

**НЕЗАВИСИМИ ЦИТИРАНИЯ НА ПУБЛИКАЦИИТЕ НА
чл. кор. НИКОЛАЙ В. ВИТАНОВ
според WEB OF SCIENCE и SCOPUS**

ПУБЛИКАЦИИ В СПИСАНИЯ С ИМПАКТ ФАКТОР

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1. VITANOV N, PANEV G

ON THE ASYMPTOTIC FORM OF THE ELECTRON WAVE-FUNCTION IN THE ATOM AND THE ION
EUROPHYSICS LETTERS 16 (2): 159-164 SEP 7 1991

1. ESQUIVEL RO, SAGAR RP, SMITH VH, et al.
PSEUDOCONVEXITY OF THE ATOMIC ELECTRON-DENSITY - A NUMERICAL STUDY
PHYSICAL REVIEW A 47 (6): 4735-4748 JUN 1993

=====

2. PANEV GS, VITANOV NV

TOTAL CHARGE-TRANSFER CROSS-SECTIONS IN COLLISIONS OF SR+ IONS WITH MG AND CA ATOMS
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 25 (1): L23-L27 JAN 14 1992

2. Shpenik OB, Zavilopulo AN, Xavery YA
Interference phenomena in the ion-atom collisions
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 124 (2-3): 386-392 APR 1997

1. CROTHERS DSF, OROURKE SFC
GENERALIZED DEMKOV MODEL - STRONG-COUPPLING APPROXIMATION
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 26 (17): L547-L553 SEP 14 1993

=====

3. VITANOV N, PANEV G

GENERALIZATION OF THE DEMKOV FORMULA IN NEAR-RESONANT CHARGE-TRANSFER
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 25 (1): 239-248 JAN 14 1992

9. Kondo, Shin-ichiro
Simulation of Oscillatory Scattered Ion Yields in He+ -Metal Surface Scattering Including the Coulomb Repulsive Interaction
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN, 88 (6):10.7566/JPSJ.88.064705 JUN 15 2019

8. Li, TC; Qu, YZ; Wu, Y; Liu, L; Wang, JG; Liebermann, HP; Buenker, RJ
Charge transfer and association of Li+ colliding with Na from very low to intermediate energies
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.052702 MAY 7 2015

7. Kondo, Shin-ichiro
Influence of Band Width on the Scattered Ion Yield Spectra of a He+ Ion by Resonant or Quasi-Resonant Charge Exchange Neutralization
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 80 (4): Art. No. 044717 APR 2011

6. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

5. Price SD
Investigating the gas-phase chemical reactions of molecular dications
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 5 (9): 1717-1729 2003

4. VORONIN AI, OSHEROV VI
N-MATRICES AND S-MATRICES FOR THE QUANTUM MODEL OF ROSEN-ZENER-DEMKOV
KHIMICHESKAYA FIZIKA 13 (7): 3-8 1994

3. OSHEROV VI, VORONIN AI
EXACT ANALYTICAL SOLUTION OF THE QUANTUM ROSEN-ZENER-DEMKOV MODEL
PHYSICAL REVIEW A 49 (1): 265-271 JAN 1994

2. CROTHERS DSF, OROURKE SFC
GENERALIZED DEMKOV MODEL - STRONG-COUPPLING APPROXIMATION
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 26 (17): L547-L553 SEP 14 1993

1. PRICE SD, ROGERS SA, LEONE SR
CHARGE-TRANSFER AND COLLISION-INDUCED DISSOCIATION REACTIONS OF OCS2+ AND CO2(2+) WITH THE RARE-GASES AT A LABORATORY COLLISION ENERGY OF 49 EV
JOURNAL OF CHEMICAL PHYSICS 98 (12): 9455-9465 JUN 15 1993

=====

4. DREWSSEN M, VITANOV NV, HAUGEN HK

TRANSVERSE LASER COOLING OF A METASTABLE ARGON BEAM - DEPENDENCE ON THE INTERACTION TIME
PHYSICAL REVIEW A 47 (4): 3118-3121 Part B, APR 1993

4. Singh, Vivek; Tiwari, V. B.; Singh, S.; Mishra, S. R.; Rawat, H. S.
The effect of laser beam size in a zig-zag collimator on transverse cooling of a krypton atomic beam
PRAMANA-JOURNAL OF PHYSICS, 83 (1):131-138; 10.1007/s12043-014-0761-2 JUL 2014

3. Liu XF
Laser cooling in flame synthesis of nanoparticles - art. no. 664426
Conference on Optical Trapping and Optical Micromanipulation IV, AUG 26-29, 2007 San Diego, CA
OPTICAL TRAPPING AND OPTICAL MICROMANIPULATION IV Book Series: PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE) Volume: 6644 Pages: 64426-64426 Published: 2007

2. KLAR D, RUF MW, HOTOP H
A TUNABLE LASER-ATOMIC BEAM PHOTOELECTRON SOURCE WITH SUB-MILLI-ELECTRON-VOLT RESOLUTION - DESIGN, OPERATION AND APPLICATION TO THRESHOLD ELECTRON-ATTACHMENT STUDIES
MEASUREMENT SCIENCE & TECHNOLOGY 5 (10): 1248-1261 OCT 1994

1. ADAMS CS, SIGEL M, MLYNEK J
ATOM OPTICS
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 240 (3): 143-210 MAY 1994

=====

5. DREWSSEN M, VITANOV NV

INTENSIFYING ATOMIC-BEAMS BY 2-STEP TRANSVERSE LASER COOLING
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 26 (22): 4109-4116 NOV 28 1993

1. KLAR D, RUF MW, HOTOP H
A TUNABLE LASER-ATOMIC BEAM PHOTOELECTRON SOURCE WITH SUB-MILLI-ELECTRON-VOLT RESOLUTION - DESIGN, OPERATION AND APPLICATION TO THRESHOLD ELECTRON-ATTACHMENT STUDIES
MEASUREMENT SCIENCE & TECHNOLOGY 5 (10): 1248-1261 OCT 1994

=====

6. VITANOV NV

GENERALIZED DEMKOV MODEL - STRONG-COUPPLING APPROXIMATION
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 26 (3): L53-L60 FEB 14 1993

8. Ivanov, Peter A.
Steady-state force sensing with single trapped ion
PHYSICA SCRIPTA Volume: 95 Issue: 2 Article Number: 025103 Published: FEB 2020

7. Ivanov, Peter A.
Efficient approach for quantum sensing field gradients with trapped ions
OPTICS COMMUNICATIONS, 405 355-362; 10.1016/j.optcom.2017.08.055 DEC 15 2017

6. Ivanov, PA; Porras, D
Adiabatic quantum metrology with strongly correlated quantum optical systems
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023803 AUG 2 2013

5. Wang Jian-Zhong; Cao Hui; Dou Fu-Quan
Many-body quantum fluctuation effects of Rosen-Zener transition in Bose-Einstein condensates
ACTA PHYSICA SINICA, 61 (22):10.7498/aps.61.220305 2012

4. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

3. O'Rourke SFC, Nesbitt BS, Crothers DSF

The role of the Stokes phenomenon in nonadiabatic transitions
ADVANCES IN CHEMICAL PHYSICS 103: 217-257 1998

2. Nesbitt BS, ORourke SFC, Crothers DSF
Analytic continuation of the Nikitin exponential model to non-zero impact parameters
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 29 (12): 2515-2528 JUN 28 1996

1. CROTHERS DSF, OROURKE SFC
GENERALIZED DEMKOV MODEL - STRONG-COUPLING APPROXIMATION
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 26 (17): L547-L553 SEP 14 1993

=====

7. DREWSEN M, VITANOV NV, HAUGEN HK
KINETIC EFFECTS OF 3-13-PHOTON VELOCITY-TUNED RESONANCES
INVESTIGATED BY A TIME-OF-FLIGHT TECHNIQUE
PHYSICAL REVIEW A 49 (2): 1141-1148 FEB 1994

1. MOLMER K
THE OPTIMUM FOKKER-PLANCK EQUATION FOR LASER COOLING
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 27 (9): 1889-1898 MAY 14 1994

=====

8. VITANOV NV
ASYMMETRIZED ROSEN-ZENER MODEL
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 27 (7): 1351-1360 APR 14 1994

8. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020

7. Aydinoglu, Gunes; Guven, Kaan
Asymmetric Rosen-Zener-like transition through a soliton-surface-plasmon photonic Josephson junction with spatially varying coupling
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053802 NOV 1 2017

6. Zhang, Ping; Malolepsza, Edyta; Straub, John E.
Dynamics of Methionine Ligand Rebinding in Cytochrome c
JOURNAL OF PHYSICAL CHEMISTRY B, 116 (23):6980-6990; 10.1021/jp300783j JUN 14 2012

5. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011

4. Requist R, Schliemann J, Abanov AG, et al.
Double occupancy errors in quantum computing operations: Corrections to adiabaticity
PHYSICAL REVIEW B 71 (11): Art. No. 115315 MAR 2005

3. Carmel L, Mann A
Geometrical approach to two-level Hamiltonians
PHYSICAL REVIEW A 61 (5): Art. No. 052113 MAY 2000

2. GARRAWAY BM, SUOMINEN KA
WAVE-PACKET DYNAMICS - NEW PHYSICS AND CHEMISTRY IN FEMTO-TIME REPORTS ON PROGRESS IN PHYSICS 58 (4): 365-419 APR 1995

1. ROBINSON EJ
CONCERNING THE ASYMMETRIZED ROSEN-ZENER MODEL
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 28 (6): L169-L172 MAR 28 1995

=====

9. VITANOV NV
GENERALIZED NIKITIN MODEL - STRONG-COUPLING APPROXIMATION
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 27 (9): 1791-1805 MAY 14 1994

6. Eleuch H, Rostovtsev YV
Analytical solution for 3D stationary Schrodinger equation: implementation of Huygens' principle for matter waves
JOURNAL OF MODERN OPTICS Volume: 57 Issue: 19 Special Issue: Sp. Iss. SI Pages: 1877-1881 Published: 2010

5. Jha, Pankaj K.; Rostovtsev, Yuri V.
Coherent excitation of a two-level atom driven by a far-off-resonant classical field: Analytical solutions
PHYSICAL REVIEW A 81 (3): Art. No. 033827 MAR 2010

4. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

3. Carmel L, Mann A
Geometrical approach to two-level Hamiltonians
PHYSICAL REVIEW A 61 (5): Art. No. 052113 MAY 2000

2. O'Rourke SFC, Nesbitt BS, Crothers DSF
The role of the Stokes phenomenon in nonadiabatic transitions
ADVANCES IN CHEMICAL PHYSICS 103: 217-257 1998

1. Nesbitt BS, ORourke SFC, Crothers DSF
Analytic continuation of the Nikitin exponential model to non-zero impact parameters
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 29 (12): 2515-2528 JUN 28 1996

=====

10. VITANOV NV
COMPLETE POPULATION RETURN IN A 2-STATE SYSTEM DRIVEN BY A SMOOTH ASYMMETRIC PULSE
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 28 (2): L19-L22 JAN 28 1995

5. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

4. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011

3. Delagnes JC, Hashmi FA, Bouchene MA
Spectral and temporal modifications of a weak resonant ultrashort pulse propagating in a two-level system driven by a strong nonresonant field
PHYSICAL REVIEW A 74 (5): Art. No. 053822 NOV 2006

2. Kuhn A, Hennrich M, Bondo T, et al.
Controlled generation of single photons from a strongly coupled atom-cavity system
APPLIED PHYSICS B-LASERS AND OPTICS 69 (5-6): 373-377 NOV-DEC 1999

1. Kuhn A, Steuerwald S, Bergmann K
Coherent population transfer in NO with pulsed lasers: the consequences of hyperfine structure, Doppler broadening and electromagnetically induced absorption
EUROPEAN PHYSICAL JOURNAL D 1 (1): 57-70 JAN 1998

=====

11. VITANOV NV
SHAPE EFFECTS IN SOME 2-STATE MODELS WITH NONANALYTIC PULSE ENVELOPES
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 28 (10): 1975-1984 MAY 28 1995

2. Barnett, Stephen M.; Beige, Almut; Ekert, Artur; Garraway, Barry M.; Keitel, Christoph H.; Kendon, Viv; Lein, Manfred; Milburn, Gerard J.; Moya-Cessa, Hector M.; Muraio, Mio; Pachos, Jiannis K.; Palma, G. Massimo; Paspalakis, Emmanuel; Phoenix, Simon J. D.; Piraux, Benard; Plenio, Martin B.; Sanders, Barry C.; Twamley, Jason; Vidiella-Barranco, A.; Kim, M. S.
Journeys from quantum optics to quantum technology
PROGRESS IN QUANTUM ELECTRONICS, 54 19-45; SI 10.1016/j.pquantelec.2017.07.002 AUG 2017

1. Robinson EJ
The effect of nonanalyticities in coupling potentials on transition probabilities in two-level systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 33 (9): L345-L348 MAY 14 2000

=====

12. VITANOV NV, KNIGHT PL
COHERENT EXCITATION OF A 2-STATE SYSTEM BY A TRAIN OF SHORT PULSES

37. Afanasiev, A. E.; Balykin, V., I
Zero ac Stark frequency shift of an atom trapped in pulsed laser light
QUANTUM ELECTRONICS Volume: 51 Issue: 3 Pages: 248-253 Published: 2021
36. Lyu, Chunhai; Cavaletto, Stefano M.; Keitel, Christoph H.; Harman, Zoltan
Interrogating the Temporal Coherence of EUV Frequency Combs with Highly Charged Ions
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 9 Article Number: 093201 Published: AUG 25 2020
35. Zeng, Bing; Duan, Lingze
Carrier-envelope phase sensitive inversion driven by few-cycle pulse pairs
OSA CONTINUUM, 1 (4):1304-1312; 10.1364/OSAC.1.001304 DEC 15 2018
34. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
33. Barnett, Stephen M.; Beige, Almut; Ekert, Artur; Garraway, Barry M.; Keitel, Christoph H.; Kendon, Viv; Lein, Manfred; Milburn, Gerard J.; Moya-Cessa, Hector M.; Muraio, Mio; Pachos, Jiannis K.; Palma, G. Massimo; Paspalakis, Emmanuel; Phoenix, Simon J. D.; Piraux, Benard; Plenio, Martin B.; Sanders, Barry C.; Twamley, Jason; Vidiella-Barranco, A.; Kim, M. S.
Journeys from quantum optics to quantum technology
PROGRESS IN QUANTUM ELECTRONICS, 54 19-45; SI 10.1016/j.pquantelec.2017.07.002 AUG 2017
32. Hai, Kuo; Luo, Yunrong; Chong, Guishu; Chen, Hao; Hai, Wenhua
ANALYTICAL EVIDENCE OF ULTRAFAST GENERATION OF SPIN-MOTION ENTANGLEMENT
QUANTUM INFORMATION & COMPUTATION, 17 (5-6):456-468; MAY 1 2017
31. Abovyan, Gor A.; Kryuchkian, Gagik Yu.
Multiphoton resonant manipulation of qubits by train of pulses
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (5):971-979; 10.1364/JOSAB.33.000971 MAY 1 2016
30. Yudin, VI; Taichenachev, AV; Basalae, MY
Dynamic steady state of periodically driven quantum systems
PHYSICAL REVIEW A, 93 (1):10.1103/PhysRevA.93.013820 JAN 13 2016
29. Zhang, Zhenhua; Tian, Jin; Du, Juan
Manipulation of population transfer and the creation of an arbitrary superposition of atomic states using a series of pulse pairs
LASER PHYSICS, 25 (9):10.1088/1054-660X/25/9/095201 SEP 2015
28. Buica, Gabriela
Quantum interference effects in Lambda-type atom interacting with two short laser pulse trains
EUROPEAN PHYSICAL JOURNAL D, 68 (10):10.1140/epjd/e2014-50290-4 OCT 21 2014
27. Tyagi, Ashish; Arya, Urvashi; Vidhani, Bhavna; Prasad, Vinod
Pulse train induced rotational excitation and orientation of a polar molecule
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, 129 193-200; 10.1016/j.saa.2014.03.075 AUG 14 2014
26. Mizrahi, J; Neyenhuis, B; Johnson, KG; Campbell, WC; Senko, C; Hayes, D; Monroe, C
Quantum control of qubits and atomic motion using ultrafast laser pulses
APPLIED PHYSICS B-LASERS AND OPTICS, 114 (1-2):45-61; 10.1007/s00340-013-5717-6 JAN 2014
25. Su, Qian-Zhen; Yu, Jie; Yuan, Kai-Jun; Cong, Shu-Lin
CONTROLLING ABOVE-THRESHOLD DISSOCIATION BRANCHING RATIOS OF HD+ WITH FEMTOSECOND LASER PULSE TRAIN
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY, 11 (4):709-721; 10.1142/S0219633612500472 AUG 2012
24. Londono, BE; Derevianko, A; Mahecha, JE; Crubellier, A; Luc-Koenig, E
Femtosecond pulses and dynamics of molecular photoexcitation: RbCs example
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033419 MAR 16 2012
23. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011
22. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona; Li, Chunfang
Enhanced selectivity and efficiency of coherent population transfer via a train of pulse pairs
PHYSICAL REVIEW A 82 (3): Art. No. 033831 SEP 27 2010
21. Supplee, James M.
Quantum interference in a lambda system driven by non-overlapping pulses with the same carrier frequency
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 27 (8): 1543-1550 AUG 2010
20. Yang, Jing; Chen, Mao-Du; Shu, Chuan-Cun; Hu, Wen-Hui; Cong, Shu-Lin
Rovibrational manipulation of molecular quantum state by a train of ultrashort pulses
CHEMICAL PHYSICS LETTERS 491 (4-6): 156-159 MAY 17 2010
19. Gogyan, A; Guerin, S; Malakyan, Y
Shaping coherent excitation of atoms and molecules by a train of ultrashort laser pulses
PHYSICAL REVIEW A 81 (3): Art. No. 033401 MAR 2010
18. Yang, Xihua; Wang, Zhen; Zhang, Zhenhua; Yan, Xiaona
Ultrafast control of coherent population transfer with a train of femtosecond pulse pairs
OPTICS COMMUNICATIONS 283 (2): 270-275 JAN 15 2010
17. Malinovskaya SA
Prevention of decoherence by two femtosecond chirped pulse trains
OPTICS LETTERS Volume: 33 Issue: 19 Pages: 2245-2247 Published: OCT 1 2008
16. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona
Ultrafast coherent population transfer with a train of weak femtosecond pulse pairs
JOURNAL OF MODERN OPTICS 56 (14): 1582-1587 2009
15. Soares, A. A.; de Araujo, Luis E. E.
Influence of propagation on the coherent accumulation of excitation induced by an ultrashort pulse train
PHYSICAL REVIEW A 80 (1): Art. No. 013832 JUL 2009
14. Felinto, Daniel; Lopez, Carlos E. E.
Theory for direct frequency-comb spectroscopy
PHYSICAL REVIEW A 80 (1): Art. No. 013419 JUL 2009
13. Shapiro, Evgeny A.; Milner, Valery; Shapiro, Moshe
Complete transfer of populations from a single state to a preselected superposition of states using piecewise adiabatic passage: Theory
PHYSICAL REVIEW A 79 (2): Art. No. 023422 FEB 2009
12. Seidl, Markus; Etinski, Mihajlo; Uiberacker, Christoph; Jakubetz, Werner
Pulse-train control of branching processes: Elimination of background and intruder state population
JOURNAL OF CHEMICAL PHYSICS 129 (23): Art. No. 234305 DEC 21 2008
11. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
10. Seidl, Markus; Uiberacker, Christoph; Jakubetz, Werner
Pulse-train control of multiphoton transitions in anharmonic progressions: Resonance loci and resonance ridges
CHEMICAL PHYSICS 349 (1-3): 296-307 JUN 16 2008
9. de Araujo, LEE
Selective and efficient excitation of diatomic molecules by an ultrashort pulse train
PHYSICAL REVIEW A 77 (3): Art. No. 033419 MAR 2008
8. Stowe, MC; Thorpe, MJ; Pe'er, A; Ye, J; Stalnaker, JE; Gerginoo, V; Diddams, SA
Direct frequency comb spectroscopy
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 55 55: 1-60 2008
7. Burlak GN
Two-atom entanglement assisted by an external pulsed pumping
INTERNATIONAL JOURNAL OF MODERN PHYSICS B 20 (11-13): 1640-1647 Part 2 Sp. Iss. SI MAY 20 2006

6. Marian A, Stowe MC, Lawall JR, et al.
United time-frequency spectroscopy for dynamics and global structure
SCIENCE 306 (5704): 2063-2068 DEC 17 2004

5. Tsukada N
Complete population transfer between two Bose-Einstein condensates induced
by nonlinear laser coupling
PHYSICAL REVIEW A 61 (6): Art. No. 063602 JUN 2000

4. Tsukada N, Nomura Y, Izu T
Complete population transfer between nonresonant tunneling states induced by
a train of laser pulses
PHYSICAL REVIEW A 59 (4): 2852-2857 APR 1999

3. Tsukada N, Nomura Y, Izu T
Diversity of quantum dynamical tunneling induced by sublevel transitions with a
train of laser pulses
JAPANESE JOURNAL OF APPLIED PHYSICS PART 2-LETTERS 37 (12A): L1433-L1436
DEC 1 1998

2. Supplee JM, Whittaker EA, Andrew K
Response of a two-level atom to a frequency-modulated optically coherent pulse
train
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 15 (7):
1833-1838 JUL 1998

1. Harshawardhan W, Agarwal GS
Multiple Landau-Zener crossings and quantum interference in atoms driven by
phase modulated fields
PHYSICAL REVIEW A 55 (3): 2165-2171 MAR 1997

=====

13. VITANOV NV, KNIGHT PL
CONTROL OF ATOMIC TRANSITIONS BY THE SYMMETRY OF EXCITATION PULSES
OPTICS COMMUNICATIONS 121 (1-3): 31-35 NOV 15 1995

5. Barnett, Stephen M.; Beige, Almut; Ekert, Artur; Garraway, Barry M.; Keitel,
Christoph H.; Kendon, Viv; Lein, Manfred; Milburn, Gerard J.; Moya-Cessa, Hector
M.; Muraio, Mio; Pachos, Jiannis K.; Palma, G. Massimo; Paspalakis, Emmanuel;
Phoenix, Simon J. D.; Piraux, Benard; Plenio, Martin B.; Sanders, Barry C.;
Twamley, Jason; Vidiella-Barranco, A.; Kim, M. S.
Journeys from quantum optics to quantum technology
PROGRESS IN QUANTUM ELECTRONICS, 54 19-45; SI
10.1016/j.pquantelec.2017.07.002 AUG 2017

4. Lehto, JMS; Suominen, KA
Two-level parabolic model with phase-jump coupling
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013404 JUL 5 2016

3. Lehto, JMS; Suominen, KA
Time-dependent two-level models and zero-area pulses
PHYSICA SCRIPTA, 91 (1):10.1088/0031-8949/91/1/013005 JAN 2016

2. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011

1. Noel MW, Griffith WM, Gallagher TF
Frequency-modulated excitation of a two-level atom
PHYSICAL REVIEW A 58 (3): 2265-2273 SEP 1998

=====

14. VITANOV NV, KNIGHT PL
COHERENT EXCITATION BY ASYMMETRIC PULSES
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 28 (9):
1905-1920 MAY 14 1995

8. Santana-Bonilla, Alejandro; Sandonas, Leonardo Medrano; Gutierrez, Rafael;
Cuniberti, Gianuario
Exploring the write-in process in molecular quantum cellular automata: a
combined modeling and first-principle approach
JOURNAL OF PHYSICS-CONDENSED MATTER, 31 (40):10.1088/1361-648X/ab29c1
OCT 9 2019

7. Huang, W., Shore, B.W., Rangelov, A., Kyoseva, E.
Application of adiabatic following to three specific three-state quantum system

Frontiers in Optics 2017 Part F66-FIO 2017 Optics InfoBase Conference Papers

6. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

5. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011

4. Ishkhanyan A, Suominen KA
Three-level system driven by delayed pulses of finite duration
Physical Review A 65 Art. No. 051403 Part A MAY 2002

3. Nicole C, Bouchene MA, Girard B
Dynamics and interference of fine-structure wave packets created by strong
ultrashort pulses
JOURNAL OF MODERN OPTICS 49 (1-2): 183-200 Sp. Iss. SI JAN 15 2002

2. Robinson EJ
The effect of nonanalyticities in coupling potentials on transition probabilities in
two-level systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 33 (9): L345-
L348 MAY 14 2000

1. Kuhn A, Steuerwald S, Bergmann K
Coherent population transfer in NO with pulsed lasers: the consequences of
hyperfine structure, Doppler broadening and electromagnetically induced
absorption
EUROPEAN PHYSICAL JOURNAL D 1 (1): 57-70 JAN 1998

=====

15. Vitanov NV, Garraway BM
Landau-Zener model: Effects of finite coupling duration
PHYSICAL REVIEW A 53 (6): 4288-4304 JUN 1996

162. Varbev, S., Boradjiev, I., Chamati, H.
Single-photon generation of entangled triplet state in an atomic spin dimer
Journal of Physics: Conference Series 1762(1),012015, 2021

161. Vashista, Mayank; Samanta, Chinmoy; Chakraborty, Aniruddha
Transition time estimation for delta-function coupling in two state problem: An
analytically solvable model
CHEMICAL PHYSICS LETTERS Volume: 770 Article Number: 138436
Published: MAY 2021

160. Casulleras, S.; Gonzalez-Ballester, C.; Maurer, P.; Garcia-Ripoll, J. J.; Romero-
Isart, O.
Remote Individual Addressing of Quantum Emitters with Chirped Pulses
PHYSICAL REVIEW LETTERS Volume: 126 Issue: 10 Article Number: 103620
Published: MAR 9 2021

159. Karanikolas, Vasilios; Kawabata, Shiro
Pulsed Quantum Annealing
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 9 Article
Number: 094003 Published: SEP 15 2020

158. Maity, Somnath; Bhattacharya, Utso; Dutta, Amit
One-dimensional quantum many body systems with long-range interactions
Journal Of Physics A-mathematical And Theoretical 53 (2020) 013001

157. Ginzl, Florian; Mills, Adam R.; Petta, Jason R.; Burkard, Guido
Spin shuttling in a silicon double quantum dot
PHYSICAL REVIEW B Volume: 102 Issue: 19 Article Number: 195418
Published: NOV 11 2020

156. Pelissetto, Andrea; Rossini, Davide; Vicari, Ettore
Scaling properties of the dynamics at first-order quantum transitions when
boundary conditions favor one of the two phases
PHYSICAL REVIEW E Volume: 102 Issue: 1 Article Number: 012143
Published: JUL 22 2020

155. Kam, Chon-Fai; Chen, Yang
Analytical results for the dynamics of parabolic level-crossing model
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 2 Article Number: 023021
Published: FEB 2020

154. Solfanelli, Andrea; Falsetti, Marco; Campisi, Michele
Nonadiabatic single-qubit quantum Otto engine
PHYSICAL REVIEW B Volume: 101 Issue: 5 Article Number: 054513

153. Grimaudo, R.; Man'ko, V. I.; Man'ko, M. A.; Messina, A.
Dynamics of a harmonic oscillator coupled with a Glauber amplifier
PHYSICA SCRIPTA Volume: 95 Issue: 2 Article Number: 024004 Published:
FEB 2020
152. Miller, Steven A.; Chang, You-Chia; Phare, Christopher T.; Shin, Min Chul;
Zadka, Moshe; Roberts, Samantha P.; Stern, Brian; Ji, Xingchen; Mohanty,
Aseema; Gordillo, Oscar A. Jimenez; Dave, Utsav D.; Lipson, Michal
Large-scale optical phased array using a low-power multi-pass silicon photonic
platform
OPTICA Volume: 7 Issue: 1 Pages: 3-6 Published: JAN 20 2020
151. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5
Article Number: 1950049 Published: AUG 2019
150. Kundu, Krishnendu; Mentink-Vigier, Frdric; Feintuch, Akiva; Vega, Shimon
DNP Mechanisms
EMAGRES Volume: 8 Issue: 3 Pages: 295-337 Published: 2019
149. Dave, Utsav D.; Lipson, Michal
Efficient Conversion to Very High Order Modes in Silicon Waveguides
IEEE Conference on Lasers and Electro-Optics (CLEO), MAY 05-10, 2019, San Jose,
CA
148. Santana-Bonilla, Alejandro; Sandonas, Leonardo Medrano; Gutierrez, Rafael;
Cuniberti, Gianaurelio
Exploring the write-in process in molecular quantum cellular automata: a
combined modeling and first-principle approach
JOURNAL OF PHYSICS-CONDENSED MATTER, 31 (40):10.1088/1361-648X/ab29c1
OCT 9 2019
147. Munoz-Bauza, Humberto; Chen, Huo; Lidar, Daniel
A double-slit proposal for quantum annealing
NPJ QUANTUM INFORMATION, 5 10.1038/s41534-019-0160-0 MAY 30 2019
146. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against
dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019
145. Geng, Pan-Fei; Tang, Rong-An; Zhang, Ai-Xia; Xue, Ju-Kui
Ladder climbing and autoresonant acceleration of the spherical plasma density
wave
NEW JOURNAL OF PHYSICS, 21 10.1088/1367-2630/ab25a8 JUN 17 2019
144. Thingna, Juzar; Esposito, Massimiliano; Barra, Felipe
Landau-Zener Lindblad equation and work extraction from coherences
PHYSICAL REVIEW E, 99 (4):10.1103/PhysRevE.99.042142 APR 26 2019
143. Ghale, Purnima; Johnson, Harley T.
Dynamical level-crossing model for the time-dependent electron emission from
dielectric surfaces in symmetric dielectric barrier discharges
PHYSICAL REVIEW B, 99 (15):10.1103/PhysRevB.99.155405 APR 4 2019
142. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019
141. Bukov, Marin; Sels, Dries; Polkovnikov, Anatoli
Geometric Speed Limit of Accessible Many-Body State Preparation
PHYSICAL REVIEW X, 9 (1):10.1103/PhysRevX.9.011034 FEB 20 2019
140. Matsuzaki, Rei; Takatsuka, Kazuo
Electronic and nuclear fluxes induced by quantum interference in the adiabatic
and nonadiabatic dynamics in the Born-Huang representation
JOURNAL OF CHEMICAL PHYSICS, 150 (1):10.1063/1.5066571 JAN 7 2019
139. Matsuzaki, Rei; Takatsuka, Kazuo
Electronic and Nuclear Flux Analysis on Nonadiabatic Electron Transfer Reaction:
A View from Single-Configuration Adiabatic Born-Huang Representation
JOURNAL OF COMPUTATIONAL CHEMISTRY, 40 (1):148-163; SI 10.1002/jcc.25557
JAN 5 2019
138. Petiziol, Francesco; Dive, Benjamin; Mintert, Florian; Wimberger, Sandro
Fast adiabatic evolution by oscillating initial Hamiltonians
PHYSICAL REVIEW A, 98 (4):10.1103/PhysRevA.98.043436 OCT 31 2018
137. Qureshi, Mumnu A.; Zhong, Johnny; Mason, Peter; Betouras, Joseph J.;
Zagoskin, Alexandre M.
Pechukas-Yukawa formalism for Landau-Zener transitions in the presence of
external noise
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.012128 JUL 23 2018
136. Tagliaferri, MLV; Bavdaz, PL; Huang, W; Dzurak, AS; Culcer, D; Veldhorst, M
Impact of valley phase and splitting on readout of silicon spin qubits
PHYSICAL REVIEW B, 97 (24):10.1103/PhysRevB.97.245412 JUN 14 2018
135. Bukov, Marin; Day, Alexandre G. R.; Weinberg, Phillip; Polkovnikov, Anatoli;
Mehta, Pankaj; Sels, Dries
Broken symmetry in a two-qubit quantum control landscape
PHYSICAL REVIEW A, 97 (5):10.1103/PhysRevA.97.052114 MAY 15 2018
134. Tomka, Michael; Venuti, Lorenzo Campos; Zanardi, Paolo
Accuracy of the adiabatic-impulse approximation for closed and open quantum
systems
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.032121 MAR 22 2018
133. Mardanya, Sougata; Bhattacharya, Utso; Agarwal, Amit; Dutta, Amit
Dynamics of edge currents in a linearly quenched Haldane model
PHYSICAL REVIEW B, 97 (11):10.1103/PhysRevB.97.115443 MAR 26 2018
132. Paul, Koushik; Sarma, Amarendra K.
Fast and efficient wireless power transfer via transitionless quantum driving
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-22562-9 MAR 7 2018
131. Tchououbiap, S. E. Mkam; Danga, J. E.; Tsiaze, R. M. Keumo; Fai, L. C.
Coherent nonlinear low-frequency Landau-Zener tunneling induced by magnetic
control of a spin qubit in a quantum wire
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 16
(6):10.1142/S0219749918500491 SEP 2018
130. Dutta, Shovan; Mueller, Erich J.
Coherent generation of photonic fractional quantum Hall states in a cavity and
the search for anyonic quasiparticles
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033825 MAR 15 2018
129. Batalov, SV; Shagalov, AG; Friedland, L
Autoresonant excitation of Bose-Einstein condensates
PHYSICAL REVIEW E, 97 (3):10.1103/PhysRevE.97.032210 MAR 21 2018
128. Pelissetto, A., Rossini, D., Vicari, E.
Out-of-equilibrium dynamics driven by localized time-dependent perturbations at
quantum phase transitions
Physical Review B 97(9),094414 (2018)
127. Seitner, Maximilian J.; Ribeiro, Hugo; Koelbl, Johannes; Faust, Thomas; Weig,
Eva M.
Finite-time Stueckelberg interferometry with nanomechanical modes
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa5a3f MAR 6 2017
126. Dutta, Anirban; Dutta, Amit
Probing the role of long-range interactions in the dynamics of a long-range Kitaev
chain
PHYSICAL REVIEW B, 96 (12):10.1103/PhysRevB.96.125113 SEP 8 2017
125. Dutta, Shovan; Mueller, Erich J.
Protocol to engineer Fulde-Ferrell-Larkin-Ovchinnikov states in a cold Fermi gas
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023612 AUG 14 2017
124. Yang, Jing; Pang, Shengshi; Jordan, Andrew N.
Quantum parameter estimation with the Landau-Zener transition
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.020301 AUG 1 2017
123. Theisen, M; Petiziol, F; Carretta, S; Santini, P; Wimberger, S
Superadiabatic driving of a three-level quantum system
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.013431 JUL 31 2017
122. Bhattacharya, Utso; Dutta, Amit
Interconnections between equilibrium topology and dynamical quantum phase
transitions in a linearly ramped Haldane model
PHYSICAL REVIEW B, 95 (18):10.1103/PhysRevB.95.184307 MAY 30 2017
121. Silveri, MP; Tuorila, JA; Thuneberg, EV; Paraoanu, GS
Quantum systems under frequency modulation
REPORTS ON PROGRESS IN PHYSICS, 80 (5):10.1088/1361-6633/aa5170 MAY
2017

120. Ribeiro, Hugo; Baksic, Alexandre; Clerk, Aashish A.
Systematic Magnus-Based Approach for Suppressing Leakage and Nonadiabatic Errors in Quantum Dynamics
PHYSICAL REVIEW X, 7 (1):10.1103/PhysRevX.7.011021 FEB 22 2017
119. Basko, DM
Landau-Zener-Stueckelberg Physics with a Singular Continuum of States
PHYSICAL REVIEW LETTERS, 118 (1):10.1103/PhysRevLett.118.016805 JAN 6 2017
118. Dou, F, Zheng, W.
High-fidelity population inversion of two-level system
Kexue Tongbao/Chinese Science Bulletin 61(20), pp. 2309-2315 (2016)
117. Li, Jing; Sun, Kun; Chen, Xi
Shortcut to adiabatic control of soliton matter waves by tunable interaction
SCIENTIFIC REPORTS, 6 10.1038/srep38258 DEC 23 2016
116. Sen, Arnab; Nandy, Sourav; Sengupta, K.
Entanglement generation in periodically driven integrable systems: Dynamical phase transitions and steady state
PHYSICAL REVIEW B, 94 (21):10.1103/PhysRevB.94.214301 DEC 8 2016
115. Seitner, Maximilian J.; Ribeiro, Hugo; Koelbl, Johannes; Faust, Thomas; Kotthaus, Joerg P.; Weig, Eva M.
Classical Stueckelberg interferometry of a nanomechanical two-mode system
PHYSICAL REVIEW B, 94 (24):10.1103/PhysRevB.94.245406 DEC 5 2016
114. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016
113. Xu, Yonggang; Zhang, Jing; Zhu, Haifei; Zhang, Jie; Ma, Pingping; Wang, Jiang; Liu, Huanhuan; Li, Yongfang
Nonlinear tunneling and robust energy transfer in sum frequency generation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (10):2038-2044; 10.1364/JOSAB.33.002038 OCT 1 2016
112. Gong, Bo; Wang, Li; Tu, Tao; Li, Chuan-Feng; Guo, Guang-Can
Robust universal gates for quantum-dot spin qubits using tunable adiabatic passages
PHYSICAL REVIEW A, 94 (3):10.1103/PhysRevA.94.032311 SEP 12 2016
111. Fishman, S; Soffer, A
Slowly changing potential problems in Quantum Mechanics: Adiabatic theorems, ergodic theorems, and scattering
JOURNAL OF MATHEMATICAL PHYSICS, 57 (7):10.1063/1.4954498 JUL 2016
110. Muthukrishnan, Siddharth; Albash, Tameem; Lidar, Daniel A.
Tunneling and Speedup in Quantum Optimization for Permutation-Symmetric Problems
PHYSICAL REVIEW X, 6 (3):10.1103/PhysRevX.6.031010 JUL 21 2016
109. Liu, Xuan-Zuo; Tian, Dong-Ping; Chong, Bo
Transition time of nonlinear Landau-Zener model in adiabatic limit
MODERN PHYSICS LETTERS B, 30 (15):10.1142/S0217984916501943 JUN 10 2016
108. Guo, Guang-Can; Li, Chuan-Feng
Quantitative Verification of the Kibble-Zurek Mechanism in Quantum Nonequilibrium Dynamics
APPLIED RESEARCH OF QUANTUM INFORMATION BASED ON LINEAR OPTICS, 99-126; 10.1007/978-3-662-49804-0_5 2016
107. O'Brien, TE; Diez, M; Beenakker, CWJ
Magnetic Breakdown and Klein Tunneling in a Type-II Weyl Semimetal
PHYSICAL REVIEW LETTERS, 116 (23):10.1103/PhysRevLett.116.236401 JUN 8 2016
106. Sharma, Shraddha; Divakaran, Uma; Polkovnikov, Anatoli; Dutta, Amit
Slow quenches in a quantum Ising chain: Dynamical phase transitions and topology
PHYSICAL REVIEW B, 93 (14):10.1103/PhysRevB.93.144306 APR 28 2016
105. Danga, JE; Kenfack, SC; Fai, LC
Quantum wire and magnetic control of a spin qubit in the Landau-Zener-Stueckelberg interferometry transition
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 49 (19):10.1088/1751-8113/49/19/195306 MAY 13 2016
104. Wojcik, P; Adamowski, J
Electrically controlled spin-transistor operation in a helical magnetic field
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, 31 (3):10.1088/0268-1242/31/3/035021 MAR 2016
103. Dutta, A., Aepli, G., Chakrabarti, B.K., Divakaran U., Rosenbaum, T.F., Sen, D.
Quantum Phase Transitions in Transverse Field Spin Models: From Statistical Physics to Quantum Information
Cambridge University Press, 2015
102. Fai, LC; Tchoffo, M; Jipdi, MN
Multi-crossing problem and Landau Zener scenario: controlled quantum bit
EUROPEAN PHYSICAL JOURNAL B, 88 (12):10.1140/epjb/e2015-60684-1 DEC 14 2015
101. Fai, LC; Tchoffo, M; Jipdi, MN
Multi-crossing dynamics of a multi-particle Landau-Zener (LZ) system: Dynamics matrix approach
EUROPEAN PHYSICAL JOURNAL B, 88 (10):10.1140/epjb/e2015-60618-y NOV 23 2015
100. Kenmoe, MB; Fai, LC
Adiabatic Landau-Zener transitions at avoided level crossings with fast noise
ANNALS OF PHYSICS, 362 814-837; 10.1016/j.aop.2015.09.012 NOV 2015
99. Vajna, Szabolcs; Dora, Balazs; Moessner, R.
Nonequilibrium transport and statistics of Schwinger pair production in Weyl semimetals
PHYSICAL REVIEW B, 92 (8):10.1103/PhysRevB.92.085122 AUG 13 2015
98. Paul, Koushik; Sarma, Amarendra K.
Shortcut to adiabatic passage in a waveguide coupler with a complex-hyperbolic-secant scheme
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053406 MAY 11 2015
97. Silveri, MP; Kumar, KS; Tuorila, J; Li, J; Vepsalainen, A; Thuneberg, EV; Paraoanu, GS
Stueckelberg interference in a superconducting qubit under periodic latching modulation
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/4/043058 APR 28 2015
96. Kenmoe, MB; Tchouobiap, SEM; Sadem, CK; Tchpda, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015
95. del Campo, A; Sengupta, K
Controlling quantum critical dynamics of isolated systems
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, 224 (1):189-203; 10.1140/epjst/e2015-02350-4 FEB 2015
94. Mehl, Sebastian; DiVincenzo, David P.
Inverted singlet-triplet qubit coded on a two-electron double quantum dot
PHYSICAL REVIEW B, 90 (19):10.1103/PhysRevB.90.195424 NOV 19 2014
93. Sau, Jay D.; Sengupta, K.
Suppressing defect production during passage through a quantum critical point
PHYSICAL REVIEW B, 90 (10):10.1103/PhysRevB.90.104306 SEP 22 2014
92. Barth, J; Friedland, L
Quantum Phenomena in a Chirped Parametric Anharmonic Oscillator
PHYSICAL REVIEW LETTERS, 113 (4):10.1103/PhysRevLett.113.040403 JUL 25 2014
91. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014
90. Kells, G; Sen, D; Slingerland, JK; Vishveshwara, S
Topological blocking in quantum quench dynamics
PHYSICAL REVIEW B, 89 (23):10.1103/PhysRevB.89.235130 JUN 26 2014
89. Haikka, P; Molmer, K
Dissipative Landau-Zener level crossing subject to continuous measurement: Excitation despite decay
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.052114 MAY 15 2014

88. Longhi, Stefano
Non-Hermitian quantum rings
PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.062112 DEC 26 2013
87. Suzuki, S., Inoue, J.-I., Chakrabarti, B.K.
Quantum ising phases and transitions in transverse ising models
Lecture Notes in Physics 862, pp. 1-414 (2013)
86. Wei, J., Chen, C.
Efficient frequency conversion by amplitude modulation
Optics Communications 311, pp. 380-384 (2013)
85. Nesterov, Alexander I.; Ovchinnikov, Sergey G.; Iaroshenko, Grigori A.
Quench dynamics in spin crossover induced by high pressure
CENTRAL EUROPEAN JOURNAL OF PHYSICS, 11 (7):894-903; 10.2478/s11534-013-0273-6 JUL 2013
84. Kraft, Matthias; Burkhardt, Stephan; Mannella, Riccardo; Wimberger, Sandro
LANDAU-ZENER TRANSITIONS IN THE PRESENCE OF HARMONIC NOISE FLUCTUATION AND NOISE LETTERS, 12 (2):SI 10.1142/S0219477513400051 JUN 2013
83. Dobrovitski, VV; Fuchs, GD; Falk, AL; Santori, C; Awschalom, DD
Quantum Control over Single Spins in Diamond
ANNUAL REVIEW OF CONDENSED MATTER PHYSICS, VOL 4, 4 23-50; 10.1146/annurev-conmatphys-030212-184238 2013
82. Gullans, M; Krich, JJ; Taylor, JM; Halperin, BI; Lukin, MD
Preparation of nonequilibrium nuclear spin states in double quantum dots
PHYSICAL REVIEW B, 88 (3):10.1103/PhysRevB.88.035309 JUL 15 2013
81. Ribeiro, Hugo; Petta, J. R.; Burkard, Guido
Interplay of charge and spin coherence in Landau-Zener-Stueckelberg-Majorana interferometry
PHYSICAL REVIEW B, 87 (23):10.1103/PhysRevB.87.235318 JUN 26 2013
80. Pascual-Winter, MF; Tongning, RC; Chaneliere, T; Le Gouet, JL
Securing coherence rephasing with a pair of adiabatic rapid passages
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/5/055024 MAY 29 2013
79. Nesterov, Alexander I.; Beas Zepeda, Juan Carlos; Berman, Gennady P.
Non-Hermitian quantum annealing in the ferromagnetic Ising model
PHYSICAL REVIEW A, 87 (4):10.1103/PhysRevA.87.042332 APR 25 2013
78. Arwas, Geva; Cohen, Doron
Multiple-path transport in quantum networks
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 46 (16):10.1088/1751-8113/46/16/165101 APR 26 2013
77. Burkhardt, Stephan; Kraft, Matthias; Mannella, Riccardo; Wimberger, Sandro
Noise-assisted transport in the Wannier-Stark system
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/4/045008 APR 12 2013
76. Ribeiro, Hugo; Burkard, Guido; Petta, J. R.; Lu, H.; Gossard, A. C.
Coherent Adiabatic Spin Control in the Presence of Charge Noise Using Tailored Pulses
PHYSICAL REVIEW LETTERS, 110 (8):10.1103/PhysRevLett.110.086804 FEB 21 2013
75. Bapst, V; Foini, L; Krzakala, F; Semerjian, G; Zamponi, F
The quantum adiabatic algorithm applied to random optimization problems: The quantum spin glass perspective
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 523 (3):127-205; 10.1016/j.physrep.2012.10.002 FEB 2013
74. Davidovich, Dotan; Cohen, Doron
Multiple path adiabatic crossing in a three-site ring
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 46 (8):10.1088/1751-8113/46/8/085302 MAR 1 2013
73. Pechen, Alexander; Il'in, Nikolay
Trap-free manipulation in the Landau-Zener system
PHYSICAL REVIEW A, 86 (5):10.1103/PhysRevA.86.052117 NOV 21 2012
72. Uzdin, Raam; Moiseyev, Nimrod
Rapid azimuthal rotation in the Hermitian and non-Hermitian Landau-Zener problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (44):SI 10.1088/1751-8113/45/44/444033 NOV 9 2012
71. Longhi, S., Della Valle, G.
Quantum transport in bipartite lattices via Landau-Zener tunneling
Physical Review A - Atomic, Molecular, and Optical Physics 86(4):043633 (2012)
70. Garanovich, Ivan L.; Longhi, Stefano; Sukhorukov, Andrey A.; Kivshar, Yuri S.
Light propagation and localization in modulated photonic lattices and waveguides
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 518 (1-2):1-79; 10.1016/j.physrep.2012.03.005 SEP 2012
69. Bapst, Victor; Semerjian, Guilhem
On quantum mean-field models and their quantum annealing
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT, 10.1088/1742-5468/2012/06/P06007 JUN 2012
68. Aslanyan, Ara L.; Aslanyan, Levon S.; Nazaryan, Stella K.
Polarization oscillations in a media with inhomogeneous anisotropy and gyrotropy
PHOTONICS AND MICRO- AND NANO-STRUCTURED MATERIALS 2011, 8414 10.1117/12.923189 2012
Editor: Drampyan RRK, Proceedings of SPIE, Conference on Photonics and Micro and Nano-structured Materials, JUN 28-30, 2011, Yerevan, ARMENIA
67. Kolodrubetz, M; Pekker, D; Clark, BK; Sengupta, K
Nonequilibrium dynamics of bosonic Mott insulators in an electric field
PHYSICAL REVIEW B, 85 (10):10.1103/PhysRevB.85.100505 MAR 16 2012
66. Ribeiro, H., Burkard, G.
Theory of electron and nuclear spins in iii-v semiconductor and carbon-based dots (Book Chapter)
in Quantum Dots: Optics, Electron Transport and Future Applications, Edited by Alexander Tartakovskii, pp. 277-295
(Cambridge University Press, 2012)
65. Ciampini, Donatella; Morsch, Oliver; Arimondo, Ennio
Experimental investigation of tunneling times using Bose-Einstein condensates
Journal of Physics Conference Series 306 10.1088/1742-6596/306/1/012031 2011, Editor(s): Elze HT; Diosi L; Fronzoni L; Halliwell J; Yearsley J; Prati E; Vitiello G
5th International Workshop on Decoherence, Information, Complexity and Entropy (DICE) - Space-Time-Matter - Current Issues in Quantum Mechanics and Beyond
64. Aslanyan, AL; Aslanyan, LS; Nazaryan, SK
Optical-Mechanical Analogy in Problems of Polarization Optics
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 47 (1):23-28; 10.3103/S1068337212010057 FEB 2012
63. Boross, Peter; Dora, Balazs; Moessner, Roderich
Testing the Dirac equation against the tight binding model for non-equilibrium graphene
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, 248 (11):2627-2630; 10.1002/pssb.201100184 NOV 2011
62. Dou, Fu-Quan; Li, Sheng-Chang; Cao, Hui
Combined effects of particle interaction and nonlinear sweep on Landau-Zener transition
PHYSICS LETTERS A, 376 (1):51-55; 10.1016/j.physleta.2011.10.034 NOV 28 2011
61. Damon, V; Bonarota, M; Louchet-Chauvet, A; Chaneliere, T; Le Gouet, JL
Revival of silenced echo and quantum memory for light
NEW JOURNAL OF PHYSICS 13 10.1088/1367-2630/13/9/093031 SEP 20 2011
60. Rodriguez-Lara, BM; Rodriguez-Mendez, D; Moya-Cessa, H
Solution to the Landau-Zener problem via Susskind-Glogower operators
PHYSICS LETTERS A 375 (43): 3770-3774 10.1016/j.physleta.2011.08.051 OCT 17 2011
59. Fuchs, GD; Burkard, G; Klimov, PV; Awschalom, DD
A quantum memory intrinsic to single nitrogen-vacancy centres in diamond
NATURE PHYSICS 7 (10): 789-793 10.1038/nphys2026 OCT 2011
58. Lu, Tianshi
Population inversion by chirped pulses
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033411 SEP 13 2011
57. Polkovnikov, Anatoli; Sengupta, Krishnendu; Silva, Alessandro; Vengalattore, Mukund
Colloquium: Nonequilibrium dynamics of closed interacting quantum systems
REVIEWS OF MODERN PHYSICS 83 (3): 863-883 10.1103/RevModPhys.83.863 AUG 15 2011

56. Barth, I; Friedland, L; Gat, O; Shagalov, AG
Quantum versus classical phase-locking transition in a frequency-chirped nonlinear oscillator
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013837 JUL 29 2011
55. Romanova, JY; Demidov, EV; Mouroukh, LG; Romanov, YA
Zener tunneling in semiconductor superlattices
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (30): 10.1088/0953-8984/23/30/305801 AUG 3 2011
54. Brataas, Arne; Rashba, Emmanuel I.
Nuclear dynamics during Landau-Zener singlet-triplet transitions in double quantum dots
PHYSICAL REVIEW B 84 (4): Art. No. 045301 JUL 1 2011
53. Deng, Shusa; Ortiz, Gerardo; Viola, Lorenza
Dynamical critical scaling and effective thermalization in quantum quenches: Role of the initial state
PHYSICAL REVIEW B 83 (9): Art. No. 094304 MAR 25 2011
52. Dora, Balazs; Moessner, Roderich
Dynamics of the spin Hall effect in topological insulators and graphene
PHYSICAL REVIEW B 83 (7): Art. No. 073403 FEB 11 2011
51. Paul R. Berman, Vladimir S. Malinovsky
Principles of Laser Spectroscopy and Quantum Optics (Princeton University Press, 2010)
50. De Grandi, C., Polkovnikov, A.
Adiabatic perturbation theory: From Landau-Zener problem to quenching through a quantum critical point
Lecture Notes in Physics 802, pp. 75-114 (2010)
49. Zhang, Dongfang
Research on the rupture of the covalent bond of the dichlorine molecule
MONATSHEFTE FÜR CHEMIE 141 (12): 1279-1285 DEC 2010
48. Dziarmaga, Jacek
Dynamics of a quantum phase transition and relaxation to a steady state
ADVANCES IN PHYSICS 59 (6): 1063-1189 2010
47. Dora, Balazs; Castro, Eduardo V.; Moessner, Roderich
Quantum quench dynamics and population inversion in bilayer graphene
PHYSICAL REVIEW B 82 (12): Art. No. 125441 SEP 23 2010
46. Ribeiro, Hugo; Petta, J. R.; Burkard, Guido
Harnessing the GaAs quantum dot nuclear spin bath for quantum control
PHYSICAL REVIEW B 82 (11): Art. No. 115445 SEP 24 2010
45. Chen, Xi; Lizuain, I.; Ruschhaupt, A.; Guery-Odelin, D.; Muga, J. G.
Shortcut to Adiabatic Passage in Two- and Three-Level Atoms
PHYSICAL REVIEW LETTERS 105 (12): Art. No. 123003 SEP 16 2010
44. Tayebirad, G; Zenesini, A; Ciampini, D; Mannella, R; Morsch, O; Arimondo, E; Lorch, N; Wimberger, S
Time-resolved measurement of Landau-Zener tunneling in different bases
PHYSICAL REVIEW A 82 (1): Art. No. 013633 JUL 26 2010
43. Shevchenko, S. N.; Ashhab, S.; Nori, Franco
Landau-Zener-Stueckelberg interferometry
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 492 (1): 1-30 JUL 2010
42. Dora, Balazs; Moessner, Roderich
Nonlinear electric transport in graphene: Quantum quench dynamics and the Schwinger mechanism
PHYSICAL REVIEW B 81 (16): Art. No. 165431 APR 15 2010
41. Yan, Yue; Wu, Biao
Integral definition of transition time in the Landau-Zener model
PHYSICAL REVIEW A 81 (2): Art. No. 022126 FEB 2010
40. Divakaran, Uma; Dutta, Amit; Sen, Diptiman
Landau-Zener problem with waiting at the minimum gap and related quench dynamics of a many-body system
PHYSICAL REVIEW B 81 (5): Art. No. 054306 FEB 2010
39. Shore, BW; Gromovyy, MV; Yatsenko, LP; Romanenko, VI
Simple mechanical analogs of rapid adiabatic passage in atomic physics
AMERICAN JOURNAL OF PHYSICS 77 (12): 1183-1194 DEC 2009
38. Dreisow, F.; Szameit, A.; Heinrich, M.; Nolte, S.; Tuennermann, A.; Ornigotti, M.; Longhi, S.
Direct observation of Landau-Zener tunneling in a curved optical waveguide coupler
PHYSICAL REVIEW A 79 (5): Art. No. 055802 MAY 2009
37. Ribeiro, Hugo; Burkard, Guido
Nuclear State Preparation via Landau-Zener-Stueckelberg Transitions in Double Quantum Dots
PHYSICAL REVIEW LETTERS 102 (21): Art. No. 216802 MAY 29 2009
36. Mukherjee, Victor; Dutta, Amit
Effects of interference in the dynamics of a spin-1/2 transverse XY chain driven periodically through quantum critical points
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT : Art. No. P05005 MAY 2009
35. Li YongFang; Ren LiQing; Ma RuiQiong; Qiu Xu; Liu Juan; Fan Rong; Fu ZhenXing
Quantum diffraction of wave function in time-domain
SCIENCE IN CHINA SERIES G-PHYSICS MECHANICS & ASTRONOMY 52 (6): 873-876 JUN 2009
34. Canovi, Elena; Rossini, Davide; Fazio, Rosario; Santoro, Giuseppe E.
Adiabatic dynamics in a spin-1 chain with uniaxial single-spin anisotropy
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT : Art. No. P03038 MAR 2009
33. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
32. Keeling, J; Gurarie, V
Collapse and revivals of the photon field in a Landau-Zener process
PHYSICAL REVIEW LETTERS 101 (3): Art. No. 033001 JUL 18 2008
31. Lang, F; Straten, PVD; Brandstatter, B; Thalhammer, G; Winkler, K; Julienne, PS; Grimm, R; Denschlag, JH
Cruising through molecular bound-state manifolds with radiofrequency
NATURE PHYSICS 4 (3): 223-226 MAR 2008
30. Castro-Beltran, HM; Marquina-Cruz, ER; Arroyo-Correa, G; Denisov, A
Nonstationary dissipative dynamics of a single qubit
LASER PHYSICS 18 (2): 149-156 FEB 2008
29. Chuchem, Maya; Cohen, Doron
Restricted quantum-classical correspondence and counting statistics for a coherent transition
PHYSICAL REVIEW A 77 (1): Art. No. 012109 JAN 2008
28. Chuchem, Maya; Cohen, Doron
Counting statistics in multiple path geometries and the fluctuations of the integrated current in a quantum stirring device
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 41 (7): Art. No. 075302 FEB 22 2008
27. Longhi S
Photonic transport via chirped adiabatic passage in optical waveguides
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 40 (12): F189-F195 JUN 28 2007
26. Damski B, Zurek WH
Adiabatic-impulse approximation for avoided level crossings: From phase-transition dynamics to Landau-Zener evolutions and back again
PHYSICAL REVIEW A 73 (6): Art. No. 063405 JUN 2006
25. Shchesnovich VS
Quantum instabilities in the system of identical bosons
PHYSICS LETTERS A 349 (5): 398-403 JAN 16 2006
24. Wubs M, Saito K, Kohler S, et al.
Landau-Zener transitions in qubits controlled by electromagnetic fields
NEW JOURNAL OF PHYSICS 7: Art. No. 218 OCT 11 2005
23. Longhi S
Landau-Zener dynamics in a curved optical directional coupler
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 7 (6): L9-L12 JUN 2005
22. Damski B

The simplest quantum model supporting the Kibble-Zurek mechanism of topological defect production: Landau-Zener transitions from a new perspective
PHYSICAL REVIEW LETTERS 95 (3): Art. No. 035701 JUL 15 2005

21. de Seze F, Dahes F, Crozatier V, et al.
Coherent driving of Tm³⁺: YAG ions using a complex hyperbolic secant optical field
EUROPEAN PHYSICAL JOURNAL D 33 (3): 343-355 JUN 2005

20. Ishkhanyan A, Javanainen J, Nakamura H
A basic two-state model for bosonic field theories with a cubic nonlinearity
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 38 (16): 3505-3516 APR 22 2005

19. Yatsenko LP, Guerin S, Jauslin HR
Pulse-driven near-resonant quantum adiabatic dynamics: Lifting of quasidegeneracy
PHYSICAL REVIEW A 70 (4): Art. No. 043402 OCT 2004

18. Crozatier V, de Seze F, Haals L, et al.
Laser diode stabilisation for coherent driving of rare earth ions
OPTICS COMMUNICATIONS 241 (1-3): 203-213 NOV 1 2004

17. Benderskii VA, Vetoshkin EV, Kats EI
Semiclassical quantization of bound and quasistationary states beyond the adiabatic approximation
PHYSICAL REVIEW A 69 (6): Art. No. 062508 JUN 2004

16. Ishkhanyan A, Mackie M, Carmichael A, et al.
Landau-Zener problem for trilinear systems
PHYSICAL REVIEW A 69 (4): Art. No. 043612 APR 2004

15. Harris TL, Tian MZ, Babbitt WR, et al.
Chirped excitation of optically dense inhomogeneously broadened media using Eu³⁺: Y₂SiO₅
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 21 (4): 811-819 APR 2004

14. Harris, T.L., Burr, G.W., Hoffnagle, J.A., Tian, M., Babbitt, W.R., Jefferson, C.M.
Chirped excitation of optically-dense inhomogeneously broadened media using Eu³⁺:Y₂SiO₅
2003 OSA Trends in Optics and Photonics Series 88, pp. 1531-1532

13. Benderskii VA, Vetoshkin EV, Kats EI
Instanton versus traditional WKB approach to the Landau-Zener problem
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97 (2): 232-258 2003

12. Faria CFD, Rotter I
High-order harmonic generation in a driven two-level atom: Periodic level crossings and three-step processes
PHYSICAL REVIEW A 66 (1): Art. No. 013402 JUL 2002

11. Saito K, Kayanuma Y
Nonadiabatic transition probabilities in the presence of strong dissipation at an avoided-level crossing point
PHYSICAL REVIEW A 65 (3): Art. No. 033407 Part B MAR 2002

10. Moyer CA
Quantum transitions at a level crossing of decaying states
PHYSICAL REVIEW A 64 (3): Art. No. 033406 SEP 2001

9. Bloch I, Kohl M, Greiner M, et al.
Optics with an atom laser beam
PHYSICAL REVIEW LETTERS 87 (3): Art. No. 030401 JUL 16 2001

8. Malinovsky VS, Krause JL
General theory of population transfer by adiabatic rapid passage with intense, chirped laser pulses
EUROPEAN PHYSICAL JOURNAL D 14 (2): 147-155 MAY 2001

7. Yurovsky VA, Ben-Reuven A
Curve crossing in linear potential grids: The quasidegeneracy approximation
PHYSICAL REVIEW A 63 (4): Art. No. 043404 APR 2001

6. Chang BY, Sola IR, Malinovsky VS, et al.
Selective excitation of diatomic molecules by chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 113 (12): 4901-4911 SEP 22 2000

5. Ishkhanyan AM
New classes of analytic solutions of the two-level problem

JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 33 (31): 5539-5546 AUG 11 2000

4. Ishkhanyan AM
New classes of analytic solutions of the three-state problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 33 (28): 5041-5047 JUL 21 2000

3. Ishkhanyan AM
New analytically integrable models of the two-state problem
OPTICS COMMUNICATIONS 176 (1-3): 155-161 MAR 15 2000

2. Li CF, Zhao XG
Spatial rotation and time-evolution operator of two-level systems
INTERNATIONAL JOURNAL OF MODERN PHYSICS B 14 (1): 101-112 JAN 10 2000

1. Ostrovsky VN, Nakamura H
Patterns of time propagation on the grid of potential curves
PHYSICAL REVIEW A 58 (6): 4293-4299 DEC 1998

=====

16. Vitanov NV, Stenholm S
Non-adiabatic effects in population transfer in three-level systems
OPTICS COMMUNICATIONS 127 (4-6): 215-222 JUN 15 1996

29. Fukushima, Kenji; Shimazaki, Takuya
Lefschetz-thimble inspired analysis of the Dykhne-Davis-Pechukas method and an application for the Schwinger Mechanism
ANNALS OF PHYSICS Volume: 415 Article Number: 168111 Published: APR 2020

28. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256; 10.1016/bs.aamop.2018.02.003 2018

27. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

26. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

25. Graefe, Eva-Maria; Mailybaev, Alexei A.; Moiseyev, Nimrod
Breakdown of adiabatic transfer of light in waveguides in the presence of absorption
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.033842 SEP 25 2013

24. Larson, J
Diode for Bose-Einstein condensates
EPL, 96 (5):10.1209/0295-5075/96/50004 DEC 2011

23. B. W. Shore
Manipulating quantum structures using laser pulses
Cambridge University Press, 2011

22. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009

21. Sarkar, Chitrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008

20. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

19. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses

18. Zhang, X.-Z., Li, X.-H., Yang, X.-D.
Numerical exploration of coherent excitation in three-level ladder systems
2007 Chinese Physics 16 (7), art. no. 023, pp. 1947-1951

17. Fewell MP
Adiabatic elimination, the rotating-wave approximation and two-photon transitions
OPTICS COMMUNICATIONS 253 (1-3): 125-137 SEP 1 2005

16. Yang, W., Gong, S., Niu, Y., Xu, Z.
Coherent population transfer in a double-A system driven by few-cycle laser pulses
2005 Proceedings of SPIE - The International Society for Optical Engineering 5646, pp. 25-32

15. Shi Q, Geva E
Stimulated Raman adiabatic passage in the presence of dephasing
JOURNAL OF CHEMICAL PHYSICS 119 (22): 11773-11787 DEC 8 2003

14. Vrabel, I., Jakubetz, W.
Counterintuitive multiphoton pulse sequences in molecular isomerization. I. Selectivity and robustness of competing multiphoton stimulated Raman adiabatic passage processes
2003 Journal of Chemical Physics 118 (16), pp. 7366-7379

13. Fleischhauer M, Lukin MD
Quantum memory for photons: Dark-state polaritons
PHYSICAL REVIEW A 65 (2): Art. No. 022314 FEB 2002

12. Ohta Y, Bando T, Yoshimoto T, et al.
Control of intramolecular proton transfer by a laser field
JOURNAL OF PHYSICAL CHEMISTRY A 105 (34): 8031-8037 AUG 30 2001

11. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000

10. Ghosh S, Sen S, Bhattacharyya SS, et al.
Effect of polarization on population transfer in H-2 by stimulated Raman transition with partially overlapping laser pulses
PRAMANA-JOURNAL OF PHYSICS 54 (6): 827-844 JUN 2000

9. Ghosh S, Sen S, Bhattacharyya SS, et al.
Nonadiabatic interaction effects on population transfer in H-2 by stimulated Raman transition with partially overlapping laser pulses
PHYSICAL REVIEW A 59 (6): 4475-4484 JUN 1999

8. Unanyan RG, Shore BW, Bergmann K
Laser-driven population transfer in four-level atoms: Consequences of non-Abelian geometrical adiabatic phase factors
PHYSICAL REVIEW A 59 (4): 2910-2919 APR 1999

7. Kim, H.A., Moon, H.S., Kim, J.B., Choe, A.S., Lee, J.
Expanded concept of the adiabatic population transfer using dressed states
1999 Physical Review A - Atomic, Molecular, and Optical Physics 59 (2-3), pp. 1404-1407

6. Drese K, Holthaus M
Perturbative and nonperturbative processes in adiabatic population transfer
EUROPEAN PHYSICAL JOURNAL D 3 (1): 73-86 JUL 1998

5. Bergmann K, Theuer H, Shore BW
Coherent population transfer among quantum states of atoms and molecules
REVIEWS OF MODERN PHYSICS 70 (3): 1003-1025 JUL 1998

4. Guerin S, Jauslin HR
Two-laser multiphoton adiabatic passage in the frame of the Floquet theory. Applications to (1+1) and (2+1) STIRAP
EUROPEAN PHYSICAL JOURNAL D 2 (2): 99-113 MAY 1998

3. Garraway BM, Suominen KA
Adiabatic passage by light-induced potentials in molecules
PHYSICAL REVIEW LETTERS 80 (5): 932-935 FEB 2 1998

2. Malinovsky VS, Tannor DJ
Simple and robust extension of the stimulated Raman adiabatic passage technique to N-level systems

1. Romanenko VI, Yatsenko LP
Adiabatic population transfer in the three-level Lambda-system: Two-photon lineshape
OPTICS COMMUNICATIONS 140 (4-6): 231-236 AUG 1 1997

=====
17. Garraway BM, Vitanov NV
Population dynamics and phase effects in periodic level crossings
PHYSICAL REVIEW A 55 (6): 4418-4432 JUN 1997

55. Mallavarapu, S. Kumar; Niranjana, Ankita; Li, Weibin; Wuster, Sebastian; Nath, Rejish
Population trapping in a pair of periodically driven Rydberg atoms
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023335
Published: FEB 26 2021

54. Yang, Zhi-Xuan; Zhang, Yi-Meng; Zhou, Yu-Xuan; Zhang, Li-Bo; Yan, Fei; Liu, Song; Xu, Yuan; Li, Jian
Phase-sensitive Landau-Zener-Stueckelberg interference in superconducting quantum circuit*
CHINESE PHYSICS B Volume: 30 Issue: 2 Article Number: 024212 Published: FEB 2021

53. Karanikolas, Vasilios; Kawabata, Shiro
Pulsed Quantum Annealing
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 9 Article Number: 094003 Published: SEP 15 2020

52. Liang, Shuang; Li, Zheng-Chun; Zhang, Weiping; Zhou, Lu; Lan, Zhihao
Stueckelberg interferometry using spin-orbit-coupled cold atoms in an optical lattice
PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 033332
Published: SEP 23 2020

51. Chen, Yejia; Lu, Zhiguo; Yan, Yiyang; Zheng, Hang
Plateau dynamics with quantized oscillations of a strongly driven qubit
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053703
Published: NOV 4 2020

50. Niranjana, Ankita; Li, Weibin; Nath, Rejish
Landau-Zener transitions and adiabatic impulse approximation in an array of two Rydberg atoms with time-dependent detuning
PHYSICAL REVIEW A Volume: 101 Issue: 6 Article Number: 063415
Published: JUN 24 2020

49. Wu, Tong; Zhou, Yuxuan; Xu, Yuan; Liu, Song; Li, Jian
Landau-Zener-Stueckelberg Interference in Nonlinear Regime
CHINESE PHYSICS LETTERS Volume: 36 Issue: 12 Article Number: 124204
Published: DEC 2019

48. Thingna, Jazar; Esposito, Massimiliano; Barra, Felipe
Landau-Zener Lindblad equation and work extraction from coherences
PHYSICAL REVIEW E, 99 (4):10.1103/PhysRevE.99.042142 APR 26 2019

47. Tchoubiap, S. E. Mkam; Danga, J. E.; Tsiaze, R. M. Keumo; Fai, L. C.
Coherent nonlinear low-frequency Landau-Zener tunneling induced by magnetic control of a spin qubit in a quantum wire
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 16 (6):10.1142/S0219749918500491 SEP 2018

46. Dou, Fu-Quan; Liu, Jie; Fu, Li-Bin
Fast quantum driving in two-level systems with interaction and nonlinear sweep
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.022102 AUG 1 2018

45. Jia, Wei; Hu, Fang-Qi; Wu, Ning; Zhao, Qing
Effect of electron spin-spin interaction on level crossings and spin flips in a spin-triplet system
PHYSICAL REVIEW A, 96 (6):10.1103/PhysRevA.96.062507 DEC 15 2017

44. Silveri, MP; Tuorila, JA; Thuneberg, EV; Paroanu, GS
Quantum systems under frequency modulation
REPORTS ON PROGRESS IN PHYSICS, 80 (5):10.1088/1361-6633/aa5170 MAY 2017

43. Ashhab, S
Landau-Zener-Stueckelberg interferometry with driving fields in the quantum regime
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 50

- (13):10.1088/1751-8121/aa5f6e MAR 31 2017
42. Neilinger, P; Shevchenko, SN; Bogar, J; Rehak, M; Oelsner, G; Karpov, DS; Hubner, U; Astafiev, O; Grajcar, M; Il'ichev, E
Landau-Zener-Stuckelberg-Majorana lasing in circuit quantum electrodynamics
PHYSICAL REVIEW B, 94 (9):10.1103/PhysRevB.94.094519 SEP 22 2016
41. Kenmoe, MB; Fai, LC
Periodically driven three-level systems
PHYSICAL REVIEW B, 94 (12):10.1103/PhysRevB.94.125101 SEP 1 2016
40. Fillion-Gourdeau, Francois; Gagnon, Denis; Lefebvre, Catherine; MacLean, Steve
Time-domain quantum interference in graphene
PHYSICAL REVIEW B, 94 (12):10.1103/PhysRevB.94.125423 SEP 16 2016
39. Yi, Sangyong; Kim, Sang Wook
Atom-molecule conversion in a periodically driven spin-boson model
PHYSICAL REVIEW A, 93 (1):10.1103/PhysRevA.93.013616 JAN 19 2016
38. Silveri, MP; Kumar, KS; Tuorila, J; Li, J; Vepsalainen, A; Thuneberg, EV; Paraoanu, GS
Stuckelberg interference in a superconducting qubit under periodic latching modulation
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/4/043058 APR 28 2015
37. Poggi, PM; Arranz, FJ; Benito, RM; Borondo, F; Wisniacki, DA
Maximum population transfer in a periodically driven quantum system
PHYSICAL REVIEW A, 90 (6):10.1103/PhysRevA.90.062108 DEC 3 2014
36. Shwa, David; Katz, Nadav
Transient coherence of media under strong phase modulation exploiting electromagnetically induced transparency
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023858 AUG 29 2014
35. Fillion-Gourdeau, Francois; Lorin, Emmanuel; Bandrauk, Andre D.
Landau-Zener-Stuckelberg interferometry in pair production from counterpropagating lasers
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.032118 SEP 20 2012
34. Lehto, J; Suominen, KA
Superparabolic level-glancing models for two-state quantum systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033415 SEP 14 2012
33. Shevchenko, SN; Omelyanchouk, AN; Il'ichev, E
Multiphoton transitions in Josephson-junction qubits
LOW TEMPERATURE PHYSICS, 38 (4):283-300; 10.1063/1.3701717 APR 2012
32. Shevchenko, S. N.; Ashhab, S.; Nori, Franco
Inverse Landau-Zener-Stuckelberg problem for qubit-resonator systems
PHYSICAL REVIEW B, 85 (9):10.1103/PhysRevB.85.094502 MAR 2 2012
31. Dou, Fu-Quan; Li, Sheng-Chang; Cao, Hui
Combined effects of particle interaction and nonlinear sweep on Landau-Zener transition
PHYSICS LETTERS A, 376 (1):51-55; 10.1016/j.physleta.2011.10.034 NOV 28 2011
30. Romanova, JY; Demidov, EV; Mourkh, LG; Romanov, YA
Zener tunneling in semiconductor superlattices
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (30): 10.1088/0953-8984/23/30/305801 AUG 3 2011
29. Paul R. Berman, Vladimir S. Malinovsky
Principles of Laser Spectroscopy and Quantum Optics (Princeton University Press, 2010)
28. Relaxation dynamics of superconducting Josephson qubits in a strong alternating field
Gel'man, A.I., Satanin, A.M.
Physics of the Solid State 52(11), pp. 2234-2240 (2010)
27. Gel'man, AI; Satanin, AM
Quantum Jumps in Landau-Zener Transitions in the Dissipative Dynamics of a Superconducting Qubit
JETP LETTERS 91 (10): 535-540 MAY 2010
26. Shevchenko, S. N.; Ashhab, S.; Nori, Franco
Landau-Zener-Stuckelberg interferometry
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 492 (1): 1-30 JUL 2010
25. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
24. Wang, Dong; Hansson, Tony; Larson, Asa; Karlsson, Hans O.; Larsons, Jonas
Quantum interference structures in trapped-ion dynamics beyond the Lamb-Dicke and rotating wave approximations
PHYSICAL REVIEW A 77 (5): Art. No. 053808 Part B MAY 2008
23. Ashhab S, Johansson JR, Zagoskin AM, et al.
Two-level systems driven by large-amplitude fields
PHYSICAL REVIEW A 75 (6): Art. No. 063414 JUN 2007
22. Yang XX, Wu Y
Efficient approach to seek exact analytical solutions of periodically driven two-level systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (9): 2285-2290 MAY 14 2006
21. Longhi S
Dynamics of driven two-level systems with permanent dipole moments: an optical realization
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (8): 1985-1996 APR 28 2006
20. Larson J
Level crossings in a cavity QED model
PHYSICAL REVIEW A 73 (1): Art. No. 013823 JAN 2006
19. Wubs M, Saito K, Kohler S, et al.
Landau-Zener transitions in qubits controlled by electromagnetic fields
NEW JOURNAL OF PHYSICS 7: Art. No. 218 OCT 11 2005
18. Duan SQ, Fu LB, Liu J, et al.
Effects of periodic modulation on the Landau-Zener transition
PHYSICS LETTERS A 346 (4): 315-320 OCT 17 2005
17. Terzis AF, Paspalakis E
High-order harmonic generation in a two-electron quantum dot molecule
JOURNAL OF APPLIED PHYSICS 97 (2): Art. No. 023523 JAN 15 2005
16. Saito K, Kayanuma Y
Nonadiabatic electron manipulation in quantum dot arrays
PHYSICAL REVIEW B 70 (20): Art. No. 201304 NOV 2004
15. Babikov D
Accuracy of gates in a quantum computer based on vibrational eigenstates
JOURNAL OF CHEMICAL PHYSICS 121 (16): 7577-7585 OCT 22 2004
14. Semerok AF, Fomichev SV
Features of laser spectroscopy and diagnostics of plasma ions in high magnetic fields
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (22): 4495-4509 NOV 28 2003
13. Faria CFD, Rotter I
High-order harmonic generation in a driven two level atom: An analogy with the three-step model
LASER PHYSICS 13 (7): 985-994 JUL 2003
12. Janowicz M
Method of multiple scales in quantum optics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 375 (5): 327-410 FEB 2003
11. Godone A, Micalizio S, Levi F
Rabi resonances in the Lambda excitation scheme
PHYSICAL REVIEW A 66 (6): Art. No. 063807 DEC 2002
10. Coffer JG, Sickmiller B, Presser A, et al.
Line shapes of atomic-candle-type Rabi resonances
PHYSICAL REVIEW A 66 (2): Art. No. 023806 AUG 2002
9. Faria CFD, Rotter I
High-order harmonic generation in a driven two-level atom: Periodic level crossings and three-step processes
PHYSICAL REVIEW A 66 (1): Art. No. 013402 JUL 2002
8. Noba K, Kayanuma Y
Population dynamics of a two-level system driven by oscillating transverse and

longitudinal fields
PHYSICAL REVIEW A 64 (1): Art. No. 013413 JUL 2001

7. Ficek Z, Seke J, Soldatov AV, et al.
Fluorescence spectrum of a two-level atom driven by a multiple modulated field
PHYSICAL REVIEW A 64 (1): Art. No. 013813 JUL 2001

6. Malinovsky VS, Krause JL
General theory of population transfer by adiabatic rapid passage with intense, chirped laser pulses
EUROPEAN PHYSICAL JOURNAL D 14 (2): 147-155 MAY 2001

5. Ficek Z, Seke J, Soldatov AV, et al.
Saturation of a two-level atom in polychromatic fields
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 2 (6): 780-785 DEC 2000

4. Kayanuma Y, Mizumoto Y
Landau-Zener transitions in a level-crossing system with periodic modulations of the diagonal energy
PHYSICAL REVIEW A 62 (6): Art. No. 061401 DEC 2000

3. Janowicz M
Non-Markovian decay of an atom coupled to a reservoir: Modification by frequency modulation
PHYSICAL REVIEW A 61 (2): Art. No. 025802 FEB 2000

2. Noel MW, Griffith WM, Gallagher TF
Frequency-modulated excitation of a two-level atom
PHYSICAL REVIEW A 58 (3): 2265-2273 SEP 1998

1. Tsukada N, Gotoda M, Isu T, et al.
Rotational transfer and dynamical bunching of an electron in three coupled quantum dots induced by a circularly polarized electric field
SOLID-STATE ELECTRONICS 42 (7-8): 1273-1280 JUL-AUG 1998

=====

18. Vitanov NV, Stenholm S
Analytic properties and effective two-level problems in stimulated Raman adiabatic passage
PHYSICAL REVIEW A 55 (1): 648-660 JAN 1997

92. Dong, Xin-Ping; Lu, Xiao-Jing; Li, Ming; Zhao, Zheng-Yin; Feng, Zhi-Bo
Speeding up generation of photon Fock state in a superconducting circuit via counterdiabatic driving
CHINESE PHYSICS B Volume: 30 Issue: 4 Article Number: 044214
Published: APR 2021

91. Yan, Run-Ying; Feng, Zhi-Bo
Fast generation of microwave photon Fock states in a superconducting nanocircuit
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 127 Article Number: 114522 Published: MAR 2021

90. Zhang, F.-Y., Feng, Z.-Q., Li, C.
Effective inhibit energetic cost in stimulated Raman shortcut-to-adiabatic passage
Communications in Theoretical Physics 73(2),025105 (2021)

89. Zhao, Z.-Y., Feng, Z.-B., Li, M., Lu, X.-J., Yan, R.-Y.
Controllable and shortcut-based population transfers with a composite system of a nitrogen-vacancy electron spin and microwave photons
Quantum Information Processing 20(2),66 (2021)

88. Yan, Run-Ying; Feng, Zhi-Bo
Two-Qubit State Swap and Entanglement Creation in a Superconducting Circuit QED via Counterdiabatic Drivings
ADVANCED QUANTUM TECHNOLOGIES Volume: 3 Issue: 9 Article Number: 2000088 Published: SEP 2020

87. Huang, Wei; Chen, Yun; Qu, Xiaowei; Yin, Shan; Shi, Xintong; Xiong, Xianming; Zhang, Wentao; Qin, Zujun; Zhang, Yuting
Complete and robust light transfer in three-waveguide coupler by shortcut to adiabaticity
AIP ADVANCES Volume: 10 Issue: 9 Article Number: 095104 Published: SEP 1 2020

86. Yan, Run-Ying; Feng, Zhi-Bo
Generating microwave photon Fock states in a circuit QED via invariant-based shortcuts to adiabaticity

QUANTUM SCIENCE AND TECHNOLOGY Volume: 5 Issue: 4 Article Number: 045001 Published: OCT 2020

85. Xu, Tian-Niu; Liu, Kaipeng; Chen, Xi; Guerin, Stephane
Invariant-based optimal composite stimulated Raman exact passage
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 23 Article Number: 235501 Published: DEC 14 2019

84. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019

83. Varguet, H; Guerin, S; Jauslin, H; des Francs, GC
Cooperative emission in quantum plasmonic superradiance
PHYSICAL REVIEW B, 100 (4):10.1103/PhysRevB.100.041115 JUL 29 2019

82. Ran, Du; Shi, Zhi-Cheng; Yang, Zhen-Biao; Song, Jie; Xia, Yan
Error correction of quantum system dynamics via measurement-feedback control
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52 (16):10.1088/1361-6455/ab2e85 AUG 28 2019

81. Wu, JL; Su, SL
Universal speeded-up adiabatic geometric quantum computation in three-level systems via counterdiabatic driving
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 52 (33):10.1088/1751-8121/ab2a92 AUG 16 2019

80. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256;
10.1016/bs.aamop.2018.02.003 2018

79. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

78. Vogell, B; Vermersch, B; Northup, TE; Lanyon, BP; Muschik, CA
Deterministic quantum state transfer between remote qubits in cavities
QUANTUM SCIENCE AND TECHNOLOGY, 2 (4):10.1088/2058-9565/aa868b DEC 2017

77. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017

76. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

75. Lu, Xiao-Jing; Li, M.; Zhao, Z. Y.; Zhang, Chun-Li; Han, Hong-Pei; Feng, Zhi-Bo; Zhou, Yun-Qing
Nonleaky and accelerated population transfer in a transmon qutrit
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023843 AUG 21 2017

74. Li, Guan-Qiang; Chen, Guang-De; Peng, Ping; Qi, wei
Non-Hermitian shortcut to adiabaticity of two- and three-level systems with gain and loss
EUROPEAN PHYSICAL JOURNAL D, 71 (1):10.1140/epjd/e2016-70525-6 JAN 19 2017

73. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016

72. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016

71. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress

- REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016
70. Mrejen, Michael; Suchowski, Haim; Hatakeyama, Taiki; Wang, Yuan; Zhang, Xiang
Experimental Realization of Two Decoupled Directional Couplers in a Subwavelength Packing by Adiabatic Elimination
NANO LETTERS, 15 (11):7383-7387; 10.1021/acs.nanolett.5b02790 NOV 2015
69. Chruscinski, Dariusz; Messina, Antonino; Militello, Benedetto; Napoli, Anna
Interaction-free evolution in the presence of time-dependent Hamiltonians
PHYSICAL REVIEW A, 91 (4):10.1103/PhysRevA.91.042123 APR 20 2015
68. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
67. Kenmoe, MB; Tchoubiap, SEM; Sadem, CK; Tchapda, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015
66. Ishkhanyan, Artur M.; Shahverdyan, Tigran A.; Ishkhanyan, Tigran A.
Thirty five classes of solutions of the quantum time-dependent two-state problem in terms of the general Heun functions
EUROPEAN PHYSICAL JOURNAL D, 69 (1):10.1140/epjd/e2014-50386-9 JAN 8 2015
65. Sun, Yuan; Metcalf, Harold
Nonadiabaticity in stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033408 SEP 10 2014
64. Shwa, David; Katz, Nadav
Transient coherence of media under strong phase modulation exploiting electromagnetically induced transparency
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023858 AUG 29 2014
63. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014
62. Wu Qi-Cheng; Ji Xin
Generation of steady four-atom decoherence-free states via quantum-jump-based feedback
CHINESE PHYSICS B, 22 (10):10.1088/1674-1056/22/10/100308 OCT 2013
61. Wu, Qi-Cheng; Ji, Xin
Generation of steady three- and four-dimensional entangled states via quantum-jump-based feedback
QUANTUM INFORMATION PROCESSING, 12 (10):3167-3178; 10.1007/s11128-013-0592-y OCT 2013
60. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian
High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013
59. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakchyan, L; Guerin, S; Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT 2012
58. Yang, Xihua; Huang, Yihua; Zhang, Zhenhua; Yan, Xiaona
Enhancement of coherent population transfer in a double Lambda-type four-level system via a train of pulse pairs
OPTICS COMMUNICATIONS, 285 (8):2101-2105; 10.1016/j.optcom.2011.12.076 APR 15 2012
57. Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage for preparing polarized molecules
JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011
56. V.I. Romanenko
Stimulated Raman Adiabatic Passage in Phase-Fluctuating fields
Ukrainian Journal of Physics V. 51 P. 1054 (2006)
55. Yang, Song; Gong, Ming; Li, ChuanFeng; Zou, Xubo; Guo, GuangCan
Optically pumping hole spins in coupled quantum dot molecules into a steady state of high concurrence entanglement
PHYSICAL REVIEW B 80 (23): Art. No. 235322 DEC 2009
54. Beil, Fabian; Klein, Jens; Halfmann, Thomas
Optically driven atomic coherences in a Pr³⁺:Y₂SiO₅ crystal
PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS 7 (1): 32-38 FEB 2009
53. Grigoryan, GG; Nikoghosyan, GV; Halfmann, T; Pashayan-Leroy, YT; Leroy, C; Guerin, S
Theory of the bright-state stimulated Raman adiabatic passage
PHYSICAL REVIEW A 80 (3): Art. No. 033402 SEP 2009
52. Hu, YM; Yang, WL; Feng, M; Du, JF
Distributed quantum-information processing with fullerene-caged electron spins in distant nanotubes
PHYSICAL REVIEW A 80 (2): Art. No. 022322 AUG 2009
51. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009
50. Alexander, AL; Lauro, R; Louchet, A; Chaneliere, T; Le Gouet, JL
Stimulated Raman adiabatic passage in Tm³⁺:YAG
PHYSICAL REVIEW B 78 (14): Art. No. 144407 OCT 2008
49. Sarkar, Chitrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008
48. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
47. Bomble, L; Lavorel, B; Remacle, F; Desouter-Lecomte, M
Computational investigation and experimental considerations for the classical implementation of a full adder on SO₂ by optical pump-probe schemes
JOURNAL OF CHEMICAL PHYSICS 128 (19): Art. No. 194308 MAY 12 2008
46. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007
45. Zhang XZ, Li XH, Yang XD
Numerical exploration of coherent excitation in three-level ladder systems
CHINESE PHYSICS 16 (7): 1947-1951 JUL 2007
44. Martin J, Bastin T
Cold three-level atom micromaser in the far-detuning regime
PHYSICAL REVIEW A 75 (5): Art. No. 053820 MAY 2007 3
43. Longhi S
Adiabatic passage of light in coupled optical waveguides
PHYSICAL REVIEW E 73 (2): Art. No. 026607 Part 2 FEB 2006
42. Batista AA
Pulse-driven interwell carrier transfer in n-type doped asymmetric double quantum wells
PHYSICAL REVIEW B 73 (7): Art. No. 075305 FEB 2006
41. Dalton BJ
Decoherence rates in large-scale quantum computers and macroscopic quantum systems
JOURNAL OF MODERN OPTICS 52 (17): 2563-2587 NOV 20 2005
40. Zhou YW, Ye CY
Population transfer and coherence in the adiabatic limit by counterintuitive and intuitive pulse sequences
CHINESE PHYSICS 14 (2): 433-438 FEB 2005
39. Zhou ZY, Chu SI, Han S
Suppression of energy-relaxation-induced decoherence in Lambda-type three-level SQUID flux qubits: A dark-state approach
PHYSICAL REVIEW B 70 (9): Art. No. 094513 SEP 2004

38. Jain S, Kurur ND
Multiple quantum inversion in scalar coupled systems with amplitude modulated temporally overlapped pulses
JOURNAL OF MAGNETIC RESONANCE 169 (2): 240-245 AUG 2004
37. Chen PC, Piermarocchi C, Sham LJ, et al.
Theory of quantum optical control of a single spin in a quantum dot
PHYSICAL REVIEW B 69 (7): Art. No. 075320 FEB 2004
36. Shakhmuratov RN, Odeurs J
Adiabatic-following criterion, estimation of the nonadiabatic excitation fraction, and quantum jumps
PHYSICAL REVIEW A 68 (4): Art. No. 043802 Part B OCT 2003
35. Vrabel I, Jakubetz W
Counterintuitive multiphoton pulse sequences in molecular isomerization. I. Selectivity and robustness of competing multiphoton stimulated Raman adiabatic passage processes
JOURNAL OF CHEMICAL PHYSICS 118 (16): 7366-7379 APR 22 2003
34. Machida T, Kawamura K
Irreversible electron transfer between two atoms
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 72 (2): 299-306 FEB 2003
33. Borisenok SV, Rozhdestvenskii YV
Coherent adiabatic passage in atomic systems with a closed interaction contour
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96 (1): 1-7 2003
32. Piermarocchi C, Chen P, Sham LJ, et al.
Optical RKKY interaction between charged semiconductor quantum dots
PHYSICAL REVIEW LETTERS 89 (16): Art. No. 167402 OCT 14 2002
31. Sugawara M
Local control theory for coherent manipulation of population dynamics
CHEMICAL PHYSICS LETTERS 358 (3-4): 290-297 MAY 31 2002
30. Ishkhanyan A, Suominen KA
Three-level system driven by delayed pulses of finite duration
PHYSICAL REVIEW A 65 (5): Art. No. 051403 Part A MAY 2002
29. Tregenna B, Beige A, Knight PL
Quantum computing in a macroscopic dark period
PHYSICAL REVIEW A 65 (3): Art. No. 032305 Part A MAR 2002
28. Cheng J, Zhou JY
Ultrafast population transfer in three-level Lambda systems driven by few-cycle laser pulses
PHYSICAL REVIEW A 64 (6): Art. No. 065402 DEC 2001
27. Ohta Y, Bando T, Yoshimoto T, et al.
Control of intramolecular proton transfer by a laser field
JOURNAL OF PHYSICAL CHEMISTRY A 105 (34): 8031-8037 AUG 30 2001
26. Noba K, Kayanuma Y
Population dynamics of a two-level system driven by oscillating transverse and longitudinal fields
PHYSICAL REVIEW A 64 (1): Art. No. 013413 JUL 2001
25. Kayanuma Y, Noba K
Wiener-Hermite expansion formalism for the stochastic model of a driven quantum system
CHEMICAL PHYSICS 268 (1-3): 177-188 Sp. Iss. SI JUN 15 2001
24. Angelakis DG, Beige A, Knight PL, et al.
Verifying atom entanglement schemes by testing Bell's inequality
ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES 56 (1-2): 27-34 JAN-FEB 2001
23. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Effect of polarization on population transfer in H₂ by stimulated Raman transition with partially overlapping laser pulses
Pramana - Journal of Physics 54(6), pp. 827-844 (2000)
22. Beige A, Munro WJ, Knight PL
Bell's inequality test with entangled atoms
PHYSICAL REVIEW A 62 (5): Art. No. 052102 NOV 2000
21. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000
20. Fan XJ, Tian SF, Li J, et al.
Time evolution of atomic response and light amplification mechanism in an open inversionless lasing system
ACTA PHYSICA SINICA 49 (9): 1719-1725 SEP 2000
19. Beige A, Braun D, Tregenna B, et al.
Quantum computing using dissipation to remain in a decoherence-free subspace
PHYSICAL REVIEW LETTERS 85 (8): 1762-1765 AUG 21 2000
18. Ishkhanyan AM
New classes of analytic solutions of the three-state problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 33 (28): 5041-5047 JUL 21 2000
17. Tsukada N
Complete population transfer between two Bose-Einstein condensates induced by nonlinear laser coupling
PHYSICAL REVIEW A 61 (6): Art. No. 063602 JUN 2000
16. Kallush S, Band YB
Short-pulse chirped adiabatic population transfer in diatomic molecules
PHYSICAL REVIEW A 61 (4): Art. No. 041401 APR 2000
15. Steinbach J, Twamley J
Motional quantum error correction
JOURNAL OF MODERN OPTICS 47 (2-3): 453-485 FEB-MAR 2000
14. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Nonadiabatic interaction effects on population transfer in H₂ by stimulated Raman transition with partially overlapping laser pulses
Physical Review A - Atomic, Molecular, and Optical Physics 59(6), pp. 4475-4484 (1999)
13. Burrows BL, Moideen FM, Amos AT
Approximate analytical solutions for two-state time-dependent problems
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 74 (5): 559-571 SEP 15 1999
12. Fleischhauer M, Unanyan R, Shore BW, et al.
Coherent population transfer beyond the adiabatic limit: Generalized matched pulses and higher-order trapping states
PHYSICAL REVIEW A 59 (5): 3751-3760 MAY 1999
11. Kim HA, Moon HS, Kim JB, et al.
Expanded concept of the adiabatic population transfer using dressed states
PHYSICAL REVIEW A 59 (2): 1404-1407 FEB 1999
10. Drese K, Holthaus M
Floquet theory for short laser pulses
EUROPEAN PHYSICAL JOURNAL D 5 (1): 119-134 JAN 1999
9. Guerin S, Unanyan RG, Yatsenko LP, et al.
Floquet perturbative analysis for STIRAP beyond the rotating wave approximation
OPTICS EXPRESS 4 (2): 84-90 JAN 18 1999
8. Drese K, Holthaus M
Perturbative and nonperturbative processes in adiabatic population transfer
EUROPEAN PHYSICAL JOURNAL D 3 (1): 73-86 JUL 1998
7. Guerin S, Jauslin HR
Two-laser multiphoton adiabatic passage in the frame of the Floquet theory. Applications to (1+1) and (2+1) STIRAP
EUROPEAN PHYSICAL JOURNAL D 2 (2): 99-113 MAY 1998
6. Paspalakis E, Knight PL
Population transfer via an autoionizing state with temporally delayed chirped laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12): 2753-2767 JUN 28 1998
5. Buffa R
Resonance fluorescence of a three-level atom driven by delayed laser pulses
OPTICS COMMUNICATIONS 149 (4-6): 376-385 APR 15 1998
4. Ter-Mikaelyan ML
Simplest atomic systems in resonant laser fields
USPEKHI FIZICHESKIKH NAUK 167 (12): 1249-1294 DEC 1997

3. Garraway BM, Suominen KA
Adiabatic passage by light-induced potentials in molecules
PHYSICAL REVIEW LETTERS 80 (5): 932-935 FEB 2 1998
2. Malinovsky VS, Tannor DJ
Simple and robust extension of the stimulated Raman adiabatic passage technique to N-level systems
PHYSICAL REVIEW A 56 (6): 4929-4937 DEC 1997
1. Paspalakis E, Protopapas M, Knight PL
Population transfer through the continuum with temporally delayed chirped laser pulses
OPTICS COMMUNICATIONS 142 (1-3): 34-40 OCT 1 1997
- =====
- 19. Vitanov NV, Stenholm S**
Pulsed excitation of a transition to a decaying level
PHYSICAL REVIEW A 55 (4): 2982-2988 APR 1997
68. Shen, Xin; Wang, Fudong; Li, Zhi; Wu, Zhigang
Landau-Zener-Stuckelberg interferometry in PT-symmetric non-Hermitian models
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 062514
Published: DEC 23 2019
67. Longstaff, Bradley; Graefe, Eva-Maria
Nonadiabatic transitions through exceptional points in the band structure of a PT-symmetric lattice
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 052119
Published: NOV 25 2019
66. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19;
10.1007/s10773-017-3535-z JAN 2018
65. Shi, X; Yuan, H; Mao, X; Ma, Y; Zhao, HQ
Robust quantum state transfer inspired by Dzyaloshinskii-Moriya interactions
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.052332 MAY 16 2017
64. Moufarej, E; Vielle-Grosjean, M; Khalili, G; McCulloch, AJ; Robicheaux, F; Picard, YJ; Comparat, D
Forced field ionization of Rydberg states for the production of monochromatic beams
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.043409 APR 10 2017
63. Rangelov, Andon; Longhi, Stefano
Nonlinear adiabatic optical isolator
APPLIED OPTICS, 56 (11):2991-2994; 10.1364/AO.56.002991 APR 10 2017
62. Kenmoe, MB; Tchabda, AB; Fai, LC
Demkov-Kunike models with decay
JOURNAL OF MATHEMATICAL PHYSICS, 57 (12):10.1063/1.4972289 DEC 2016
61. Glenn, R; Dantus, M
Molecular level crossing and the geometric phase effect from the optical Hanle perspective
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043402 APR 4 2016
60. Kenmoe, MB; Tchoubiap, SEM; Sadem, CK; Tchabda, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015
59. Avishai, Y; Band, YB
Landau-Zener problem with decay and dephasing
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.032116 SEP 30 2014
58. Shi Xuan; Oh, C. H.; Wei Lian-Fu
Stark-Chirped Rapid Adiabatic Passage in Presence of Dissipation for Quantum Computation
COMMUNICATIONS IN THEORETICAL PHYSICS, 61 (2):235-240; FEB 2014
57. Uzdin, Raam; Moiseyev, Nimrod
Rapid azimuthal rotation in the Hermitian and non-Hermitian Landau-Zener problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (44):SI
10.1088/1751-8113/45/44/444033 NOV 9 2012
56. Dridi, G; Guerin, S
Adiabatic passage for a lossy two-level quantum system by a complex time method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (18):10.1088/1751-8113/45/18/185303 MAY 11 2012
55. Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage for preparing polarized molecules
JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011
54. Dridi, G; Guerin, S; Jauslin, HR; Viennot, D; Jolicard, G
Adiabatic approximation for quantum dissipative systems: Formulation, topology, and superadiabatic tracking
PHYSICAL REVIEW A 82 (2): Art. No. 022109 AUG 16 2010
53. Yang, S., Gong, M., Li, C., Zou, X., Guo, G.
Optically pumping hole spins in coupled quantum dot molecules into a steady state of high concurrence entanglement
Physical Review B - Condensed Matter and Materials Physics 80(23),235322 (2009)
52. Grigoryan, GG; Nikoghosyan, GV; Halfmann, T; Pashayan-Leroy, YT; Leroy, C; Guerin, S
Theory of the bright-state stimulated Raman adiabatic passage
PHYSICAL REVIEW A 80 (3): Art. No. 033402 SEP 2009
51. Hu, Y.M., Yang, W.L., Feng, M., Du, J.F.
Distributed quantum-information processing with fullerene-caged electron spins in distant nanotubes
Physical Review A - Atomic, Molecular, and Optical Physics 80(2),022322 (2009)
50. Beil, Fabian; Klein, Jens; Halfmann, Thomas
Optically driven atomic coherences in a Pr³⁺:Y₂SiO₅ crystal
PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS 7 (1): 32-38 FEB 2009
49. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009
48. Bomble, L; Lavorel, B; Remacle, F; Desouter-Lecomte, M
Computational investigation and experimental considerations for the classical implementation of a full adder on SO₂ by optical pump-probe schemes
JOURNAL OF CHEMICAL PHYSICS 128 (19): Art. No. 194308 MAY 12 2008
47. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
46. Lacour, X; Guerin, S; Jauslin, HR
Optimized adiabatic passage with dephasing
PHYSICAL REVIEW A 78 (3): Art. No. 033417 SEP 2008
45. Sarkar, Chitrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008
44. Castro-Beltran, HM; Marquina-Cruz, ER; Arroyo-Correa, G; Denisov, A
Nonstationary dissipative dynamics of a single qubit
LASER PHYSICS 18 (2): 149-156 FEB 2008
43. Martin J, Bastin T
Cold three-level atom micromaser in the far-detuning regime
PHYSICAL REVIEW A 75 (5): Art. No. 053820 MAY 2007 3
42. Zhang, X.-Z., Li, X.-H., Yang, X.-D.
Numerical exploration of coherent excitation in three-level ladder systems
2007 Chinese Physics 16 (7), art. no. 023, pp. 1947-1951
41. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007
40. Longhi S
Adiabatic passage of light in coupled optical waveguides
PHYSICAL REVIEW E 73 (2): Art. No. 026607 Part 2 FEB 2006

39. Batista AA
Pulse-driven interwell carrier transfer in n-type doped asymmetric double quantum wells
PHYSICAL REVIEW B 73 (7): Art. No. 075305 FEB 2006
38. Graefe EM, Korsch HJ
Crossing scenario for a nonlinear non-Hermitian two-level system
CZECHOSLOVAK JOURNAL OF PHYSICS 56 (9): 1007-1020 SEP 2006
37. Dalton BJ
Decoherence rates in large-scale quantum computers and macroscopic quantum systems
JOURNAL OF MODERN OPTICS 52 (17): 2563-2587 NOV 20 2005
36. Zhou YW, Ye CY
Population transfer and coherence in the adiabatic limit by counterintuitive and intuitive pulse sequences
CHINESE PHYSICS 14 (2): 433-438 FEB 2005
35. Zhou ZY, Chu SI, Han S
Suppression of energy-relaxation-induced decoherence in Lambda-type three-level SQUID flux qubits: A dark-state approach
PHYSICAL REVIEW B 70 (9): Art. No. 094513 SEP 2004
34. Jain S, Kurur ND
Multiple quantum inversion in scalar coupled systems with amplitude modulated temporally overlapped pulses
JOURNAL OF MAGNETIC RESONANCE 169 (2): 240-245 AUG 2004
33. Sham, L.J., Chen, P., Piermarocchi, C., Steel, D.G.
Coherent optical control of electron spin interaction and dynamics
Conference on Quantum Electronics and Laser Science (QELS) - Technical Digest Series 89, pp. QMD4/1-QMD4/2 (2003)
32. Shakhmuratov RN, Odeurs J
Adiabatic-following criterion, estimation of the nonadiabatic excitation fraction, and quantum jumps
PHYSICAL REVIEW A 68 (4): Art. No. 043802 Part B OCT 2003
31. Vrabel I, Jakubetz W
Counterintuitive multiphoton pulse sequences in molecular isomerization. I. Selectivity and robustness of competing multiphoton stimulated Raman adiabatic passage processes
JOURNAL OF CHEMICAL PHYSICS 118 (16): 7366-7379 APR 22 2003
30. Machida T, Kawamura K
Irreversible electron transfer between two atoms
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 72 (2): 299-306 FEB 2003
29. Borisenok SV, Rozhdestvenskii YV
Coherent adiabatic passage in atomic systems with a closed interaction contour
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96 (1): 1-7 2003
28. Fainberg BD, Gorbunov VA
Coherent population transfer in molecules coupled with a dissipative environment by an intense ultrashort chirped pulse
JOURNAL OF CHEMICAL PHYSICS 117 (15): 7222-7232 OCT 15 2002
27. Sugawara M
Local control theory for coherent manipulation of population dynamics
CHEMICAL PHYSICS LETTERS 358 (3-4): 290-297 MAY 31 2002
26. Cheng J, Zhou JY
Ultrafast population transfer in three-level Lambda systems driven by few-cycle laser pulses
PHYSICAL REVIEW A 64 (6): Art. No. 065402 DEC 2001
25. Ohta Y, Bando T, Yoshimoto T, et al.
Control of intramolecular proton transfer by a laser field
JOURNAL OF PHYSICAL CHEMISTRY A 105 (34): 8031-8037 AUG 30 2001
24. Noba K, Kayanuma Y
Population dynamics of a two-level system driven by oscillating transverse and longitudinal fields
PHYSICAL REVIEW A 64 (1): Art. No. 013413 JUL 2001
23. Kayanuma Y, Noba K
Wiener-Hermite expansion formalism for the stochastic model of a driven quantum system
CHEMICAL PHYSICS 268 (1-3): 177-188 Sp. Iss. SI JUN 15 2001
22. Angelakis DG, Beige A, Knight PL, et al.
Verifying atom entanglement schemes by testing Bell's inequality
ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES 56 (1-2): 27-34 JAN-FEB 2001
21. Moyer CA
Quantum transitions at a level crossing of decaying states
PHYSICAL REVIEW A 64 (3): Art. No. 033406 SEP 2001
20. Beige A, Munro WJ, Knight PL
Bell's inequality test with entangled atoms
PHYSICAL REVIEW A 62 (5): Art. No. 052102 NOV 2000
19. Fan XJ, Tian SF, Li J, et al.
Time evolution of atomic response and light amplification mechanism in an open inversionless lasing system
ACTA PHYSICA SINICA 49 (9): 1719-1725 SEP 2000
18. Beige A, Braun D, Tregenna B, et al.
Quantum computing using dissipation to remain in a decoherence-free subspace
PHYSICAL REVIEW LETTERS 85 (8): 1762-1765 AUG 21 2000
17. Ishkhanyan AM
New classes of analytic solutions of the three-state problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 33 (28): 5041-5047 JUL 21 2000
16. Kallush S, Band YB
Short-pulse chirped adiabatic population transfer in diatomic molecules
PHYSICAL REVIEW A 61 (4): Art. No. 041401 APR 2000
15. Chaltykyan VO, Grigoryan GG, Pashayan YT
Interaction of non-monochromatic laser field with two-level atom
JOURNAL OF MODERN OPTICS 47 (1): 11-24 JAN 15 2000
14. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000
13. Ghosh S, Sen S, Bhattacharyya SS, et al.
Effect of polarization on population transfer in H-2 by stimulated Raman transition with partially overlapping laser pulses
PRAMANA-JOURNAL OF PHYSICS 54 (6): 827-844 JUN 2000
12. Tsukada N
Complete population transfer between two Bose-Einstein condensates induced by nonlinear laser coupling
PHYSICAL REVIEW A 61 (6): Art. No. 063602 JUN 2000
11. Guerin S, Unanyan RG, Yatsenko LP, et al.
Floquet perturbative analysis for STIRAP beyond the rotating wave approximation
OPTICS EXPRESS 4 (2): 84-90 JAN 18 1999
10. Burrows BL, Moideen FM, Amos AT
Approximate analytical solutions for two-state time-dependent problems
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 74 (5): 559-571 SEP 15 1999
9. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Nonadiabatic interaction effects on population transfer in H2 by stimulated Raman transition with partially overlapping laser pulses
1999 Physical Review A - Atomic, Molecular, and Optical Physics 59 (6), pp. 4475-4484
8. Drese K, Holthaus M
Floquet theory for short laser pulses
EUROPEAN PHYSICAL JOURNAL D 5 (1): 119-134 JAN 1999
7. Wilson-Gordon AD, Friedmann H
Four-wave mixing with short temporally nonoverlapping pulses
JOURNAL OF PHYSICAL CHEMISTRY A 102 (47): 9651-9654 NOV 19 1998
6. Paspalakis E, Knight PL
Population transfer via an autoionizing state with temporally delayed chirped laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12): 2753-2767 JUN 28 1998

5. Buffa R
Resonance fluorescence of a three-level atom driven by delayed laser pulses
OPTICS COMMUNICATIONS 149 (4-6): 376-385 APR 15 1998
4. Drese K, Holthaus M
Perturbative and nonperturbative processes in adiabatic population transfer
EUROPEAN PHYSICAL JOURNAL D 3 (1): 73-86 JUL 1998
3. Guerin S, Jauslin HR
Two-laser multiphoton adiabatic passage in the frame of the Floquet theory. Applications to (1+1) and (2+1) STIRAP
EUROPEAN PHYSICAL JOURNAL D 2 (2): 99-113 MAY 1998
2. Ter-Mikaelyan ML
Simplest atomic systems in resonant laser fields
USPEKHI FIZICHESKIKH NAUK 167 (12): 1249-1294 DEC 1997
1. Paspalakis E, Protopapas M, Knight PL
Population transfer through the continuum with temporally delayed chirped laser pulses
OPTICS COMMUNICATIONS 142 (1-3): 34-40 OCT 1 1997
- =====
- 20. Vitanov NV, Stenholm S**
Properties of stimulated Raman adiabatic passage with intermediate-level detuning
OPTICS COMMUNICATIONS 135 (4-6): 394-405 FEB 15 1997
60. Ran, Du; Shan, Wu-Jiang; Shi, Zhi-Cheng; Yang, Zhen-Biao; Song, Jie; Xia, Yan
Manipulation of Multi-Level Quantum Systems via Unsharp Measurements and Feedback Operations
ANNALEN DER PHYSIK Volume: 531 Issue: 11 Article Number: 1900063
Published: NOV 2019
59. Gujarati, Tanvi P.
Rydberg-atom-based creation of an N-particle Greenberger-Horne-Zeilinger state using stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.062326 DEC 21 2018
58. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018
57. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
56. Zai, Jing-Bo; Zhan, Wei-Shen; Wang, Shuo; Dang, Hai-Ping; Han, Xiao
Population transfer of a NaH molecule via stimulated Raman adiabatic passage
LASER PHYSICS, 26 (9):10.1088/1054-660X/26/9/096002 SEP 2016
55. Dupont-Nivet, M; Casiulis, M; Laudat, T; Westbrook, Cl; Schwartz, S
Microwave-stimulated Raman adiabatic passage in a Bose-Einstein condensate on an atom chip
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053420 MAY 26 2015
54. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
53. Kenmoe, MB; Tchoubiap, SEM; Sadem, CK; Tchapda, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015
52. Takekoshi, Tetsu; Reichsoellner, Lukas; Schindewolf, Andreas; Hutson, Jeremy M.; Le Sueur, C. Ruth; Dulieu, Olivier; Ferlaino, Francesca; Grimm, Rudolf; Naegerl, Hanns-Christoph
Ultracold Dense Samples of Dipolar RbCs Molecules in the Rovibrational and Hyperfine Ground State
PHYSICAL REVIEW LETTERS, 113 (20):10.1103/PhysRevLett.113.205301 NOV 12 2014
51. Jakubetz, Werner
Limitations of STIRAP-like population transfer in extended systems: The three-level system embedded in a web of background states
JOURNAL OF CHEMICAL PHYSICS, 137 (22):10.1063/1.4770053 DEC 14 2012
50. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakhchyan, L; Guerin, S; Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT 2012
49. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)
48. Hsiao, Fu-Chen; Lin, Tzung-Yi; Tseng, Shuo-Yen
Bandwidth Analysis of Waveguide Mode Converters Based on Optical Analogy of Stimulated Raman Adiabatic Passage in Engineered Multimode Waveguides
IEEE PHOTONICS JOURNAL, 3 (6):1198-1205; 10.1109/JPHOT.2011.2176479 DEC 2011
47. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010
46. Lazarou, C; Keller, M; Garraway, BM
Molecular heat pump for rotational states
PHYSICAL REVIEW A 81 (1): Art. No. 013418 JAN 2010
45. V.I. Romanenko
Stimulated Raman Adiabatic Passage in Phase-Fluctuating fields
Ukrainian Journal of Physics V. 51 P. 1054 (2006)
44. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic evolution for the Rb-87 atom-molecule conversion system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (18): Art. No. 185301 SEP 28 2009
43. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009
42. Verdu, J; Zoubi, H; Koller, C; Majer, J; Ritsch, H; Schmiedmayer, J
Strong Magnetic Coupling of an Ultracold Gas to a Superconducting Waveguide Cavity
PHYSICAL REVIEW LETTERS 103 (4): Art. No. 043603 JUL 24 2009
41. Klein, J; Beil, F; Halfmann, T
Experimental investigations of stimulated Raman adiabatic passage in a doped solid
PHYSICAL REVIEW A 78 (3): Art. No. 033416 SEP 2008
40. Sarkar, Chitrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008
39. Tsukanov, A.V.
Optically driven nanostructures as the base for the large-scale quantum computing
Proceedings of SPIE - The International Society for Optical Engineering 7023,70230M (2008)
38. Goto, Hayato; Ichimura, Kouichi
Stimulated Raman adiabatic passage with small two-photon detunings and its geometrical description
PHYSICS LETTERS A 372 (9): 1535-1540 FEB 25 2008
37. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007
36. Klein J, Beil F, Halfmann T
Robust population transfer by stimulated raman adiabatic passage in a Pr3+: Y2SiO5 crystal
PHYSICAL REVIEW LETTERS 99 (11): Art. No. 113003 SEP 12 2007

35. Tsukanov AV
Single-qubit operations in the double-donor structure driven by optical and voltage pulses
PHYSICAL REVIEW B 76 (3): Art. No. 035328 JUL 2007
34. Zhang XZ, Li XH, Yang XD
Numerical exploration of coherent excitation in three-level ladder systems
CHINESE PHYSICS 16 (7): 1947-1951 JUL 2007
33. Han YC, Wang SM, Yuan KJ, et al.
Population transfer of the Na-2 molecule via continuum state
CHEMICAL PHYSICS 333 (2-3): 119-127 MAR 30 2007
32. Goto H, Ichimura K
Observation of coherent population transfer in a four-level tripod system with a rare-earth-metal-ion-doped crystal
PHYSICAL REVIEW A 75 (3): Art. No. 033404 MAR 2007
31. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
30. Goto H, Ichimura K
Population transfer via stimulated Raman adiabatic passage in a solid
PHYSICAL REVIEW A 74 (5): Art. No. 053410 NOV 2006
29. Tsukanov, A.V.
Quantum operations in the optically driven two-electron double-dot structure
2006 Proceedings of SPIE - The International Society for Optical Engineering 6264, art. no. 62640J
28. Batista AA
Pulse-driven interwell carrier transfer in n-type doped asymmetric double quantum wells
PHYSICAL REVIEW B 73 (7): Art. No. 075305 FEB 2006
27. Tsukanov AV
Rabi oscillations in the four-level double-dot structure under the influence of the resonant pulse
PHYSICAL REVIEW B 73 (8): Art. No. 085308 FEB 2006
26. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006
25. Tsukanov AV
Entanglement and quantum-state engineering in the optically driven two-electron double-dot structure
PHYSICAL REVIEW A 72 (2): Art. No. 022344 AUG 2005
24. Fewell MP
Adiabatic elimination, the rotating-wave approximation and two-photon transitions
OPTICS COMMUNICATIONS 253 (1-3): 125-137 SEP 1 2005
23. Jain S, Kurur ND
Multiple quantum inversion in scalar coupled systems with amplitude modulated temporally overlapped pulses
JOURNAL OF MAGNETIC RESONANCE 169 (2): 240-245 AUG 2004
22. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004
21. Vrabel, I., Jakubetz, W.
Counterintuitive multiphoton pulse sequences in molecular isomerization. I. Selectivity and robustness of competing multiphoton stimulated Raman adiabatic passage processes
2003 Journal of Chemical Physics 118 (16), pp. 7366-7379
20. Kurkal V, Rice SA
Population transfer to a predissociating target state using pulsed coherent excitation: Sensitivity to coupling to background states
JOURNAL OF PHYSICAL CHEMISTRY A 106 (45): 10810-10817 NOV 14 2002
19. Ichimura K
A simple frequency-domain quantum computer with ions in a crystal coupled to a cavity mode
OPTICS COMMUNICATIONS 196 (1-6): 119-125 SEP 1 2001
18. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000
17. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Effect of polarization on population transfer in H2 by stimulated Raman transition with partially overlapping laser pulses
2000 Pramana - Journal of Physics 54 (6), pp. 827-844
16. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Nonadiabatic interaction effects on population transfer in H2 by stimulated Raman transition with partially overlapping laser pulses
1999 Physical Review A - Atomic, Molecular, and Optical Physics 59 (6), pp. 4475-4484
15. Lee J, Han J, Choe AS, et al.
Optimal detuning for atomic interferometry
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 35 (3): 175-179 SEP 1999
14. Sola IR, Malinovsky VS, Chang BY, et al.
Coherent population transfer in three-level Lambda systems by chirped laser pulses: Minimization of the intermediate-level population
PHYSICAL REVIEW A 59 (6): 4494-4501 JUN 1999
13. Kim HA, Moon HS, Kim JB, et al.
Expanded concept of the adiabatic population transfer using dressed states
PHYSICAL REVIEW A 59 (2): 1404-1407 FEB 1999
12. Wilson-Gordon AD, Friedmann H
Four-wave mixing with short temporally nonoverlapping pulses
JOURNAL OF PHYSICAL CHEMISTRY A 102 (47): 9651-9654 NOV 19 1998
11. Drese K, Holthaus M
Floquet theory for short laser pulses
EUROPEAN PHYSICAL JOURNAL D 5 (1): 119-134 JAN 1999
10. Drese K, Holthaus M
Perturbative and nonperturbative processes in adiabatic population transfer
EUROPEAN PHYSICAL JOURNAL D 3 (1): 73-86 JUL 1998
9. Wilson-Gordon, A.D., Friedmann, H.
Four-wave mixing with short temporally nonoverlapping pulses
1998 Journal of Physical Chemistry A 102 (47), pp. 9651-9654
8. Paspalakis E, Knight PL
Population transfer via an autoionizing state with temporally delayed chirped laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12): 2753-2767 JUN 28 1998
7. Buffa R
Resonance fluorescence of a three-level atom driven by delayed laser pulses
OPTICS COMMUNICATIONS 149 (4-6): 376-385 APR 15 1998
6. Choe AS, Lee JM
Laser frequency chirping effect on the diadiabatic transition occurring under the optimal detuning condition for coherent population transfer
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 32 (4): 617-620 APR 1998
5. Choe AS, Lee J
Effect of interference between three-level inversions on the inversion process and amount of inversion in a four-level lambda system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (6): 1179-1190 MAR 28 1998
4. Lee JM, Han JM, Choe AS, et al.
Complete population inversion in a four-level lambda scheme
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 32 (2): 128-131 FEB 1998
3. Garraway BM, Suominen KA
Adiabatic passage by light-induced potentials in molecules
PHYSICAL REVIEW LETTERS 80 (5): 932-935 FEB 2 1998
2. Malinovsky VS, Tannor DJ
Simple and robust extension of the stimulated Raman adiabatic passage technique to N-level systems

1. Paspalakis E, Protopapas M, Knight PL

Population transfer through the continuum with temporally delayed chirped laser pulses

OPTICS COMMUNICATIONS 142 (1-3): 34-40 OCT 1 1997

=====

21. Vitanov NV, Stenholm S

Population transfer by delayed pulses via continuum states

PHYSICAL REVIEW A 56 (1): 741-747 JUL 1997

34. Naskar, Somnath; Saha, Subrata; Dey, Tarak Nath; Deb, Bimalendu

Electromagnetically induced transparency in two-colour ultracold photoassociation

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (12):10.1088/1361-6455/aa6b43 JUN 28 2017

33. Kenmoe, MB; Tchouobiap, SEM; Sadem, CK; Tchpda, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015

32. Demekhin, Philipp V.; Cederbaum, Lorenz S.
Quantum oscillations between close-lying states mediated by the electronic continuum in intense high-frequency pulses

PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.013417 JAN 28 2015

31. Li, X; McCurdy, CW; Haxton, DJ
Population transfer between valence states via autoionizing states using two-color ultrafast pi pulses in XUV and the limitations of adiabatic passage

PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.031404 MAR 31 2014

30. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)

ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

29. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)

28. Cui, Ni; Niu, Yueping; Gong, Shangqing
Tunneling-induced coherent electron population transfer in an asymmetric quantum well

OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011

27. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure

ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010

26. Sarkar, Chittrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels

PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009

25. Longhi, Stefano
Optical analogue of coherent population trapping via a continuum in optical waveguide arrays

JOURNAL OF MODERN OPTICS 56 (6): 729-737 2009

24. Sarkar, Chittrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses

PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008

23. Longhi, S
Transfer of light waves in optical waveguides via a continuum

PHYSICAL REVIEW A 78 (1): Art. No. 013815 JUL 2008

22. Yan, Tian-Min; Han, Yong-Chang; Yuan, Kai-Jun; Cong, Shu-Lin
Steering population transfer via continuum structure of the Li-2 molecule with ultrashort laser pulses

CHEMICAL PHYSICS 348 (1-3): 39-44 JUN 2 2008

21. Anirudh Pradhan, Anju Rai, Sheel Kumar Singh
Cylindrically symmetric inhomogeneous universe with electromagnetic field in

string cosmology
Astrophysics and Space Science 312 261 (2007)

20. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses

JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007

19. Han YC, Wang SM, Yuan KJ, et al.
Population transfer of the Na-2 molecule via continuum state

CHEMICAL PHYSICS 333 (2-3): 119-127 MAR 30 2007

18. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage

REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007

17. Peters T, Halfmann T
Stimulated Raman adiabatic passage via the ionization continuum in helium: Experiment and theory

OPTICS COMMUNICATIONS 271 (2): 475-486 MAR 15 2007

16. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics

PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006

15. Peters T, Yatsenko LP, Halfmann T
Experimental demonstration of selective coherent population transfer via a continuum

PHYSICAL REVIEW LETTERS 95 (10): Art. No. 103601 SEP 2 2005

14. Zhang XZ, Han HL, Han HP, et al.
Coherent population transfer in Rydberg potassium atom via stimulated Raman adiabatic passage

CHINESE PHYSICS 14 (4): 720-724 APR 2005

13. Gong JB, Rice SA
Selective photochemistry via adiabatic passage: Degenerate product states with different lifetimes

JOURNAL OF CHEMICAL PHYSICS 120 (11): 5117-5127 MAR 15 2004

12. Karpati A, Kis Z
Adiabatic creation of coherent superposition states via multiple intermediate states

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003

11. Kurkal V, Rice SA
Population transfer to a predissociating target state using pulsed coherent excitation: Sensitivity to coupling to background states

JOURNAL OF PHYSICAL CHEMISTRY A 106 (45): 10810-10817 NOV 14 2002

10. Pimentel, L.O.
Nonsingular inhomogeneous string cosmology

General Relativity and Gravitation 31(5), pp. 761-765 (1999)

9. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.
Nonadiabatic interaction effects on population transfer in H2 by stimulated Raman transition with partially overlapping laser pulses

1999 Physical Review A - Atomic, Molecular, and Optical Physics 59 (6), pp. 4475-4484

8. Kylstra NJ, Paspalakis E, Knight PL
Laser-induced continuum structure in helium: ab initio non-perturbative calculations

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (18): L719-L728 SEP 28 1998

7. Buffa R
Optimal control of population transfer through the continuum

OPTICS COMMUNICATIONS 153 (4-6): 240-244 AUG 1 1998

6. Bergmann K, Theuer H, Shore BW
Coherent population transfer among quantum states of atoms and molecules

REVIEWS OF MODERN PHYSICS 70 (3): 1003-1025 JUL 1998

5. Paspalakis E, Knight PL
Population transfer via an autoionizing state with temporally delayed chirped laser pulses

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12):

4. Kobrak MN, Rice SA

Selective photochemistry via adiabatic passage: An extension of stimulated Raman adiabatic passage for degenerate final states
PHYSICAL REVIEW A 57 (4): 2885-2894 APR 1998

3. Paspalakis E, Protopapas M, Knight PL

Time-dependent pulse and frequency effects in population trapping via the continuum
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (4): 775-794 FEB 28 1998

2. Kobrak, M.N., Rice, S.A.

Coherent population transfer via a resonant intermediate state: The breakdown of adiabatic passage
1998 Physical Review A - Atomic, Molecular, and Optical Physics 57 (2), pp. 1158-1163

1. Paspalakis E, Protopapas M, Knight PL

Population transfer through the continuum with temporally delayed chirped laser pulses
OPTICS COMMUNICATIONS 142 (1-3): 34-40 OCT 1 1997

=====

22. Vitanov NV, Stenholm S

Population transfer via a decaying state
PHYSICAL REVIEW A 56 (2): 1463-1471 AUG 1997

58. Alrifai, Rim; Coda, Virginie; Peltier, Jonathan; Rangelov, Andon A.; Montemezzani, Germano

Ultrabroadband beam splitting in a dissipative system of three waveguides
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023527
Published: FEB 22 2021

57. Anza, Fabio; Messina, Antonino; Militello, Benedetto

Resonant Transitions Due to Changing Boundaries
OPEN SYSTEMS & INFORMATION DYNAMICS, 26 (2):10.1142/S1230161219500069 JUN 2019

56. Dodonov, AV; Napoli, A; Militello, B

Emulation of n-photon Jaynes-Cummings and anti-Jaynes-Cummings models via parametric modulation of a cyclic qutrit
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033823 MAR 11 2019

55. Vogell, B; Vermersch, B; Northup, TE; Lanyon, BP; Muschik, CA

Deterministic quantum state transfer between remote qubits in cavities
QUANTUM SCIENCE AND TECHNOLOGY, 2 (4):10.1088/2058-9565/aa868b DEC 2017

54. Mathisen, Thomas; Larson, Jonas

Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018

53. Borkowski, Mateusz

Optical Lattice Clocks with Weakly Bound Molecules
PHYSICAL REVIEW LETTERS, 120 (8):10.1103/PhysRevLett.120.083202 FEB 22 2018

52. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan

Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19;
10.1007/s10773-017-3535-z JAN 2018

51. Ciamei, A; Bayerle, A; Pasquiou, B; Schreck, F

Observation of Bose-enhanced photoassociation products
EPL, 119 (4):10.1209/0295-5075/119/46001 AUG 2017

50. Grimes, David D.; Barnum, Timothy J.; Zhou, Yan; Colombo, Anthony P.; Field, Robert W.

Coherent laser-millimeter-wave interactions en route to coherent population transfer
JOURNAL OF CHEMICAL PHYSICS, 147 (14):10.1063/1.4997624 OCT 14 2017

49. Shore, Bruce W.

Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

48. Ciamei, Alessio; Bayerle, Alex; Chen, Chun-Chia; Pasquiou, Benjamin; Schreck, Florian

Efficient production of long-lived ultracold Sr-2 molecules
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.013406 JUL 7 2017

47. Shi, X; Yuan, H; Mao, X; Ma, Y; Zhao, HQ

Robust quantum state transfer inspired by Dzyaloshinskii-Moriya interactions
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.052332 MAY 16 2017

46. Picon, Antonio; Mompert, Jordi; Southworth, Stephen H.

Stimulated Raman adiabatic passage with two-color x-ray pulses
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/8/083038 AUG 19 2015

45. Dupont-Nivet, M; Casuilis, M; Laudat, T; Westbrook, CI; Schwartz, S

Microwave-stimulated Raman adiabatic passage in a Bose-Einstein condensate on an atom chip
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053420 MAY 26 2015

44. Kenmoe, MB; Tchouobiap, SEM; Sadem, CK; Tchabda, AB; Fai, LC

Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015

43. Wang, Qiong; Nie, Jian-Jun; Zeng, Hao-Sheng

Roles of dephasing in the population transfer in stimulated Raman adiabatic process
EUROPEAN PHYSICAL JOURNAL D Volume: 67 Issue: 7 Article Number: 151
Published: JUL 2013

42. Shore, Bruce W.

PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

41. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong

Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

40. Avishai, Y; Band, YB

Landau-Zener problem with decay and dephasing
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.032116 SEP 30 2014

39. Shi Xuan; Oh, C. H.; Wei Lian-Fu

Stark-Chirped Rapid Adiabatic Passage in Presence of Dissipation for Quantum Computation
COMMUNICATIONS IN THEORETICAL PHYSICS, 61 (2):235-240; FEB 2014

38. Assemat, E; Sugny, D

Connection between optimal control theory and adiabatic-passage techniques in quantum systems
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023406 AUG 6 2012

37. Shapiro, M., Brumer, P.

Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)

36. Pyragas, Viktoras; Juzeliunas, Gediminas

Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012

35. Thanopoulos, Ioannis; Shapiro, Moshe

Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010

34. Lazarou, Constantinos; Keller, Matthias; Garraway, Barry M.

Adiabatic passage methods in cooling trapped molecular ions
QUANTUM OPTICS 7727: Art. No. 772708 2010

33. Lazarou, C; Keller, M; Garraway, BM

Molecular heat pump for rotational states
PHYSICAL REVIEW A 81 (1): Art. No. 013418 JAN 2010

32. Gromovyi, M.V., Romanenko, V.I., Yatsenko, L.P.

Stimulated raman adiabatic passage in the field of finite duration pulses

31. Beil, Fabian; Klein, Jens; Halfmann, Thomas

Optically driven atomic coherences in a Pr³⁺:Y₂SiO₅ crystal
PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS 7 (1):
32-38 FEB 2009

30. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie

Adiabatic evolution for the Rb-87 atom-molecule conversion system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (18): Art.
No. 185301 SEP 28 2009

29. Sarkar, Chittrakshya; Bhattacharyya, S. S.; Saha, Samir

Coherent control of vibrational population transfer in the Li-2 molecule with
femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009

28. Zhang, SJ; Ma, C; Zhang, WH; Ye, L

One step to generate cluster states using dipole-induced transparency in a cavity-
waveguide system
COMMUNICATIONS IN THEORETICAL PHYSICS 50 (3): 648-650 SEP 15 2008

27. Yang, Xihua; Zhu, Shiyao

Collision-assisted electromagnetically induced control of coherent population
transfer
PHYSICAL REVIEW A 78 (2): Art. No. 023818 Part B AUG 2008

26. Sarkar, Chittrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir

Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-
Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008

25. Yang, Xihua; Zhu, Shiyao

Control of coherent population transfer via spontaneous decay-induced
coherence
PHYSICAL REVIEW A 77 (6): Art. No. 063822 JUN 2008

24. Goto, Hayato; Ichimura, Kouichi

Stimulated Raman adiabatic passage with small two-photon detunings and its
geometrical description
PHYSICS LETTERS A 372 (9): 1535-1540 FEB 25 2008

23. Goto, Hayato; Ichimura, Kouichi

Upper bound for the success probability of cavity-mediated adiabatic transfer in
the presence of dissipation
PHYSICAL REVIEW A 77 (1): Art. No. 013816 JAN 2008

22. Evangelos Voutsinas, John Boviatsis, Antonios Fountoulakis

Control of a double quantum dot structure by stimulated Raman adiabatic
passage
Physica Status Solidi (c) 4 439 (2007)

21. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.

Population transfer to excited vibrational levels of H-2 molecule by stimulated
hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007

20. Qian J, Qian Y, Feng XL, et al.

Generation and discrimination of Greenberger-Horne-Zeilinger states using
dipole-induced transparency in a cavity-waveguide system
PHYSICAL REVIEW A 75 (3): Art. No. 032309 MAR 2007

19. Goto H, Ichimura K

Observation of coherent population transfer in a four-level tripod system with a
rare-earth-metal-ion-doped crystal
PHYSICAL REVIEW A 75 (3): Art. No. 033404 MAR 2007

18. Caillet X, Simon C

Precision of single-qubit gates based on Raman transitions
EUROPEAN PHYSICAL JOURNAL D 42 (2): 341-348 MAY 2007

17. Kral P, Thanopoulos I, Shapiro M

Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007

16. Shapiro M, Brumer P

Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR
2006

15. Fleischhauer M, Imamoglu A, Marangos JP

Electromagnetically induced transparency: Optics in coherent media
REVIEWS OF MODERN PHYSICS 77 (2): 633-673 APR 2005

14. Fewell MP

Adiabatic elimination, the rotating-wave approximation and two-photon
transitions
OPTICS COMMUNICATIONS 253 (1-3): 125-137 SEP 1 2005

13. Kaatuzian H, Rostami A, Oskouei AA

Analysis of quantum light memory in atomic systems
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 7 (6): 157-167
JUN 2005

12. Karpati, A., Kis, Z., Adam, P.

Robust state preparation in a degenerate four-state system
2005 Acta Physica Hungarica, Series B: Quantum Electronics 23 (1-2), pp. 41-47

11. Karpati A, Kis Z, Adam P

Engineering mixed states in a degenerate four-state system
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 193003 NOV 5 2004

10. Zhou ZY, Chu SI, Han S

Suppression of energy-relaxation-induced decoherence in Lambda-type three-
level SQUID flux qubits: A dark-state approach
PHYSICAL REVIEW B 70 (9): Art. No. 094513 SEP 2004

9. Rostami A

Analysis of quantum light memory in atomic systems
LECTURE NOTES IN COMPUTER SCIENCE 3124: 296-303 2004

8. Hu ZF, Du CG, Li SQ

Nonadiabatic effects on population transfer of two Bose-Einstein condensates
induced by atomic interaction
CHINESE PHYSICS 12 (7): 708-713 JUL 2003

7. Hu ZF, Du CG, Li DJ, et al.

Stimulated Raman adiabatic population transfer of two Bose-Einstein
condensates
CHINESE PHYSICS LETTERS 19 (9): 1234-1237 SEP 2002

6. Rice SA, Shah SP

Active control of product selection in a chemical reaction: a view of the current
scene
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 4 (10): 1683-1700 2002

5. Fleischhauer M, Lukin MD

Quantum memory for photons: Dark-state polaritons
PHYSICAL REVIEW A 65 (2): Art. No. 022314 FEB 2002

4. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.

Effect of polarization on population transfer in H₂ by stimulated Raman transition
with partially overlapping laser pulses
Pramana - Journal of Physics 54(6), pp. 827-844 (2000)

3. Ghosh, S., Sen, S., Bhattacharyya, S.S., Saha, S.

Nonadiabatic interaction effects on population transfer in H₂ by stimulated
Raman transition with partially overlapping laser pulses
1999 Physical Review A - Atomic, Molecular, and Optical Physics 59 (6), pp. 4475-
4484

2. Paspalakis E, Knight PL

Population transfer via an autoionizing state with temporally delayed chirped
laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12):
2753-2767 JUN 28 1998

1. Garraway BM, Suominen KA

Adiabatic passage by light-induced potentials in molecules
PHYSICAL REVIEW LETTERS 80 (5): 932-935 FEB 2 1998

=====

23. Vitanov NV, Suominen KA

Time-dependent control of ultracold atoms in magnetic traps
PHYSICAL REVIEW A 56 (6): R4377-R4380 DEC 1997

24. Chakraborty, A; Mishra, SR

A Floquet formalism for the interaction of magnetically trapped atoms with rf
fields

23. Burrows, Kathryn A.; Perrin, Helene; Garraway, Barry M.
Nonadiabatic losses from radio-frequency-dressed cold-atom traps: Beyond the Landau-Zener model
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023429 AUG 30 2017

22. Theisen, M; Petiziol, F; Carretta, S; Santini, P; Wimberger, S
Superadiabatic driving of a three-level quantum system
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.013431 JUL 31 2017

21. Garraway, B.M., Perrin, H.
Recent developments in trapping and manipulation of atoms with adiabatic potentials
Journal of Physics B: Atomic, Molecular and Optical Physics 49(17),172001 (2016)

20. Kenmoe, M. B.; Tchoubiapi, S. E. Mkam; Danga, J. E.; Sadem, C. Kenfack; Fai, L. C.
Lie algebras for some specific dissipative Landau-Zener problems
PHYSICS LETTERS A, 379 (7):635-642; 10.1016/j.physleta.2014.12.032 MAR 20 2015

19. Ishkhanyan, Artur M.; Shahverdyan, Tigran A.; Ishkhanyan, Tigran A.
Thirty five classes of solutions of the quantum time-dependent two-state problem in terms of the general Heun functions
EUROPEAN PHYSICAL JOURNAL D, 69 (1):10.1140/epjd/e2014-50386-9 JAN 8 2015

18. Petrovic, J; Herrera, I; Lombardi, P; Schafer, F; Cataliotti, FS
A multi-state interferometer on an atom chip
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/4/043002 APR 4 2013

17. Gildemeister, M; Nugent, E; Sherlock, BE; Kubasik, M; Sheard, BT; Foot, CJ
Trapping ultracold atoms in a time-averaged adiabatic potential
PHYSICAL REVIEW A 81 (3): Art. No. 031402 MAR 2010

16. Fernholz, T; Gerritsma, R; Whitlock, S; Barb, I; Spreeuw, RJC
Fully permanent magnet atom chip for Bose-Einstein condensation
PHYSICAL REVIEW A 77 (3): Art. No. 033409 MAR 2008

15. Morizot, O.; Alzar, C. L. Garrido; Pottie, P-E; Lorent, V.; Perrin, H.
Trapping and cooling of rf-dressed atoms in a quadrupole magnetic field
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 40 (20): 4013-4022 OCT 28 2007

14. Wang GF, Liu B, Fu LB, et al.
Adiabatic Landau-Zener tunnelling in nonlinear three-level system
ACTA PHYSICA SINICA 56 (7): 3733-3738 JUL 2007

13. Alzar CLG, Perrin H, Garraway BM, et al.
Evaporative cooling in a radio-frequency trap
PHYSICAL REVIEW A 74 (5): Art. No. 053413 NOV 2006

12. Wang GF, Ye DF, Fu LB, et al.
Landau-Zener tunneling in a nonlinear three-level system
PHYSICAL REVIEW A 74 (3): Art. No. 033414 SEP 2006

11. Morizot O, Colombe Y, Lorent V, et al.
Ring trap for ultracold atoms
PHYSICAL REVIEW A 74 (2): Art. No. 023617 AUG 2006

10. Shytov AV
Landau-Zener transitions in a multilevel system: An exact result
PHYSICAL REVIEW A 70 (5): Art. No. 052708 NOV 2004

9. Forre M
Landau-Zener-Stueckelberg theory for multiphoton intrashell transitions in Rydberg atoms: Bloch-Siegert shifts and widths
PHYSICAL REVIEW A 70 (1): Art. No. 013406 JUL 2004

8. Cren P, Roos CF, Aclan A, et al.
Loading of a cold atomic beam into a magnetic guide
EUROPEAN PHYSICAL JOURNAL D 20 (1): 107-116 JUL 2002

7. Forre M, Nilsen HM, Hansen JP
Dynamics of a H(n) atom in time-dependent electric and magnetic fields
PHYSICAL REVIEW A 65 (5): Art. No. 053409 Part B MAY 2002

6. Forre M, Fregenal D, Day JC, et al.

Dynamics of a single Rydberg shell in time dependent external fields
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 35 (2): 401-419 JAN 28 2002

5. Demkov YN, Ostrovsky VN
The exact solution of the multistate Landau-Zener type model: the generalized bow-tie model
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 34 (12): 2419-2435 JUN 28 2001

4. Kenkre VM, Raghavan S
Dynamic localization and related resonance phenomena
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 2 (5): 686-693 OCT 2000

3. Rabitz H, Zhu WS
Optimal control of molecular motion: Design, implementation, and inversion
ACCOUNTS OF CHEMICAL RESEARCH 33 (8): 572-578 AUG 2000

2. Poulsen UV, Molmer K
Atomic reflection from a magnetic mirror: Beyond the adiabatic approximation
EUROPEAN PHYSICAL JOURNAL D 11 (2): 151-157 AUG 2000

1. Graham R, Walls DF
Theory of strong outcoupling from Bose-Einstein condensates
PHYSICAL REVIEW A 60 (2): 1429-1441 AUG 1999

=====
24. Unanyan RG, Vitanov NV, Stenholm S
Suppression of incoherent ionization in population transfer via continuum
PHYSICAL REVIEW A 57 (1): 462-466 JAN 1998

27. Sen, Surajit; Dey, Tushar Kanti; Deb, Bimalendu
A unified approach to Lambda-, Xi- and V-type systems with one continuum
JOURNAL OF MODERN OPTICS, 64 (19):2083-2096;
10.1080/09500340.2017.1337941 2017

26. Naskar, Somnath; Saha, Subrata; Dey, Tarak Nath; Deb, Bimalendu
Electromagnetically induced transparency in two-colour ultracold photoassociation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (12):10.1088/1361-6455/aa6b43 JUN 28 2017

25. Sardar, Dibyendu; Naskar, Somnath; Pal, Arpita; Berriche, Hamid; Deb, Bimalendu
Formation of a molecular ion by photoassociative Raman processes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 49 (24):10.1088/0953-4075/49/24/245202 DEC 28 2016

24. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

23. Li, X; McCurdy, CW; Haxton, DJ
Population transfer between valence states via autoionizing states using two-color ultrafast pi pulses in XUV and the limitations of adiabatic passage
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.031404 MAR 31 2014

22. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)

21. Muradyan, Gevorg; Muradyan, Atom Zh
Quantum superposition principle and generation of short optical pulses
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011), 350 10.1088/1742-6596/350/1/012006 2012
Editors: Bhattacharjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series

20. Cui, Ni; Niu, Yueping; Gong, Shangqing
Tunneling-induced coherent electron population transfer in an asymmetric quantum well
OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011

19. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010

18. Longhi, S
Transfer of light waves in optical waveguides via a continuum
PHYSICAL REVIEW A 78 (1): Art. No. 013815 JUL 2008
17. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007
16. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
15. Peters T, Halfmann T
Stimulated Raman adiabatic passage via the ionization continuum in helium: Experiment and theory
OPTICS COMMUNICATIONS 271 (2): 475-486 MAR 15 2007
14. Raczynski A, Rzepecka M, Zaremba J, et al.
Electromagnetically induced transparency and light slowdown for Lambda-like systems with a structured continuum
OPTICS COMMUNICATIONS 266 (2): 552-557 OCT 15 2006
13. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006
12. Peters T, Yatsenko LP, Halfmann T
Experimental demonstration of selective coherent population transfer via a continuum
PHYSICAL REVIEW LETTERS 95 (10): Art. No. 103601 SEP 2 2005
11. Popov AK, Kimberg VV, George TF
Large enhancement of fully resonant sum-frequency generation through quantum control via continuum states
PHYSICAL REVIEW A 69 (4): Art. No. 043816 APR 2004
10. Chen PC, Piermarocchi C, Sham LJ, et al.
Theory of quantum optical control of a single spin in a quantum dot
PHYSICAL REVIEW B 69 (7): Art. No. 075320 FEB 2004
9. Popov AK, Kimberg VV, George TF
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
PHYSICAL REVIEW A 68 (3): Art. No. 033407 SEP 2003
8. Karpati A, Kis Z
Adiabatic creation of coherent superposition states via multiple intermediate states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003
7. Kurkal V, Rice SA
Population transfer to a predissociating target state using pulsed coherent excitation: Sensitivity to coupling to background states
JOURNAL OF PHYSICAL CHEMISTRY A 106 (45): 10810-10817 NOV 14 2002
6. Raczynski A, Rezmerska A, Zaremba J
Population transfer through coupled continuum
PHYSICAL REVIEW A 63 (2): Art. No. 025402 FEB 2001
5. Ghosh S, Sen S, Bhattacharyya SS, et al.
Effect of polarization on population transfer in H-2 by stimulated Raman transition with partially overlapping laser pulses
PRAMANA-JOURNAL OF PHYSICS 54 (6): 827-844 JUN 2000
4. Ghosh S, Sen S, Bhattacharyya SS, et al.
Nonadiabatic interaction effects on population transfer in H-2 by stimulated Raman transition with partially overlapping laser pulses
PHYSICAL REVIEW A 59 (6): 4475-4484 JUN 1999
3. Buffa R
Optimal control of population transfer through the continuum
OPTICS COMMUNICATIONS 153 (4-6): 240-244 AUG 1 1998
2. Paspalakis E, Knight PL
Population transfer via an autoionizing state with temporally delayed chirped laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (12): 2753-2767 JUN 28 1998
1. Kobrak MN, Rice SA
Coherent population transfer via a resonant intermediate state: The breakdown of adiabatic passage
PHYSICAL REVIEW A 57 (2): 1158-1163 FEB 1998
- =====
- 25. Vitanov NV**
Analytic model of a three-state system driven by two laser pulses on two-photon resonance
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 31 (4): 709-725 FEB 28 1998
37. Shi, J., Ma, R.-Q., Liu, L.
Coherent tunneling by nonadiabatic passage in a three-waveguide coupler
Journal of the Physical Society of Japan 89(6),064006 (2020)
36. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
35. Namkung, Min; Kwon, Younghun
Almost minimum error discrimination of N-ary weak coherent states by Jaynes-Cummings Hamiltonian dynamics
SCIENTIFIC REPORTS Volume: 9 Article Number: 19664 Published: DEC 23 2019
34. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
33. Zhou, Jian; Liu, BaoJie; Hong, ZhuoPing; Xue, Zheng Yuan
Fast holonomic quantum computation based on solid-state spins with all-optical control
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 61 (1):10.1007/s11433-017-9119-8 JAN 2018
32. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017
31. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
30. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384; 10.1080/09500340.2017.1361478 2017
29. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
28. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
27. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
26. Huang, Wei; Rangelov, Andon A.; Kyoseva, Elica
Complete achromatic optical switching between two waveguides with a sign flip of the phase mismatch
PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.053837 NOV 19 2014
25. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499; 10.1080/09500340.2014.942404 2014

24. Amniet-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI
10.1080/09500340.2013.877164 2014
23. de Galway, W.O., Naudts, J.
Energy transfer using unitary transformations
Entropy 15(12), pp. 5121-5143 (2013)
22. He, Yong Lin; Han, Jiu Ning
Multiphoton Rabi oscillations of a ringlike three-level system
PHYSICAL REVIEW A, 85 (4):10.1103/PhysRevA.85.043415 APR 17 2012
21. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
20. Paspalakis, Emmanuel
Controlled Preparation of a Biexciton State in a Quantum Dot
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE 7 (9): 1717-1722 Sp. Iss. SI SEP 2010
19. Thanopoulos, I; Kral, P; Shapiro, M; Paspalakis, E
Optical control of molecular switches
JOURNAL OF MODERN OPTICS 56 (6): 686-703 2009
18. Thanopoulos, I; Kral, P; Shapiro, M; Paspalakis, E
Optical control of molecular switches
JOURNAL OF MODERN OPTICS 56 (1): 1-18 2009
17. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
16. Nath, Mihir Ranjan; Sen, Surajit; Sen, Asoke Kumar; Gangopadhyay, Gautam
Dynamical symmetry breaking of lambda- and vee-type three-level systems on quantization of the field modes
PRAMANA-JOURNAL OF PHYSICS 71 (1): 77-97 JUL 2008
15. Boviatsis J, Voutsinas E, Fountoulakis A
Entanglement of two interacting electrons in a driven double quantum dot structure
SUPERLATTICES AND MICROSTRUCTURES 41 (5-6): 396-399 MAY-JUN 2007
14. Chatel, B., Girard, B.
Coherent control of atomic dynamics with chirped and shaped pulses (Book Chapter)
in Femtosecond Laser Spectroscopy pp. 267-304 (Springer, 2005), ed. P. Hannaford
13. Rau ARP, Zhao WC
Time-dependent treatment of a general three-level system
PHYSICAL REVIEW A 71 (6): Art. No. 063822 JUN 2005
12. Muradyan AZ, Muradyan GA
Collapse and revival in atom internal dynamics due to quantum translational motion
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 37 (22): 4471-4482 NOV 28 2004
11. Kis Z, Paspalakis E
Controlled creation of entangled states of excitons in coupled quantum dots
JOURNAL OF APPLIED PHYSICS 96 (6): 3435-3439 SEP 15 2004
10. Thanopoulos I, Paspalakis E, Kis Z
Laser-driven coherent manipulation of molecular chirality
CHEMICAL PHYSICS LETTERS 390 (1-3): 228-235 MAY 21 2004
9. Paspalakis E, Kis Z, Voutsinas E, et al.
Controlled rotation in a double quantum dot structure
PHYSICAL REVIEW B 69 (15): Art. No. 155316 APR 2004
8. Kis Z, Paspalakis E
Arbitrary rotation and entanglement of flux SQUID qubits
PHYSICAL REVIEW B 69 (2): Art. No. 024510 JAN 2004
7. Chatel A, Degert J, Stock S, et al.
Competition between sequential and direct paths in a two-photon transition
PHYSICAL REVIEW A 68 (4): Art. No. 041402 OCT 2003
6. Muradyan AZ, Poghosyan AA, Berman PR
Theory of a compound large-angle atom beam splitter
PHYSICAL REVIEW A 68 (3): Art. No. 033604 SEP 2003
5. Djotyan GP, Bakos JS, Sorlei Z
Three-level Lambda atom in the field of frequency-chirped bichromatic laser pulses: Writing and storage of optical phase information
PHYSICAL REVIEW A 64 (1): Art. No. 013408 JUL 2001
4. Champenois C, Buchner M, Dehuille R, et al.
Atomic diffraction by a laser standing wave: Analysis using Bloch states
EUROPEAN PHYSICAL JOURNAL D 13 (2): 271-278 FEB 2001
3. Zamith S, Bouchene MA, Sokell E, et al.
Pump probe experiment in atomic fine structure levels: Observation of the oscillation of an angular wavepacket
EUROPEAN PHYSICAL JOURNAL D 12 (2): 255-261 NOV 2000
2. Kim HA, Moon HS, Kim JB, et al.
Expanded concept of the adiabatic population transfer using dressed states
PHYSICAL REVIEW A 59 (2): 1404-1407 FEB 1999
1. Djotyan GP, Bakos JS, Sorlei Z
Coherent writing and reading of information using frequency-chirped short bichromatic laser pulses
OPTICS EXPRESS 4 (2): 113-120 JAN 18 1999
- =====
- 26. Vitanov NV**
Adiabatic population transfer by delayed laser pulses in multistate systems
PHYSICAL REVIEW A 58 (3): 2295-2309 SEP 1998
45. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020
44. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Xue-Feng
Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043
Published: JUL 15 2020
43. Shen, Ya-Xi; Peng, Yu-Gui; Zhao, De-Gang; Chen, Xin-Cheng; Zhu, Jie; Zhu, Xue-Feng
One-Way Localized Adiabatic Passage in an Acoustic System
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.094501 MAR 8 2019
42. Lunghi, T; Doutre, F; Rambau, AP; Bellec, M; De Micheli, MP; Apetrei, AM; Alibart, O; Belabas, N; Tascu, S; Tanzilli, S
Broadband integrated beam splitter using spatial adiabatic passage
OPTICS EXPRESS, 26 (21):27058-27063; 10.1364/OE.26.027058 OCT 15 2018
41. Shirikhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
40. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
39. Oukraou, Hassan; Coda, Virginie; Rangelov, Andon A.; Montemezzani, Germano
Broadband photonic transport between waveguides by adiabatic elimination
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.023811 FEB 6 2018
38. Mukherjee, N., Perreault, W.E., Zare, R.N.
Stark-Induced Adiabatic Passage Processes to Selectively Prepare Vibrationally Excited Single and Superposition of Quantum States (Book Chapter)
in Frontiers and Advances in Molecular Spectroscopy, pp. 1-46 (Elsevier, 2018), ed. Jaan Laane
37. Shore, Bruce W.

- Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
 ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
 SEP 30 2017
36. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
 Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited
 quantum states of molecular hydrogen
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50
 (14):10.1088/1361-6455/aa786f JUL 28 2017
35. Saadati-Niari, Maghsoud
 Coherent superpositions of states in coupled Hilbert-space using step by step
 Morris-Shore transformation
 ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
34. Sazonov, SV
 Few-cycle solitons in the medium with permanent dipole moment under
 conditions of the induced birefringence
 OPTICS COMMUNICATIONS, 380 480-491; 10.1016/j.optcom.2016.06.053 DEC 1
 2016
33. Sazonov, SV
 New Type of Extremely Short Vector Solitons in a Medium of Asymmetric
 Molecules
 JETP LETTERS, 102 (12):834-840; 10.1134/S0021364015240091 DEC 2015
32. Xu, Peng; Yang, Xu-Chen; Mei, Feng; Xue, Zheng-Yuan
 Controllable high-fidelity quantum state transfer and entanglement generation in
 circuit QED
 SCIENTIFIC REPORTS, 6 10.1038/srep18695 JAN 25 2016
31. Izadyari, M; Saadati-Niari, M; Khadem-Hosseini, R; Amniat-Talab, M
 Creation of N-atom GHZ state in atom-cavity-fiber system by multi-state adiabatic
 passage
 OPTICAL AND QUANTUM ELECTRONICS, 48 (1):10.1007/s11082-015-0356-2 JAN
 2016
30. Zhai, Jingjing; Zhang, Lu; Zhang, Keye; Qian, Jing; Zhang, Weiping
 Efficiency limitation for realizing an atom-molecule adiabatic transfer based on a
 chainwise system
 JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 32
 (10):2164-2171; 10.1364/JOSAB.32.002164 OCT 1 2015
29. Shore, Bruce W.
 PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
 PASSAGE (STIRAP)
 ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
28. Xia, T; Zhang, XL; Saffman, M
 Analysis of a controlled phase gate using circular Rydberg states
 PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.062337 DEC 30 2013
27. Hao, Si-Yang; Xia, Yan; Song, Jie
 Effective scheme for preparation of multi-atom Greenberger-Horne-Zeilinger
 states in coupled cavities via adiabatic passage
 JOURNAL OF MODERN OPTICS, 60 (16):1349-1354;
 10.1080/09500340.2013.837982 SEP 20 2013
26. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.;
 Montemezzani, Germano
 Broadband adiabatic light transfer in optically induced waveguide arrays
 PHYSICAL REVIEW A, 87 (1):10.1103/PhysRevA.87.013806 JAN 7 2013
25. Ciret, C., Coda, V., Montemezzani, G., Rangelov, A.A., Neshev, D.N.
 Planar n-fold beam splitter based on adiabatic light transfer
 2012 European Conference on Optical Communication, ECOC
24. Wang, Ping; Chen, Mei-Feng
 Preparation of four-dimensional entangled states in separate cavities via adiabatic
 passage
 PHYSICA SCRIPTA, 86 (6):10.1088/0031-8949/86/06/065002 DEC 2012
23. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.;
 Montemezzani, Germano
 Planar achromatic multiple beam splitter by adiabatic light transfer
 OPTICS LETTERS, 37 (18):3789-3791; SEP 15 2012
22. Tseng, Shuo-Yen; Wu, Ming-Chan
 Mode Conversion/Splitting by Optical Analogy of Multistate Stimulated Raman
 Adiabatic Passage in Multimode Waveguides
 JOURNAL OF LIGHTWAVE TECHNOLOGY 28 (24): 3529-3534 DEC 15 2010
21. Qian, Jing; Zhang, Weiping; Ling, Hong Y.
 Achieving ground-state polar molecular condensates by chainwise atom-
 molecule adiabatic passage
 PHYSICAL REVIEW A 81 (1): Art. No. 013632 JAN 2010
20. Amniat-Talab, M.; Nader-Ali, R.; Guerin, S.; Niari, M. Saadati
 Creation of atomic W state in a cavity by adiabatic passage
 OPTICS COMMUNICATIONS 283 (4): 622-627 FEB 15 2010
19. Anuchina YD, Rozhdestvenskii YV
 Splitting of Atomic Wave Packets under Multizone Raman Excitation
 JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS Volume: 109 Issue: 5
 Pages: 719-725 Published: NOV 2009
18. Liu Wen-Wu; Li Hong-Cai; Yang Rong-Can
 Implementation of quantum search scheme by adiabatic passage in a cavity-laser-
 atom system
 CHINESE PHYSICS B 18 (1): 23-29 JAN 2009
17. Kuznetsova, Elena; Pellegrini, Philippe; Cote, Robin; Lukin, M. D.; Yelin, S. F.
 Formation of deeply bound molecules via chainwise adiabatic passage
 PHYSICAL REVIEW A 78 (2): Art. No. 021402 Part A AUG 2008
16. Kamleitner, I; Cresser, J; Twamley, J
 Adiabatic information transport in the presence of decoherence
 PHYSICAL REVIEW A 77 (3): Art. No. 032331 MAR 2008
15. Della Valle, G; Ornigotti, M; Fernandez, TT; Laporta, P; Longhi, S; Coppa, A;
 Foglietti, V
 Adiabatic light transfer via dressed states in optical waveguide arrays
 APPLIED PHYSICS LETTERS 92 (1): Art. No. 011106 JAN 7 2008
14. Goto H, Ichimura K
 Observation of coherent population transfer in a four-level tripod system with a
 rare-earth-metal-ion-doped crystal
 PHYSICAL REVIEW A 75 (3): Art. No. 033404 MAR 2007
13. Marx CA, Jakubetz W
 Phase-sensitive stimulated Raman adiabatic passage in dipolar extended lambda
 systems
 JOURNAL OF CHEMICAL PHYSICS 125 (23): Art. No. 234103 DEC 21 2006
12. Sangouard N, Lacour X, Guerin S, et al.
 CNOT gate by adiabatic passage with an optical cavity
 EUROPEAN PHYSICAL JOURNAL D 37 (3): 451-456 MAR 2006
11. Sangouard N, Lacour X, Guerin S, et al.
 Fast SWAP gate by adiabatic passage
 PHYSICAL REVIEW A 72 (6): Art. No. 062309 DEC 2005
10. Fewell MP
 Adiabatic elimination, the rotating-wave approximation and two-photon
 transitions
 OPTICS COMMUNICATIONS 253 (1-3): 125-137 SEP 1 2005
9. Amniat-Talab M, Guerin S, Jauslin HR
 Decoherence-free creation of atom-atom entanglement in a cavity via fractional
 adiabatic passage
 PHYSICAL REVIEW A 72 (1): Art. No. 012339 Part A-B JUL 2005
8. Larson J, Andersson E
 Cavity-state preparation using adiabatic transfer
 PHYSICAL REVIEW A 71 (5): Art. No. 053814 MAY 2005
7. Jain S, Kurur ND
 Multiple quantum inversion in scalar coupled systems with amplitude modulated
 temporally overlapped pulses
 JOURNAL OF MAGNETIC RESONANCE 169 (2): 240-245 AUG 2004
6. Sazonov SV
 Nonlinear regimes of propagation of resonant pulses in multilevel quantum
 media
 OPTICS AND SPECTROSCOPY 95 (4): 622-630 OCT 2003
5. Sola IR, Malinovsky VS
 Collapse of the stimulated Raman adiabatic passage due to geometrical factors
 and how to overcome it
 PHYSICAL REVIEW A 68 (1): Art. No. 013412 JUL 2003

4. Unanyan RG, Fleischhauer M
Efficient and robust entanglement generation in a many-particle system with resonant dipole-dipole interactions
PHYSICAL REVIEW A 66 (3): Art. No. 032109 SEP 2002
3. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000
2. Sola IR, Malinovsky VS, Tannor DJ
Optimal pulse sequences for population transfer in multilevel systems
PHYSICAL REVIEW A 60 (4): 3081-3090 OCT 1999
1. Kim HA, Moon HS, Kim JB, et al.
Expanded concept of the adiabatic population transfer using dressed states
PHYSICAL REVIEW A 59 (2): 1404-1407 FEB 1999
- =====
- 27. Vitanov NV, Shore BW, Bergmann K**
Adiabatic population transfer in multistate chains via dressed intermediate states
EUROPEAN PHYSICAL JOURNAL D 4 (1): 15-29 OCT 1998
39. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020
38. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430
Published: DEC 30 2019
37. Liu, Lan; Zhang, De-Chao; Yang, Huan; Liu, Ya-Xiong; Nan, Jue; Rui, Jun; Zhao, Bo; Pan, Jian-Wei
Observation of Interference between Resonant and Detuned STIRAP in the Adiabatic Creation of (23)Na(40)K Molecules
PHYSICAL REVIEW LETTERS, 122 (25):10.1103/PhysRevLett.122.253201 JUN 25 2019
36. Chung, Hung-Pin; Lee, Hieh-Hsun; Huang, Kuang-Hsu; Yang, Sung-Lin; Wang, Kai; Solntsev, Alexander S.; Sukhorukov, Ndrej A.; Setzpfandt, Frank; Chen, Yen-Hung
Broadband on-chip polarization mode splitters in lithium niobate integrated adiabatic couplers
OPTICS EXPRESS, 27 (2):1632-1645; 10.1364/OE.27.001632 JAN 21 2019
35. Mukherjee, N., Perreault, W.E., Zare, R.N.
Stark-Induced Adiabatic Passage Processes to Selectively Prepare Vibrationally Excited Single and Superposition of Quantum States (Book Chapter)
in Frontiers and Advances in Molecular Spectroscopy, pp. 1-46 (Elsevier, 2018), ed. Jaan Laane
34. Castellini, Alessia; Jauslin, Hans Rudolf; Rousseaux, Benjamin; et al.
Quantum plasmonics with multi-emitters: application to stimulated Raman adiabatic passage
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 223
Published: DEC 21 2018
33. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256; 10.1016/bs.aamop.2018.02.003 2018
32. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
31. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited quantum states of molecular hydrogen
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (14):10.1088/1361-6455/aa786f JUL 28 2017
30. Joo, Jaewoo; Elliott, Matthew; Oi, Daniel K. L.; Ginossar, Eran; Spiller, Timothy P.
Deterministic amplification of Schrodinger cat states in circuit quantum electrodynamics
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/2/023028 FEB 5 2016
29. Zhai, Jingjing; Zhang, Lu; Zhang, Keye; Qian, Jing; Zhang, Weiping
Efficiency limitation for realizing an atom-molecule adiabatic transfer based on a chainwise system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 32 (10):2164-2171; 10.1364/JOSAB.32.002164 OCT 1 2015
28. Sun, C., Chen, C., Wei, J., Li, P.
Efficient three-process frequency conversion based on straddling stimulated Raman adiabatic passage
IEEE Photonics Journal 6(6),6966718 (2014)
27. Hope, AP; Nguyen, TG; Greentree, AD; Mitchell, A
Long-range coupling of silicon photonic waveguides using lateral leakage and adiabatic passage
OPTICS EXPRESS, 21 (19):22705-22716; 10.1364/OE.21.022705 SEP 23 2013
26. Assemat, E; Sugny, D
Connection between optimal control theory and adiabatic-passage techniques in quantum systems
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023406 AUG 6 2012
25. Porat, Gil; Silberberg, Yaron; Arie, Ady; Suchowski, Haim
Two photon frequency conversion
OPTICS EXPRESS, 20 (4):3613-3619; FEB 13 2012
24. Yang, Xihua; Huang, Yihua; Zhang, Zhenhua; Yan, Xiaona
Enhancement of coherent population transfer in a double Lambda-type four-level system via a train of pulse pairs
OPTICS COMMUNICATIONS, 285 (8):2101-2105; 10.1016/j.optcom.2011.12.076 APR 15 2012
23. Yuan, Haidong; Koch, Christiane P.; Salamon, Peter; Tannor, David J.
Controllability on relaxation-free subspaces: On the relationship between adiabatic population transfer and optimal control
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033417 MAR 15 2012
22. Suchowski, Haim; Silberberg, Yaron; Uskov, Dmitry B.
Pythagorean coupling: Complete population transfer in a four-state system
PHYSICAL REVIEW A Volume: 84 Issue: 1 Article Number: 013414 DOI: 10.1103/PhysRevA.84.013414 Published: JUL 18 2011
21. Kumar, Praveen; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Optimal control of population and coherence in three-level Lambda systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 44 (15): 10.1088/0953-4075/44/15/154010 AUG 14 2011
20. Naegerl, Hanns-Christoph; Mark, Manfred J.; Haller, Elmar; Gustavsson, Mattias; Hart, Russell; Danzl, Johann G.
Ultracold and dense samples of ground-state molecules in lattice potentials
22ND INTERNATIONAL CONFERENCE ON ATOMIC PHYSICS 264: Art. No. 012015 2011
19. Tseng, Shuo-Yen; Wu, Ming-Chan
Mode Conversion/Splitting by Optical Analogy of Multistate Stimulated Raman Adiabatic Passage in Multimode Waveguides
JOURNAL OF LIGHTWAVE TECHNOLOGY 28 (24): 3529-3534 DEC 15 2010
18. Danzl, Johann G.; Mark, Manfred J.; Haller, Elmar; Gustavsson, Mattias; Hart, Russell; Naegerl, Hanns-Christoph
PRODUCTION OF A QUANTUM GAS OF ROVIBRONIC GROUND-STATE MOLECULES IN AN OPTICAL LATTICE
LASER SPECTROSCOPY : 256-269 2010
17. Mukherjee, Nandini; Zare, Richard N.
Preparation of polarized molecules using coherent infrared multicolor ladder excitation
JOURNAL OF CHEMICAL PHYSICS 132 (15): Art. No. 154302 APR 21 2010
16. Della Valle, G; Ornigotti, M; Fernandez, TT; Coppa, A; Foglietti, V; Laporta, P; Longhi, S
Adiabatic Transfer of Light in Optical Waveguide Arrays
2008 CONFERENCE ON LASERS AND ELECTRO-OPTICS & QUANTUM ELECTRONICS AND LASER SCIENCE CONFERENCE, VOLS 1-9 : 3221-3222 2008
15. Choi, Hyeonho; Son, Won-Joon; Shin, Seokmin; Chang, Bo Y.; Sola, Ignacio R.
Selective photodissociation in diatomic molecules by dynamical Stark-shift

- control
JOURNAL OF CHEMICAL PHYSICS 128 (10): Art. No. 104315 MAR 14 2008
14. Della Valle, G; Ornigotti, M; Fernandez, TT; Laporta, P; Longhi, S; Coppa, A; Foglietti, V
Adiabatic light transfer via dressed states in optical waveguide arrays
APPLIED PHYSICS LETTERS 92 (1): Art. No. 011106 JAN 7 2008
13. Merkel W, Mack H, Freyberger M, et al.
Coherent transport of single atoms in optical lattices
PHYSICAL REVIEW A 75 (3): Art. No. 033420 MAR 2007
12. Marx CA, Jakubetz W
Phase-sensitive stimulated Raman adiabatic passage in dipolar extended lambda systems
JOURNAL OF CHEMICAL PHYSICS 125 (23): Art. No. 234103 DEC 21 2006
11. Petrosyan D, Lambropoulos P
Coherent population transfer in a chain of tunnel coupled quantum dots
OPTICS COMMUNICATIONS 264 (2): 419-425 AUG 15 2006
10. Remacle F, Levine RD
All-optical digital logic: Full addition or subtraction on a three-state system
PHYSICAL REVIEW A 73 (3): Art. No. 033820 MAR 2006
9. Sklarz SE, Tannor DJ
Quantum computation via local control theory: Direct sum vs. direct product Hilbert spaces
CHEMICAL PHYSICS 322 (1-2): 87-97 Sp. Iss. SI MAR 6 2006
8. Gong S, Niu Y
Creation of arbitrary coherent superposition states in four-level systems
OPTICS AND SPECTROSCOPY 99 (2): 270-273 AUG 2005 (Optika i Spektroskopiya 99 (2), pp. 286-289)
7. Niu YP, Gong SQ
Manipulation of population transfer to atomic superposition states: An extension of stimulated Raman adiabatic passage to a four-level ladder system
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 73 (8): 2131-2134 AUG 2004
6. Popov AK, Kimberg VV, George TF
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
PHYSICAL REVIEW A 68 (3): Art. No. 033407 SEP 2003
5. Conover CWS, Doogue MC, Struwe FJ
Chirped-pulse multiphoton transitions between Rydberg states
PHYSICAL REVIEW A 65 (3): Art. No. 033414 Part B MAR 2002
4. Ohta Y, Yoshimoto T, Bando T, et al.
Analysis of adiabatic population transfer in multilevel systems by Huckel model
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY 80 (4-5): 1068-1075 NOV-DEC 2000
3. Nakajima T
Influence of strong coupling and pulse delay in a system involving double autoionization resonance
PHYSICAL REVIEW A 60 (6): 4805-4811 DEC 1999
2. Tannor DJ, Kosloff R, Bartana A
Laser cooling of internal degrees of freedom of molecules by dynamically trapped states
FARADAY DISCUSSIONS 113: 365-383 1999
1. Sola IR, Malinovsky VS, Tannor DJ
Optimal pulse sequences for population transfer in multilevel systems
PHYSICAL REVIEW A 60 (4): 3081-3090 OCT 1999
- =====
- 28. Vitanov NV**
Transition times in the Landau-Zener model
PHYSICAL REVIEW A 59 (2): 988-994 FEB 1999
121. Vashistha, Mayank; Samanta, Chinmoy; Chakraborty, Aniruddha
Transition time estimation for delta-function coupling in two state problem: An analytically solvable model
CHEMICAL PHYSICS LETTERS Volume: 770 Article Number: 138436
Published: MAY 2021
120. Ladewig, B., Mathey, S., Diehl, S.
Kibble-Zurek mechanism from different angles: The transverse XY model and subleading scalings
Physical Review B 102(10),104306 (2020)
119. Yeo, Joel; Ran, Qiangong; Tan, Alvin; Li, Hao
Heuristic model for sum frequency generation in chirped quasi-phase-matching gratings with application to selective, cascaded harmonic generation
OPTICS EXPRESS Volume: 28 Issue: 19 Pages: 28164-28177 Published: SEP 14 2020
118. Maity, Somnath; Bhattacharya, Utso; Dutta, Amit
One-dimensional quantum many body systems with long-range interactions
Journal Of Physics A-mathematical And Theoretical 53 (2020) 013001
117. Bartolotta, John P.; Reilly, Jarrod T.; Holland, Murray J.
Speeding up particle slowing using shortcuts to adiabaticity
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043107
Published: OCT 16 2020
116. Pelissetto, Andrea; Rossini, Davide; Vicari, Ettore
Scaling properties of the dynamics at first-order quantum transitions when boundary conditions favor one of the two phases
PHYSICAL REVIEW E Volume: 102 Issue: 1 Article Number: 012143
Published: JUL 22 2020
115. Niranjana, Ankita; Li, Weibin; Nath, Rejish
Landau-Zener transitions and adiabatic impulse approximation in an array of two Rydberg atoms with time-dependent detuning
PHYSICAL REVIEW A Volume: 101 Issue: 6 Article Number: 063415
Published: JUN 24 2020
114. Fei, Zhaoyu; Freitas, Nahuel; Cavina, Vasco; Quan, H. T.; Esposito, Massimiliano
Work Statistics across a Quantum Phase Transition
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 17 Article Number: 170603
Published: MAY 1 2020
113. Bartolotta, John P.; Holland, Murray J.
Sawtooth-wave adiabatic passage in a magneto-optical trap
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 053434
Published: MAY 27 2020
112. Solfanelli, Andrea; Falsetti, Marco; Campisi, Michele
Nonadiabatic single-qubit quantum Otto engine
PHYSICAL REVIEW B Volume: 101 Issue: 5 Article Number: 054513
Published: FEB 25 2020
111. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5
Article Number: 1950049 Published: AUG 2019
110. Shen, Xin; Wang, Fudong; Li, Zhi; Wu, Zhigang
Landau-Zener-Stueckelberg interferometry in PT-symmetric non-Hermitian models
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 062514
Published: DEC 23 2019
109. Kundu, Krishnendu; Mentink-Vigier, Frederic; Feintuch, Akiva; Vega, Shimon
DNP Mechanisms
EMAGRES Volume: 8 Issue: 3 Pages: 295-337 Published: 2019
108. Paul, Nisarga; Amir, Ariel
Quantum diffusion in the strong tunneling regime
PHYSICAL REVIEW B, 100 (2):10.1103/PhysRevB.100.024110 JUL 26 2019
107. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019
106. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019
105. Matsuzaki, Rei; Takatsuka, Kazuo
Electronic and nuclear fluxes induced by quantum interference in the adiabatic and nonadiabatic dynamics in the Born-Huang representation
JOURNAL OF CHEMICAL PHYSICS, 150 (1):10.1063/1.5066571 JAN 7 2019

104. Matsuzaki, Rei; Takatsuka, Kazuo
Electronic and Nuclear Flux Analysis on Nonadiabatic Electron Transfer Reaction: A View from Single-Configuration Adiabatic Born-Huang Representation
JOURNAL OF COMPUTATIONAL CHEMISTRY, 40 (1):148-163; SI 10.1002/jcc.25557
JAN 5 2019
103. Petziol, Francesco; Dive, Benjamin; Mintert, Florian; Wimberger, Sandro
Fast adiabatic evolution by oscillating initial Hamiltonians
PHYSICAL REVIEW A, 98 (4):10.1103/PhysRevA.98.043436 OCT 31 2018
102. Bartolotta, John P.; Norcia, Matthew A.; Cline, Julia R. K.; Thompson, James K.; Holland, Murray J.
Laser cooling by sawtooth-wave adiabatic passage
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.023404 AUG 6 2018
101. Cournol, Anne; Robert, Jacques; Pillet, Pierre; Vanhaecke, Nicolas
Accurate density measurement of a cold Rydberg gas via non collisional two-body transitions
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aad214 JUL 20 2018
100. Zanca, Tommaso; Pellegrini, Franco; Santoro, Giuseppe E.; Tosatti, Erio
Frictional lubricity enhanced by quantum mechanics
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, 115 (14):3547-3550; 10.1073/pnas.1801144115 APR 3 2018
99. Mardanya, Sougata; Bhattacharya, Utso; Agarwal, Amit; Dutta, Amit
Dynamics of edge currents in a linearly quenched Haldane model
PHYSICAL REVIEW B, 97 (11):10.1103/PhysRevB.97.115443 MAR 26 2018
98. Pelissetto, Andrea; Rossini, Davide; Vicari, Ettore
Out-of-equilibrium dynamics driven by localized time-dependent perturbations at quantum phase transitions
PHYSICAL REVIEW B, 97 (9):10.1103/PhysRevB.97.094414 MAR 14 2018
97. Kenmoe, MB; Tchabda, AB; Fai, LC
SU(3) Landau-Zener interferometry with a transverse periodic drive
PHYSICAL REVIEW B, 96 (12):10.1103/PhysRevB.96.125126 SEP 18 2017
96. Jipdi, MN; Tchoffo, M; Fokou, IF; Fai, LC; Ateufack, ME
Weak coupling polaron and Landau-Zener scenario: Qubits modeling
SUPERLATTICES AND MICROSTRUCTURES, 106 76-85;
10.1016/j.spmi.2017.03.027 JUN 2017
95. Dutta, Anirban; Dutta, Amit
Probing the role of long-range interactions in the dynamics of a long-range Kitaev chain
PHYSICAL REVIEW B, 96 (12):10.1103/PhysRevB.96.125113 SEP 8 2017
94. Sachtleben, Kewin; Mazon, Kahio T.; Rego, Luis G. C.
Superconducting Qubits as Mechanical Quantum Engines
PHYSICAL REVIEW LETTERS, 119 (9):10.1103/PhysRevLett.119.090601 AUG 31 2017
93. Theisen, M; Petziol, F; Carretta, S; Santini, P; Wimberger, S
Superadiabatic driving of a three-level quantum system
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.013431 JUL 31 2017
92. Hou, Junpeng; Luo, Xi-Wang; Sun, Kuei; Zhang, Chuanwei
Adiabatically tuning quantized supercurrents in an annular Bose-Einstein condensate
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.011603 JUL 31 2017
91. Bhattacharya, Utso; Dutta, Amit
Interconnections between equilibrium topology and dynamical quantum phase transitions in a linearly ramped Haldane model
PHYSICAL REVIEW B, 95 (18):10.1103/PhysRevB.95.184307 MAY 30 2017
90. Jipdi, MN; Tchoffo, M; Fokou, IF; Fai, LC; Ateufack, ME
Weak coupling polaron and Landau-Zener scenario: Qubits modeling
SUPERLATTICES AND MICROSTRUCTURES, 106 76-85;
10.1016/j.spmi.2017.03.027 JUN 2017
89. Mentink-Vigier, Frederic; Vega, Shimon; De Paepe, Gael
Fast and accurate MAS-DNP simulations of large spin ensembles
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 19 (5):3506-3522;
10.1039/c6cp07881h FEB 7 2017
88. Fishman, S; Soffer, A
Slowly changing potential problems in Quantum Mechanics: Adiabatic theorems, ergodic theorems, and scattering
JOURNAL OF MATHEMATICAL PHYSICS, 57 (7):10.1063/1.4954498 JUL 2016
87. Zanca, Tommaso; Santoro, Giuseppe E.
Quantum annealing speedup over simulated annealing on random Ising chains
PHYSICAL REVIEW B, 93 (22):10.1103/PhysRevB.93.224431 JUN 28 2016
86. Liu, Xuan-Zuo; Tian, Dong-Ping; Chong, Bo
Transition time of nonlinear Landau-Zener model in adiabatic limit
MODERN PHYSICS LETTERS B, 30 (15):10.1142/S0217984916501943 JUN 10 2016
85. Barra, Felipe; Esposito, Massimiliano
Dissipation in small systems: Landau-Zener approach
PHYSICAL REVIEW E, 93 (6):10.1103/PhysRevE.93.062118 JUN 13 2016
84. Guo, Guang-Can; Li, Chuan-Feng
Quantitative Verification of the Kibble-Zurek Mechanism in Quantum Nonequilibrium Dynamics
APPLIED RESEARCH OF QUANTUM INFORMATION BASED ON LINEAR OPTICS, 99-126; 10.1007/978-3-662-49804-0_5 2016
83. Sharma, Shraddha; Divakaran, Uma; Polkovnikov, Anatoli; Dutta, Amit
Slow quenches in a quantum Ising chain: Dynamical phase transitions and topology
PHYSICAL REVIEW B, 93 (14):10.1103/PhysRevB.93.144306 APR 28 2016
82. Qin, Xiao-Ke
How to control the coherent oscillations in Landau-Zener-Stueckelberg dynamics of three-level system
MODERN PHYSICS LETTERS B, 30 (9):10.1142/S0217984916501499 APR 10 2016
81. Fai, LC; Tchoffo, M; Jipdi, MN
Multi-crossing problem and Landau Zener scenario: controlled quantum bit
EUROPEAN PHYSICAL JOURNAL B, 88 (12):10.1140/epjb/e2015-60684-1 DEC 14 2015
80. Fai, LC; Tchoffo, M; Jipdi, MN
Multi-crossing dynamics of a multi-particle Landau-Zener (LZ) system: Dynamics matrix approach
EUROPEAN PHYSICAL JOURNAL B, 88 (10):10.1140/epjb/e2015-60618-y NOV 23 2015
79. Kenmoe, MB; Fai, LC
Adiabatic Landau-Zener transitions at avoided level crossings with fast noise
ANNALS OF PHYSICS, 362 814-837; 10.1016/j.aop.2015.09.012 NOV 2015
78. Dutta, A., Aeppli, G., Chakrabarti, B.K., (...), Rosenbaum, T.F., Sen, D.
Quantum Phase Transitions in Transverse Field Spin Models: From Statistical Physics to Quantum Information, pp. 1-330 (Cambridge University Press , 2015)
77. Xu Jian
Probing the Energy Spectrum in the Vicinity of Dirac Points with Landau-Zener Transition
COMMUNICATIONS IN THEORETICAL PHYSICS, 62 (3):343-347; SEP 2014
76. Shwa, David; Katz, Nadav
Transient coherence of media under strong phase modulation exploiting electromagnetically induced transparency
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023858 AUG 29 2014
75. Fouokeng, Georges Collince; Tchoffo, Martin; Ateufack, Mathurin Esouague; et al.
Dynamics of a central electron spin coupled to an anti-ferromagnetic spin bath driven by a variable magnetic field in the Landau-Zener scenario
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 129 Issue: 7 Article Number: 151 Published: JUL 24 2014
74. Olson, Abraham J.; Wang, Su-Ju; Niffenegger, Robert J.; Li, Chuan-Hsun; Greene, Chris H.; Chen, Yong P.
Tunable Landau-Zener transitions in a spin-orbit-coupled Bose-Einstein condensate
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.013616 JUL 17 2014
73. Suchowski, Haim; Porat, Gil; Arie, Ady
Adiabatic processes in frequency conversion
LASER & PHOTONICS REVIEWS, 8 (3):333-367; 10.1002/lpor.201300107 MAY 2014
72. Xu, Canran; Poudel, Amrit; Vavilov, Maxim G.
Nonadiabatic dynamics of a slowly driven dissipative two-level system

- PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.052102 MAY 6 2014
71. Campisi, Michele
Quantum fluctuation relations for ensembles of wave functions
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/11/115008 NOV 13 2013
70. De Grandi, C; Polkovnikov, A; Sandvik, AW
Microscopic theory of non-adiabatic response in real and imaginary time
JOURNAL OF PHYSICS-CONDENSED MATTER, 25 (40):10.1088/0953-8984/25/40/404216 OCT 9 2013
69. Wei, J., Chen, C.
Efficient frequency conversion by amplitude modulation
Optics Communications 311, pp. 380-384 (2013)
68. Nesterov, Alexander I.; Ovchinnikov, Sergey G.; Iaroshenko, Grigori A.
Quench dynamics in spin crossover induced by high pressure
CENTRAL EUROPEAN JOURNAL OF PHYSICS, 11 (7):894-903; 10.2478/s11534-013-0273-6 JUL 2013
67. Bendersky, Denise; Zangara, Pablo R.; Pastawski, Horacio M.
Fragility of superposition states evaluated by the Loschmidt echo
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.032102 SEP 5 2013
66. Kraft, Matthias; Burkhardt, Stephan; Mannella, Riccardo; Wimberger, Sandro
LANDAU-ZENER TRANSITIONS IN THE PRESENCE OF HARMONIC NOISE FLUCTUATION AND NOISE LETTERS, 12 (2):SI 10.1142/S0219477513400051 JUN 2013
65. Kenmoe, MB; Phien, HN; Kiselev, MN; Fai, LC
Effects of colored noise on Landau-Zener transitions: Two- and three-level systems
PHYSICAL REVIEW B, 87 (22):10.1103/PhysRevB.87.224301 JUN 6 2013
64. Burkhardt, Stephan; Kraft, Matthias; Mannella, Riccardo; Wimberger, Sandro
Noise-assisted transport in the Wannier-Stark system
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/4/045008 APR 12 2013
63. Bapst, V; Foini, L; Krzakala, F; Semerjian, G; Zamponi, F
The quantum adiabatic algorithm applied to random optimization problems: The quantum spin glass perspective
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 523 (3):127-205; 10.1016/j.physrep.2012.10.002 FEB 2013
62. Mieth, Simon; Schraft, Daniel; Halfmann, Thomas; Yatsenko, Leonid P.
Rephasing of optically driven atomic coherences by rapid adiabatic passage in Pr³⁺:Y₂SiO₅
PHYSICAL REVIEW A, 86 (6):10.1103/PhysRevA.86.063404 DEC 6 2012
61. Uzdin, Raam; Moiseyev, Nimrod
Rapid azimuthal rotation in the Hermitian and non-Hermitian Landau-Zener problem
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (44):SI 10.1088/1751-8113/45/44/444033 NOV 9 2012
60. Borovkov, VI; Beregovaya, IV; Shchegoleva, LN; Potashov, PA; Bagryansky, VA; Molin, YN
Radical ions with nearly degenerate ground state: Correlation between the rate of spin-lattice relaxation and the structure of adiabatic potential energy surface
JOURNAL OF CHEMICAL PHYSICS, 137 (10):10.1063/1.4749247 SEP 14 2012
59. Lehto, J; Suominen, KA
Superparabolic level-glancing models for two-state quantum systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033415 SEP 14 2012
58. Bapst, Victor; Semerjian, Guilhem
On quantum mean-field models and their quantum annealing
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT, 10.1088/1742-5468/2012/06/P06007 JUN 2012
57. Loerch, N; Pepe, FV; Lignier, H; Ciampini, D; Mannella, R; Morsch, O; Arimondo, E; Facchi, P; Florio, G; Pascazio, S; Wimberger, S
Wave-function-renormalization effects in resonantly enhanced tunneling
PHYSICAL REVIEW A, 85 (5):10.1103/PhysRevA.85.053602 MAY 3 2012
56. Gritsev, V; Polkovnikov, A
Dynamical quantum Hall effect in the parameter space
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, 109 (17):6457-6462; 10.1073/pnas.1116693109 APR 24 2012
55. Bruner, B.D., Suchowski, H., Ganany-Padowicz, A., Juwiler, I., Arie, A., Silberberg, Y.
Generation of ultrafast visible and mid-IR pulses via adiabatic frequency conversion
Optics InfoBase Conference Papers, Advanced Solid-State Photonics, ASSP 2011
54. Ciampini, Donatella; Morsch, Oliver; Arimondo, Ennio
Experimental investigation of tunneling times using Bose-Einstein condensates
Journal of Physics Conference Series 306 10.1088/1742-6596/306/1/012031 2011, Editor(s): Elze HT; Diosi L; Fronzoni L; Halliwell J; Yearsley J; Prati E; Vitiello G
5th International Workshop on Decoherence, Information, Complexity and Entropy (DICE) - Space-Time-Matter - Current Issues in Quantum Mechanics and Beyond
53. Suchowski, H; Bruner, BD; Ganany-Padowicz, A; Juwiler, I; Arie, A; Silberberg, Y
Adiabatic frequency conversion of ultrafast pulses
APPLIED PHYSICS B-LASERS AND OPTICS, 105 (4):697-702; 10.1007/s00340-011-4591-3 DEC 2011
52. Hikichi, T; Suzuki, S; Sengupta, K
Non-adiabatic quench dynamics near anisotropic quantum critical point
Journal of Physics Conference Series, Editor(s): Bhattacharjee JK; Chakrabarti BK; Inoue JI; Sen P
STATPHYS-KOLKATA VII 297 10.1088/1742-6596/297/1/012020 2011
51. Polkovnikov, Anatoli; Sengupta, Krishnendu; Silva, Alessandro; Vengalattore, Mukund
Colloquium: Nonequilibrium dynamics of closed interacting quantum systems
REVIEWS OF MODERN PHYSICS 83 (3): 863-883 10.1103/RevModPhys.83.863 AUG 15 2011
50. Miyashita, Seiji
Quantum Dynamics Under Time-Dependent External Fields
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE 8 (6): 919-936 Sp. Iss. SI JUN 2011
49. Campisi, Michele; Talkner, Peter; Haenggi, Peter
Influence of measurements on the statistics of work performed on a quantum system
PHYSICAL REVIEW E 83 (4): Art. No. 041114 Part 1 APR 15 2011
48. Zenesini, A; Ciampini, D; Morsch, O; Arimondo, E
Observation of Stueckelberg oscillations in accelerated optical lattices
PHYSICAL REVIEW A 82 (6): Art. No. 065601 DEC 2 2010
47. Kosevich, Yu.A., Manevitch, L.I., Manevitch, E.L.
Vibrational analogue of nonadiabatic Landau - Zener tunneling and a possibility for the creation of a new type of energy traps
Physics-Uspekhi 53(12), pp. 1281-1286 (2010)
46. Mukherjee, Victor; Dutta, Amit
Adiabatic multicritical quantum quenches: Continuously varying exponents depending on the direction of quenching
EPL 92 (3): Art. No. 37004 NOV 2010
45. Hikichi, T; Suzuki, S; Sengupta, K
Slow quench dynamics of the Kitaev model: Anisotropic critical point and effect of disorder
PHYSICAL REVIEW B 82 (17): Art. No. 174305 NOV 18 2010
44. Dziarmaga, Jacek
Dynamics of a quantum phase transition and relaxation to a steady state
ADVANCES IN PHYSICS 59 (6): 1063-1189 2010
43. Phillips, CR; Fejer, MM
Efficiency and phase of optical parametric amplification in chirped quasi-phase-matched gratings
OPTICS LETTERS 35 (18): 3093-3095 SEP 15 2010
42. De Grandi, C., Polkovnikov, A.
Adiabatic perturbation theory: From Landau-Zener problem to quenching through a quantum critical point
Lecture Notes in Physics 802, pp. 75-114 (2010)
41. Tayebirad, G; Zenesini, A; Ciampini, D; Mannella, R; Morsch, O; Arimondo, E; Lorch, N; Wimberger, S
Time-resolved measurement of Landau-Zener tunneling in different bases
PHYSICAL REVIEW A 82 (1): Art. No. 013633 JUL 26 2010
40. Shevchenko, S. N.; Ashhab, S.; Nori, Franco

- Landau-Zener-Stuckelberg interferometry
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 492 (1): 1-30 JUL 2010
39. Eckstein, Martin; Kollar, Marcus
Near-adiabatic parameter changes in correlated systems: influence of the ramp protocol on the excitation energy
NEW JOURNAL OF PHYSICS 12: Art. No. 055012 MAY 28 2010
38. Yan, Yue; Wu, Biao
Integral definition of transition time in the Landau-Zener model
PHYSICAL REVIEW A 81 (2): Art. No. 022126 FEB 2010
37. Divakaran, Uma; Dutta, Amit; Sen, Diptiman
Landau-Zener problem with waiting at the minimum gap and related quench dynamics of a many-body system
PHYSICAL REVIEW B 81 (5): Art. No. 054306 FEB 2010
36. Suchowski, H., Bruner, B.D., Arie, A., Silberberg, Y.
Adiabatic frequency conversion of ultrafast pulses
Optics InfoBase Conference Papers, International Conference on Ultrafast Phenomena 2010
35. Deng, Shusa; Ortiz, Gerardo; Viola, Lorenza
Anomalous nonergodic scaling in adiabatic multicritical quantum quenches
PHYSICAL REVIEW B 80 (24): Art. No. 241109 DEC 2009
34. Liu, Gui-Bin; Liu, Bang-Gui
Nonequilibrium dynamical ferromagnetism of interacting single-molecule magnets
APPLIED PHYSICS LETTERS 95 (18): Art. No. 183110 NOV 2 2009
33. Elena Canovi, Davide Rossini, Rosario Fazio, Giuseppe E Santoro
Adiabatic dynamics in a spin-1 chain with uniaxial single-spin anisotropy
Journal of Statistical Mechanics Theory and Experiment 2009 P03038 (2009)
32. Zenesini, A; Lignier, H; Tayebirad, G; Radogostowicz, J; Ciampini, D; Mannella, R; Wimberger, S; Morsch, O; Arimondo, E
Time-Resolved Measurement of Landau-Zener Tunneling in Periodic Potentials
PHYSICAL REVIEW LETTERS 103 (9): Art. No. 090403 AUG 28 2009
31. Gurarie, V
Feshbach molecule production in fermionic atomic gases
PHYSICAL REVIEW A 80 (2): Art. No. 023626 AUG 2009
30. Divakaran, Uma; Dutta, Amit
Reverse quenching in a one-dimensional Kitaev model
PHYSICAL REVIEW B 79 (22): Art. No. 224408 JUN 2009
29. Mukherjee, Victor; Dutta, Amit
Effects of interference in the dynamics of a spin-1/2 transverse XY chain driven periodically through quantum critical points
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT : Art. No. P05005 MAY 2009
28. Li YongFang; Ren LiQing; Ma RuiQiong; Qiu Xu; Liu Juan; Fan Rong; Fu ZhenXing
Quantum diffraction of wave function in time-domain
SCIENCE IN CHINA SERIES G-PHYSICS MECHANICS & ASTRONOMY 52 (6): 873-876 JUN 2009
27. Murgida, GE; Wisniacki, DA; Tamborenea, PI
Landau-Zener transitions in a semiconductor quantum dot
JOURNAL OF MODERN OPTICS 56 (6): 799-804 2009
26. Caneva, Tornmaso; Fazio, Rosario; Santoro, G. E.
Quantum annealing of an infinite-range transverse-field Ising model - art. no. 012004
INTERNATIONAL WORKSHOP ON STATISTICAL-MECHANICAL INFORMATICS 2008 (IW-SMI 2008) 143: 12004-12004 2009
25. Caneva, T; Fazio, R; Santoro, GE
Adiabatic quantum dynamics of the Lipkin-Meshkov-Glick model
PHYSICAL REVIEW B 78 (10): Art. No. 104426 SEP 2008
24. Wang, Dong; Hansson, Tony; Larson, Asa; Karlsson, Hans O.; Larsson, Jonas
Quantum interference structures in trapped-ion dynamics beyond the Lamb-Dicke and rotating wave approximations
PHYSICAL REVIEW A 77 (5): Art. No. 053808 Part B MAY 2008
23. Castro-Beltran, HM; Marquina-Cruz, ER; Arroyo-Correa, G; Denisov, A
Nonstationary dissipative dynamics of a single qubit
LASER PHYSICS 18 (2): 149-156 FEB 2008
22. Foldi P, Benedict MG, Pereira JM, et al.
Dynamics of molecular nanomagnets in time-dependent external magnetic fields: Beyond the Landau-Zener-Stuckelberg model
PHYSICAL REVIEW B 75 (10): Art. No. 104430 MAR 2007
21. Keranen P, Maalampi J, Myrskylainen M, et al.
Landau-Zener problem in a three-level neutrino system with nonlinear time dependence
PHYSICAL REVIEW D 75 (3): Art. No. 033006 FEB 2007
20. Ostrovsky VN, Volkov MV, Hansen JP, et al.
Four-state nonstationary models in multistate Landau-Zener theory
PHYSICAL REVIEW B 75 (1): Art. No. 014441 JAN 2007
19. Saito K, Wubs M, Kohler S, et al.
Quantum state preparation in circuit QED via Landau-Zener tunneling
EUROPHYSICS LETTERS 76 (1): 22-28 OCT 2006
18. Damski B, Zurek WH
Adiabatic-impulse approximation for avoided level crossings: From phase-transition dynamics to Landau-Zener evolutions and back again
PHYSICAL REVIEW A 73 (6): Art. No. 063405 JUN 2006
17. Monmayrant A, Chatel B, Girard B
Quantum state measurement using coherent transients
PHYSICAL REVIEW LETTERS 96 (10): Art. No. 103002 MAR 17 2006
16. Chatel, B., Girard, B.
Coherent control of atomic dynamics with chirped and shaped pulses (Book Chapter)
in Femtosecond Laser Spectroscopy pp. 267-304 (Springer, 2005), ed. P. Hannaford
15. Wubs M, Saito K, Kohler S, et al.
Landau-Zener transitions in qubits controlled by electromagnetic fields
NEW JOURNAL OF PHYSICS 7: Art. No. 218 OCT 11 2005
14. Shevchenko SN, Kiyko AS, Omelyanchouk AN, et al.
Dynamic behavior of Josephson-junction qubits: crossover between Rabi oscillations and Landau-Zener transitions
LOW TEMPERATURE PHYSICS 31 (7): 569-576 JUL 2005 (Fizika Nizkikh Temperatur (Kharkov) 31 (7), pp. 752-760)
13. Damski B
The simplest quantum model supporting the Kibble-Zurek mechanism of topological defect production: Landau-Zener transitions from a new perspective
PHYSICAL REVIEW LETTERS 95 (3): Art. No. 035701 JUL 15 2005
12. Mohring B, Bienert M, Haug F, et al.
Extracting atoms on demand with lasers
PHYSICAL REVIEW A 71 (5): Art. No. 053601 MAY 2005
11. Benderskii VA, Vetoshkin EV, Kats EI
Instanton versus traditional WKB approach to the Landau-Zener problem
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97 (2): 232-258 2003
10. Nazarkin A, Netz R, Sauerbrey R
Interference-induced transparency and coherent control of quantum systems by frequency-chirped pulses
PHYSICAL REVIEW A 67 (4): Art. No. 041401 APR 2003
9. Chang BY, Kim B, Sola IR
Electronic and vibrational population transfer in diatomic molecules as a function of chirp for different pulse bandwidths
JOURNAL OF CHEMICAL PHYSICS 118 (14): 6270-6279 APR 8 2003
8. Netz R, Nazarkin A, Sauerbrey R
Observation of selectivity of coherent population transfer induced by optical interference
PHYSICAL REVIEW LETTERS 90 (6): Art. No. 063001 FEB 14 2003
7. Faria CFD, Rotter I
High-order harmonic generation in a driven two-level atom: Periodic level crossings and three-step processes
PHYSICAL REVIEW A 66 (1): Art. No. 013402 JUL 2002
6. Saito K, Kayanuma Y

Nonadiabatic transition probabilities in the presence of strong dissipation at an avoided-level crossing point
PHYSICAL REVIEW A 65 (3): Art. No. 033407 Part B MAR 2002

5. Moyer CA
Quantum transitions at a level crossing of decaying states
PHYSICAL REVIEW A 64 (3): Art. No. 033406 SEP 2001

4. Zamith S, Degert J, Stock S, et al.
Observation of coherent transients in ultrashort chirped excitation of an undamped two-level system
PHYSICAL REVIEW LETTERS 87 (3): Art. No. 033001 JUL 16 2001

3. Boyd JK
Probability amplitude dynamics for a two-level system
JOURNAL OF MATHEMATICAL PHYSICS 41 (7): 4330-4364 JUL 2000

2. Martikainen JP, Suominen KA
Validity of the Landau-Zener model for output coupling of Bose condensates
PHYSICAL REVIEW A 60 (5): 4175-4178 NOV 1999

1. Xie RH, Brumer P
Quantum reflection of ultracold atoms in magnetic traps
ZEITSCHRIFT FUR NATURFORSCHUNG SECTION A-A JOURNAL OF PHYSICAL SCIENCES 54 (3-4): 167-170 MAR-APR 1999

=====
29. Stenholm S, Vitanov N
Ambiguity in quantum optics: the pure state
JOURNAL OF MODERN OPTICS 46 (2): 239-253 FEB 15 1999

5. Ben-Benjamin, JS; Unruh, WG
The ambiguity function and the displacement operator basis in quantum mechanics
PHYSICA SCRIPTA, 94 (12):10.1088/1402-4896/ab3376 DEC 2019

4. Manuel Moya-Cessa, Hector
Relation between the Glauber-Sudarshan and Kirkwood-Rihaczek distribution functions
JOURNAL OF MODERN OPTICS, 60 (9):726-730; 10.1080/09500340.2013.807364 MAY 1 2013

3. Moya-Cessa, JR; Moya-Cessa, H; Berriel-Valdos, LR; Aguilar-Loreto, O; Barberis-Blostein, P
Unifying distribution functions: some lesser known distributions
APPLIED OPTICS 47 (22): E13-E18 AUG 1 2008

2. Avelar AT, Baseia B, Malbouisson JMC
Scheme for direct measurement of the Wigner characteristic function of traveling fields
OPTICS COMMUNICATIONS 259 (2): 754-757 MAR 15 2006

1. Mancini S, Moya-Cessa H, Tombesi P
Vibrational superposition states without rotating wave approximation
JOURNAL OF MODERN OPTICS 47 (12): 2133-2136 OCT 2000

=====
30. Vitanov NV, Suominen KA
Nonlinear level-crossing models
PHYSICAL REVIEW A 59 (6): 4580-4588 JUN 1999

35. Kam, Chon-Fai; Chen, Yang
Analytical approximations to the dynamics of cubic level crossing model
ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK Volume: 72 Issue: 3 Article Number: 91 Published: JUN 2021

34. Ladewig, B., Mathey, S., Diehl, S.
Kibble-Zurek mechanism from different angles: The transverse XY model and subleading scalings
Physical Review B 102(10),104306 (2020)

33. Kam, Chon-Fai; Chen, Yang
Analytical results for the dynamics of parabolic level-crossing model
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 2 Article Number: 023021 Published: FEB 2020

32. Fukushima, Kenji; Shimazaki, Takuya
Lefschetz-thimble inspired analysis of the Dykhne-Davis-Pechukas method and an

application for the Schwinger Mechanism
ANNALS OF PHYSICS Volume: 415 Article Number: 168111 Published: APR 2020

31. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5 Article Number: 1950049 Published: AUG 2019

30. Anza, Fabio; Messina, Antonino; Militello, Benedetto
Resonant Transitions Due to Changing Boundaries
OPEN SYSTEMS & INFORMATION DYNAMICS, 26 (2):10.1142/S1230161219500069 JUN 2019

29. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019

28. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019

27. Dodonov, AV; Napoli, A; Militello, B
Emulation of n-photon Jaynes-Cummings and anti-Jaynes-Cummings models via parametric modulation of a cyclic qutrit
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033823 MAR 11 2019

26. Mostafavi, Fatemeh; Yuan, Luqi; Ramezani, Hamidreza
Eigenstates Transition without Undergoing an Adiabatic Process
PHYSICAL REVIEW LETTERS, 122 (5):10.1103/PhysRevLett.122.050404 FEB 8 2019

25. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

24. Takahashi, Ryuji; Sugimoto, Naoyuki
Semiclassical Lattice Effects on Interband Tunneling of a Two-state System
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN, 87 (10):10.7566/JPSJ.87.104701 OCT 15 2018

23. Dou, Fu-Quan; Liu, Jie; Fu, Li-Bin
Fast quantum driving in two-level systems with interaction and nonlinear sweep
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.022102 AUG 1 2018

22. Lehto, JMS; Suominen, KA
Two-level parabolic model with phase-jump coupling
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013404 JUL 5 2016

21. Dodonov, AV; Militello, B; Napoli, A; Messina, A
Effective Landau-Zener transitions in the circuit dynamical Casimir effect with time-varying modulation frequency
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052505 MAY 9 2016

20. Shahverdyan, TA; Ishkhanyan, TA; Grigoryan, AE; Ishkhanyan, AM
Analytic solutions of the quantum two-state problem in terms of the double, bi- and triconfluent Heun functions
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 50 (3):211-226; 10.3103/S1068337215030019 JUL 2015

19. Lehto, J
Zhu-Nakamura theory and the superparabolic level-glancing models
PHYSICAL REVIEW A, 88 (4):10.1103/PhysRevA.88.043404 OCT 3 2013

18. Barnes, Edwin
Analytically solvable two-level quantum systems and Landau-Zener interferometry
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013818 JUL 15 2013

17. Zhang, Jingfu; Shim, Jeong Hyun; Niemeyer, Ingo; Taniguchi, T.; Teraji, T.; Abe, H.; Onoda, S.; Yamamoto, T.; Ohshima, T.; Isoya, J.; Suter, Dieter
Experimental Implementation of Assisted Quantum Adiabatic Passage in a Single Spin
PHYSICAL REVIEW LETTERS, 110 (24):10.1103/PhysRevLett.110.240501 JUN 11 2013

16. Dou, Fu-Quan; Li, Sheng-Chang; Cao, Hui
Combined effects of particle interaction and nonlinear sweep on Landau-Zener

- transition
PHYSICS LETTERS A, 376 (1):51-55; 10.1016/j.physleta.2011.10.034 NOV 28 2011
15. Liu, Gui-Bin; Liu, Bang-Gui
Dynamical Monte Carlo investigation of spin reversal and nonequilibrium magnetization of single-molecule magnets
PHYSICAL REVIEW B 82 (13): Art. No. 134410 OCT 7 2010
14. Oka, Takashi; Aoki, Hideo
Dielectric breakdown in a Mott insulator: Many-body Schwinger-Landau-Zener mechanism studied with a generalized Bethe ansatz
PHYSICAL REVIEW B 81 (3): Art. No. 033103 JAN 2010
13. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
12. Barankov, Roman; Polkovnikov, Anatoli
Optimal nonlinear passage through a quantum critical point
PHYSICAL REVIEW LETTERS 101 (7): Art. No. 076801 AUG 15 2008
11. Foeldi, P; Benedict, MG
Pure states resulting from decoherence in periodic Landau-Zener transitions
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 175-181 JUL 2008
10. Foeldi, P., Benedict, M.G., Peeters, F.M.
Dynamics of periodic anticrossings: Decoherence, pointer states, and hysteresis curves
PHYSICAL REVIEW A 77 (1): Art. No. 013406 JAN 2008
9. Bhattacharya M, Raman C
Detecting level crossings without solving the Hamiltonian. II. Applications to atoms and molecules
PHYSICAL REVIEW A 75 (3): Art. No. 033406 MAR 2007
8. Keranen P, Maalampi J, Myrskylainen M, et al.
Landau-Zener problem in a three-level neutrino system with nonlinear time dependence
PHYSICAL REVIEW D 75 (3): Art. No. 033006 FEB 2007
7. Schilling R, Vogelsberger M, Garanin DA
Nonadiabatic transitions for a decaying two-level system: geometrical and dynamical contributions
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39 (44): 13727-13745 NOV 3 2006
6. Yatsenko LP, Guerin S, Jauslin HR
Pulse-driven near-resonant quantum adiabatic dynamics: Lifting of quasidegeneracy
PHYSICAL REVIEW A 70 (4): Art. No. 043402 OCT 2004
5. Benderskii VA, Vetoshkin EV, Kats EI
Instanton versus traditional WKB approach to the Landau-Zener problem
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97 (2): 232-258 2003
4. Guerin S, Thomas S, Jauslin HR
Optimization of population transfer by adiabatic passage
PHYSICAL REVIEW A 65 (2): Art. No. 023409 FEB 2002
3. Yurovsky VA, Ben-Reuven A
Curve crossing in linear potential grids: The quasidegeneracy approximation
PHYSICAL REVIEW A 63 (4): Art. No. 043404 APR 2001
2. Vala J, Duhieu O, Masnou-Seeuws F, et al.
Coherent control of cold-molecule formation through photoassociation using a chirped-pulsed-laser field
PHYSICAL REVIEW A 63 (1): Art. No. 013412 JAN 2001
1. Zabay O, Garraway BM
Time-dependent tunneling of Bose-Einstein condensates
PHYSICAL REVIEW A 61 (3): Art. No. 033603 MAR 2000
- =====
- 31. Vitanov NV, Suominen KA, Shore BW**
Creation of coherent atomic superpositions by fractional stimulated Raman adiabatic passage
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 32 (18): 4535-4546 SEP 28 1999
170. Fedoseev, Vitaly; Luna, Fernando; Hedgepeth, Ian; Löffler, Wolfgang; Bouwmeester, Dirk
Stimulated Raman Adiabatic Passage in Optomechanics
PHYSICAL REVIEW LETTERS Volume: 126 Issue: 11 Article Number: 113601
Published: MAR 19 2021
169. Liu, Wen-Wu; Zhang, Chun-Ling; Zhang, Ling
Fast and robust implementation of quantum gates by transitionless quantum driving
QUANTUM INFORMATION PROCESSING Volume: 20 Issue: 3 Article Number: 118 Published: MAR 19 2021
168. Shirkhaghah, N.; Saadati-Niari, M.; Nedaee-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021
167. Zhu, Jing-Jun; Chen, Xi
Fast-forward scaling of atom-molecule conversion in Bose-Einstein condensates
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023307
Published: FEB 4 2021
166. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020
165. Petzioli, Francesco; Arimondo, Ennio; Giannelli, Luigi; Mintert, Florian; Wimberger, Sandro
Optimized three-level quantum transfers based on frequency-modulated optical excitations
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 2185 Published: FEB 10 2020
164. Tian, Liang; Sun, Li-Li; Zhu, Xiao-Yu; Song, Xue-Ke; Yan, Lei-Lei; Liang, Er-Jun; Su, Shi-Lei; Feng, Mang
Fast achievement of quantum state transfer and distributed quantum entanglement by dressed states
CHINESE PHYSICS B Volume: 29 Issue: 5 Article Number: 050306 Published: MAY 2020
163. Shirkhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published: MAY-JUN 2020
162. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020
161. Paparella, Iris; Moro, Lorenzo; Prati, Enrico
Digitally stimulated Raman passage by deep reinforcement learning
PHYSICS LETTERS A Volume: 384 Issue: 14 Article Number: 126266
Published: MAY 18 2020
160. Ngoc-Loan Phan; Thanh-Tuynh Nguyen; Mineo, Hirobumi; Van-Hung Hoang
Depletion effect in high-order harmonic generation with coherent superposition state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 2 Pages: 311-319 Published: FEB 1 2020
159. Shirkhanghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
158. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019
157. Wu, Jin-Lei; Wang, Yan; Song, Jie; Xia, Yan; Su, Shi-Lei; Jiang, Yong-Yuan
Robust and highly efficient discrimination of chiral molecules through three-mode parallel paths
PHYSICAL REVIEW A, 100 (4):10.1103/PhysRevA.100.043413 OCT 21 2019

156. Hu, Chang-Kang; Santos, Alan C.; Cui, Jin-Ming; Huang, Yun-Feng; Sarandy, Marcelo S.; Li, Chuan-Feng; Guo, Guang-Can
Adiabatic quantum dynamics under decoherence in a controllable trapped-ion setup
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.062320 JUN 17 2019
155. Liu, A-Peng; Han, Xue; Cheng, Liu-Yong; Guo, Qi; Su, Shi-Lei; Wang, Hong-Fu; Zhang, Shou
Generation of large scale hyperentangled photonic GHZ states with an error-detected pattern
EUROPEAN PHYSICAL JOURNAL D, 73 (6):10.1140/epjd/e2019-90582-5 JUN 2019
154. Liu, A-Peng; Guo, Qi; Su, Shi-Lei; Cheng, Liu-Yong; Wang, Hong-Fu; Zhang, Shou
Entanglement Purification on Separate Atoms in an Error-Detected Pattern
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 58 (5):1404-1417; 10.1007/s10773-019-04030-w MAY 2019
153. Yan, Ying; Li, Yichao; Kinoshita, Adam; Walther, Andreas; Shi, Chunyan; Rippe, Lars; Moser, Joel; Kroll, Stefan; Chen, Xi
Inverse engineering of shortcut pulses for high fidelity initialization on qubits closely spaced in frequency
OPTICS EXPRESS, 27 (6):8267-8282; 10.1364/OE.27.008267 MAR 18 2019
152. Zhang, CL; Liu, WW
Generation of W state by combining adiabatic passage and quantum Zeno techniques
INDIAN JOURNAL OF PHYSICS, 93 (1):67-73; 10.1007/s12648-018-1256-7 JAN 2019
151. Paspalakis, Emmanuel; Economou, Sophia E.; Carreno, Fernando
Adiabatically preparing quantum dot spin states in the Voigt geometry
JOURNAL OF APPLIED PHYSICS Volume: 125 Issue: 2 Article Number: 024305 Published: JAN 14 2019
150. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018
149. Ban, Yue; Jiang, Li-Xin; Li, Yi-Chao; Wang, Lin-Jun; Chen, Xi
Fast creation and transfer of coherence in triple quantum dots by using shortcuts to adiabaticity
OPTICS EXPRESS, 26 (24):31137-31149; 10.1364/OE.26.031137 NOV 26 2018
148. Hiluf, Dawit
All optical programmable logic array (PLA)
Journal of Physics Conference Series, Applied Nanotechnology and Nanoscience International Conference (ANNIC 2017), 987 10.1088/1742-6596/987/1/012033 2018
147. Zhang Chun-Ling; Liu Wen-Wu
Fast implementation of four-dimensional entangled state in separately coupled cavities via shortcut to adiabatic passage
ACTA PHYSICA SINICA, 67 (16):10.7498/aps.67.20180315 AUG 20 2018
146. Zhang, Chun-Ling; Luo, Cheng-Li; Liu, Wen-Wu
Fast implementation of four-dimensional entangled state via transitionless quantum driving
OPTICS COMMUNICATIONS, 427 497-504; 10.1016/j.optcom.2018.06.080 NOV 15 2018
145. Vepsäläinen, A.; Danilin, S.; Paraoanu, GS
Optimal superadiabatic population transfer and gates by dynamical phase corrections
QUANTUM SCIENCE AND TECHNOLOGY, 3 (2):10.1088/2058-9565/aaa640 APR 2018
144. Lu, Mei; Chen, Qing-Qin
Shortcuts to adiabatic passage for the generation of a maximal Bell state and W state in an atom-cavity system
LASER PHYSICS LETTERS, 15 (5):10.1088/1612-202X/aaadef MAY 2018
143. Boscain, Ugo; Sigalotti, Mario
Ensemble control of parameter-dependent quantum systems by adiabatic evolution
2017 IEEE 56TH ANNUAL CONFERENCE ON DECISION AND CONTROL (CDC), 2017
142. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017
141. Yang, Rong-Can; Lin, Xiu; Liu, Hong-Yu
Singlet-State Preparation for Three Lambda-type Atoms with Rydberg Blockade Mechanism
COMMUNICATIONS IN THEORETICAL PHYSICS, 68 (2):215-219; 10.1088/0253-6102/68/2/215 AUG 2017
140. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384; 10.1080/09500340.2017.1361478 2017
139. Ran, Du; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Speeding up adiabatic passage by adding Lyapunov control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033803 SEP 1 2017
138. Baksic, Alexandre; Belyansky, Ron; Ribeiro, Hugo; Clerk, Aashish A.
Shortcuts to adiabaticity in the presence of a continuum: Applications to itinerant quantum state transfer
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.021801 AUG 31 2017
137. Yang, Rong-Can; Lin, Xiu; Liu, Hong-Yu
Singlet-State Preparation for Three Lambda-type Atoms with Rydberg Blockade Mechanism
COMMUNICATIONS IN THEORETICAL PHYSICS Volume: 68 Issue: 2 Pages: 215-219 Published: AUG 2017
136. Yang, Rong-Can; Ye, Li-Xiang; Lin, Xiu; Liu, Hong-Yu
Adiabatic Generation of N-quNit Singlet States with Cavity QED
SCIENTIFIC REPORTS, 7 10.1038/srep45756 APR 3 2017
135. Martin Vaquero, J.; Cuevas-Maraver, J.; Peralta Conde, A.
Propagation studies for the construction of atomic macro-coherence in dense media as a tool to investigate neutrino physics
EUROPEAN PHYSICAL JOURNAL D, 71 (3):10.1140/epjd/e2017-70600-6 MAR 9 2017
134. Wu, Jin-Lei; Ji, Xin; Zhang, Shou
Fast adiabatic quantum state transfer and entanglement generation between two atoms via dressed states
SCIENTIFIC REPORTS, 7 10.1038/srep46255 APR 11 2017
133. Yang, Rong-Can; Ye, Li-Xiang; Lin, Xiu; Liu, Hong-Yu
Adiabatic Generation of N-quNit Singlet States with Cavity QED
SCIENTIFIC REPORTS, 7 10.1038/srep45756 APR 3 2017
132. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016
131. Shi, ZC; Wang, LC; Yi, XX
Preparing entangled states by Lyapunov control
QUANTUM INFORMATION PROCESSING, 15 (12):4939-4953; 10.1007/s11128-016-1441-6 DEC 2016
130. Tian, Si-Cong; Xing, En-Bo; Wan, Ren-Gang; Wang, Chun-Liang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Control of coherence transfer via tunneling in quadruple and multiple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125205 DEC 2016
129. Boyero Garcia, R.; Carpentier, A. V.; Gomez-Cadenas, J. J.; Peralta Conde, A.
A novel technique to achieve atomic macro-coherence as a tool to determine the nature of neutrinos
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6532-7 OCT 2016
128. Tian, Si-Cong; Wan, Ren-Gang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Tunneling-assisted coherent population transfer and creation of coherent superposition states in triple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125203 DEC 2016
127. Song, Chong; Su, Shi-Lei; Bai, Cheng-Hua; Ji, Xin; Zhang, Shou
Generation of atomic NOON states via shortcuts to adiabatic passage
QUANTUM INFORMATION PROCESSING, 15 (10):4159-4173; 10.1007/s11128-

126. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016
125. Wu, Jin-Lei; Song, Chong; Xu, Jing; Yu, Lin; Ji, Xin; Zhang, Shou
Adiabatic passage for one-step generation of n-qubit Greenberger-Horne-Zeilinger states of superconducting qubits via quantum Zeno dynamics
QUANTUM INFORMATION PROCESSING, 15 (9):3663-3675; 10.1007/s11128-016-1366-0 SEP 2016
124. Ye, Li-Xiang; Lin, Xiu; Chen, Xiang; He, Juan; Yang, Rong-Can; Liu, Hong-Yu
Generation of GHZ states with invariant-based shortcuts
QUANTUM INFORMATION PROCESSING, 15 (7):2785-2796; 10.1007/s11128-016-1303-2 JUL 2016
123. Song, Kun-Huang; Chen, Ming-Feng
Shortcuts to adiabatic passage for generation of W states of distant atoms
QUANTUM INFORMATION PROCESSING, 15 (8):3169-3188; 10.1007/s11128-016-1338-4 AUG 2016
122. Song, Chong; Su, Shi-Lei; Wu, Jin-Lei; Wang, Dong-Yang; Ji, Xin; Zhang, Shou
Generation of tree-type three-dimensional entangled states via adiabatic passage
PHYSICAL REVIEW A, 93 (6):10.1103/PhysRevA.93.062321 JUN 20 2016
121. Tian, Si-Cong; Wan, Ren-Gang; Wang, Chun-Liang; Shu, Shi-Li; Wang, Li-Jie; Tong, Chun-Zhu
Creation and Transfer of Coherence via Technique of Stimulated Raman Adiabatic Passage in Triple Quantum Dots
NANOSCALE RESEARCH LETTERS, 11 10.1186/s11671-016-1433-6 APR 23 2016
120. Yang, Rong-Can; Lin, Xiu; Ye, Li-Xiang; Chen, Xiang; He, Juan; Liu, Hong-Yu
Generation of singlet states with Rydberg blockade mechanism and driven by adiabatic passage
QUANTUM INFORMATION PROCESSING, 15 (2):731-740; 10.1007/s11128-015-1188-5 FEB 2016
119. Kumar, KS; Vepsalainen, A; Danilin, S; Paraoanu, GS
Stimulated Raman adiabatic passage in a three-level superconducting circuit
NATURE COMMUNICATIONS, 7 10.1038/ncomms10628 FEB 2016
118. Huang, Wei; Du, Yan-Xiong; Liang, Zhen-Tao; Yan, Hui
Detecting quantumness witness with atoms manipulated by the fractional stimulated Raman adiabatic passage processes
OPTICS COMMUNICATIONS, 363 42-46; 10.1016/j.optcom.2015.10.053 MAR 15 2016
117. Tikman, Y; Yavuz, I; Ciappina, MF; Chacon, A; Altun, Z; Lewenstein, M
High-order-harmonic generation from Rydberg atoms driven by plasmon-enhanced laser fields
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023410 FEB 10 2016
116. Xu, Peng; Yang, Xu-Chen; Mei, Feng; Xue, Zheng-Yuan
Controllable high-fidelity quantum state transfer and entanglement generation in circuit QED
SCIENTIFIC REPORTS, 6 10.1038/srep18695 JAN 25 2016
115. Rousseaux, B; Dzsotjan, D; des Francs, GC; Jauslin, HR; Couteau, C; Guerin, S
Adiabatic passage mediated by plasmons: A route towards a decoherence-free quantum plasmonic platform
PHYSICAL REVIEW B, 93 (4):10.1103/PhysRevB.93.045422 JAN 22 2016
114. Izadyari, M; Saadati-Niari, M; Khadem-Hosseini, R; Amniat-Talab, M
Creation of N-atom GHZ state in atom-cavity-fiber system by multi-state adiabatic passage
OPTICAL AND QUANTUM ELECTRONICS, 48 (1):10.1007/s11082-015-0356-2 JAN 2016
113. Chen, Zhen; Chen, Ye-Hong; Xia, Yan
Deterministic generation of singlet state of N atoms in coupled cavities via adiabatic passage of a dark state
JOURNAL OF MODERN OPTICS, 63 (2):92-102; 10.1080/09500340.2015.1066460 2016
112. Yang Rong-Can; Ye Li-Xiang; Lin Xiu; Chen Xiang
Generation of Three-Qutrit Singlet States with Two-Level Trapped Ions
COMMUNICATIONS IN THEORETICAL PHYSICS, 64 (4):391-394; OCT 1 2015
111. Yang, Rong-Can; Ye, Li-Xiang; Lin, Xiu; Chen, Xiang; Liu, Hong-Yu
Generation of three-qutrit singlet states with trapped ions via adiabatic passage
QUANTUM INFORMATION PROCESSING, 14 (12):4449-4459; 10.1007/s11128-015-1130-x DEC 2015
110. Chen, Jingwei; Wei, L. F.
Deterministic implementations of quantum gates with circuit QEDs via Stark-chirped rapid adiabatic passages
PHYSICS LETTERS A, 379 (40-41):2549-2555; 10.1016/j.physleta.2015.05.035 OCT 23 2015
109. Chen, Ming-Feng; Shen, Li-Tuo; Chen, Rong-Xin; Yang, Zhen-Biao
Driving to the steady ground-state superposition assisted by spontaneous emission
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033403 SEP 4 2015
108. Zhang Chun-Ling; Chen Mei-Feng
Quantum state transfer between atomic ensembles trapped in separate cavities via adiabatic passage
CHINESE PHYSICS B, 24 (7):10.1088/1674-1056/24/7/070310 JUL 2015
107. Wang, Qiong; Nie, Jian-Jun; Zeng, Hao-Sheng
Roles of dephasing in the population transfer in stimulated Raman adiabatic process
EUROPEAN PHYSICAL JOURNAL D Volume: 67 Issue: 7 Article Number: 151 Published: JUL 2013
106. Zhang, Chun-Ling; Chen, Mei-Feng
Entanglement of two atomic ensembles in coupled cavities via adiabatic passage
OPTICS COMMUNICATIONS, 339 61-65; 10.1016/j.optcom.2014.11.027 MAR 15 2015
105. Yang, Rong-Can; Lin, Xiu; Lin, Xiu-Min
Generation of three-qutrit singlet states for three atoms trapped in separated cavities
OPTICS COMMUNICATIONS Volume: 338 Pages: 366-370 Published: MAR 1 2015
104. Liu, Qi-Gong; Wu, Qi-Cheng; Leng, Chun-Ling; Liang, Yan; Ji, Xin; Zhang, Shou
Generation of atomic NOON states via adiabatic passage
QUANTUM INFORMATION PROCESSING, 13 (12):2801-2814; 10.1007/s11128-014-0833-8 DEC 2014
103. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014
102. Lu, Mei; Xia, Yan; Shen, Li-Tuo; Song, Jie
An effective shortcut to adiabatic passage for fast quantum state transfer in a cavity quantum electronic dynamics system
LASER PHYSICS, 24 (10):10.1088/1054-660x/24/10/105201 OCT 2014
101. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499; 10.1080/09500340.2014.942404 2014
100. Greentree, Andrew D.; Koiller, Belita
Dark-state adiabatic passage with spin-one particles
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.012319 JUL 14 2014
99. Chen, Li-Bo; Zheng, Chun-Hong; Ma, Hong-Yang; Shan, Chuan-Jia
Robust entangling two distant Bose-Einstein condensates via adiabatic passage
OPTICS COMMUNICATIONS, 328 73-76; 10.1016/j.optcom.2014.04.056 OCT 1 2014
98. Sandor, N; Demeter, G; Dzsotjan, D; Djotyan, GP
Coherence creation in an optically thick medium by matched propagation of a chirped-laser-pulse pair
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033823 MAR 12 2014
97. Deng, Li; Nakajima, Takashi
Detuning-induced stimulated Raman adiabatic passage in atoms with hyperfine structure
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023406 FEB 7 2014

96. Yang, Liu; Yan, Dong; Wang, Xiao-Chang; Yang, Hong; Wu, Jin-Hui
Accurate accumulation of arbitrary Berry phases via fractional stimulated Raman adiabatic passage
OPTICS COMMUNICATIONS, 313 345-349; 10.1016/j.optcom.2013.10.059 FEB 15 2014
95. Hao, Si-Yang; Xia, Yan; Song, Jie
Effective scheme for preparation of multi-atom Greenberger-Horne-Zeilinger states in coupled cavities via adiabatic passage
JOURNAL OF MODERN OPTICS, 60 (16):1349-1354;
10.1080/09500340.2013.837982 SEP 20 2013
94. Sandor, Nora; Djotyan, Gagik P.
Propagation of Raman-resonant frequency chirped laser pulses in a medium of lambda-atoms
PHOTON COUNTING APPLICATIONS IV; AND QUANTUM OPTICS AND QUANTUM INFORMATION TRANSFER AND PROCESSING, 8773 10.1117/12.2017217 2013
Proceedings of SPIE, Editor(s): Prochazka I; Fiuorasek J; Sobolewski R
93. Zhang Chun-Ling; Chen Mei-Feng
Generation of four-atom Greenberger-Horn-Zeilinger state via adiabatic passage
CHINESE PHYSICS B, 22 (5):10.1088/1674-1056/22/5/050307 MAY 2013
92. Lu, M., Xia, Y., Song, J., Song, H.-S.
Driving three atoms into a singlet state in an optical cavity via adiabatic passage of a dark state
Journal of Physics B: Atomic, Molecular and Optical Physics 46(1), 015502 (2013)
91. Hao, Si-Yang; Xia, Yan; Song, Jie; Nguyen Ba An
One-step generation of multiatom Greenberger-Horne-Zeilinger states in separate cavities via adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30 (2):468-474; FEB 2013
90. Wang, Ping; Chen, Mei-Feng
Preparation of four-dimensional entangled states in separate cavities via adiabatic passage
PHYSICA SCRIPTA, 86 (6):10.1088/0031-8949/86/06/065002 DEC 2012
89. Deng, Li; Nakajima, Takashi
Generation of vacuum-ultraviolet pulses with a Doppler-broadened gas utilizing high atomic coherence
OPTICS EXPRESS, 20 (16):17566-17580; JUL 30 2012
88. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.; Montemezzani, Germano
Planar achromatic multiple beam splitter by adiabatic light transfer
OPTICS LETTERS, 37 (18):3789-3791; SEP 15 2012
87. Boscain, Ugo V.; Chittaro, Francesca; Mason, Paolo; Sigalotti, Mario
Adiabatic Control of the Schrodinger Equation via Conical Intersections of the Eigenvalues
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 57 (8):1970-1983; SI 10.1109/TAC.2012.2195862 AUG 2012
86. Amnat-Talab, M; Saadati-Niari, M; Guerin, S
Quantum state engineering in ion-traps via adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30249-3 AUG 2012
85. Chen, Li-Bo; Shi, Peng; Zheng, Chun-Hong; Gu, Yong-Jian
Generation of three-dimensional entangled state between a single atom and a Bose-Einstein condensate via adiabatic passage
OPTICS EXPRESS, 20 (13):14547-14555; JUN 18 2012
84. Xiong, Wei; Ye, Liu
Tunable optimal quantum cloning machines with trapped atoms
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (5):901-905; MAY 1 2012
83. Wu, Tao; Ye, Liu
Implementing Two-Qubit SWAP Gate with SQUID Qubits in a Microwave Cavity via Adiabatic Passage Evolution
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 51 (4):1076-1081;
10.1007/s10773-011-0984-7 APR 2012
82. Yuan, Haidong; Koch, Christiane P.; Salamon, Peter; Tannor, David J.
Controllability on relaxation-free subspaces: On the relationship between adiabatic population transfer and optimal control
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033417 MAR 15 2012
81. Leon-Montiel, R. de J.; Torres, Juan P.
Enhancing the sensitivity and robustness of label-free imaging systems via stimulated Raman adiabatic passage
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/1/013018 JAN 12 2012
80. Li, Peng-Bo; Gao, Shao-Yan; Li, Fu-Li
Engineering two-mode continuous-variable entangled states of distant atomic spin ensembles with superconducting quantum circuits
PHYSICAL REVIEW A, 85 (1):10.1103/PhysRevA.85.014303 JAN 30 2012
79. Kou, J; Wan, RG; Kang, ZH; Jiang, L; Wang, L; Jiang, Y; Gao, JY
Phase-dependent coherent population trapping and optical switching
PHYSICAL REVIEW A, 84 (6):10.1103/PhysRevA.84.063807 DEC 2 2011
78. Deng, Li; Niu, Yueping; Gong, Shangqing
Selective preparation of the maximum coherent superposition state in four-level atoms
CHINESE OPTICS LETTERS 9 (11): SI 10.3788/COL201109.112701 NOV 10 2011
77. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11): 2785-2796 NOV 2011
76. Chen, Li-Bo; Shi, Peng; Gu, Yong-Jian; Xie, Lin; Ma, Li-Zhen
Generation of atomic entangled states in a bi-mode cavity via adiabatic passage
OPTICS COMMUNICATIONS 284 (20): 5020-5023 10.1016/j.optcom.2011.06.037 SEP 15 2011
75. Zheng An-Shou; Liu Ji-Bing; Chen Hong-Yun
N-Qubit W State of Spatially Separated Atoms via Fractional Adiabatic Passage
CHINESE PHYSICS LETTERS 28 (8): 10.1088/0256-307X/28/8/080303 AUG 2011
74. Issoufa, Y.H., Messikh, A.
Single-qubit rotation gate using three-level lambda systems
Australian Journal of Basic and Applied Sciences 5(6), pp. 360-364 (2011)
73. Xiong, Wei; Ye, Liu
Scheme for generation of Greenberger-Horne-Zeilinger states of remote atoms trapped in separate optical cavities
International Journal of Quantum Information 9 (4): 1123-1131 JUN 2011
72. Cui, Ni; Niu, Yueping; Gong, Shangqing
Tunneling-induced coherent electron population transfer in an asymmetric quantum well
OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011
71. Amnat-Talab, M., Saadati-Niari, M., Sedghi, H.
Effect of spontaneous emission and cavity decay on intracavity stimulated raman adiabatic passage
Iranian Journal of Physics Research 10(4), pp. 329-336 (2011)
70. Song Pei-Jun; Lue Xin-You; Si Liu-Gang; Yang Xiao-Xue
Deterministic generation of Greenberger-Horne-Zeilinger and W states for three distant atoms via adiabatic passage
CHINESE PHYSICS B 20 (5): Art. No. 050308 MAY 2011
69. Li, Peng-Bo; Li, Fu-Li
Engineering squeezed states of microwave radiation with circuit quantum electrodynamics
PHYSICAL REVIEW A 83 (3): Art. No. 035807 MAR 25 2011
68. Amnat-Talab, M; Saadati-Niari, M; Guerin, S; Nader-Ali, R
Superposition of states by adiabatic passage in N-pod systems
PHYSICAL REVIEW A 83 (1): Art. No. 013817 JAN 21 2011
67. Wan, Ren-Gang; Kou, Jun; Jiang, Li; Jiang, Yun; Gao, Jin-Yue
Two-dimensional atom localization via controlled spontaneous emission from a driven tripod system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (1): 10-17 JAN 2011
66. Tseng, Shuo-Yen; Wu, Ming-Chan
Mode Conversion/Splitting by Optical Analogy of Multistate Stimulated Raman Adiabatic Passage in Multimode Waveguides
JOURNAL OF LIGHTWAVE TECHNOLOGY 28 (24): 3529-3534 DEC 15 2010
65. Yang, Wanli; Xu, Zhenyu; Feng, Mang; Du, Jiangfeng
Entanglement of separate nitrogen-vacancy centers coupled to a whispering-

64. Issoufa, Youssef Hamidou; Messikh, Azeddine
Effect of dephasing on single-qubit rotation gates
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215506 NOV 14 2010
63. Yang Zhen-Biao; Wu Huai-Zhi; Zheng Shi-Biao
Robust generation of qutrit entanglement via adiabatic passage of dark states
CHINESE PHYSICS B 19 (9): Art. No. 094205 SEP 2010
62. Ginzburg, P; Shalyt, M; Hayat, A; Orenstein, M
Photon-energy qubit generation by spontaneous emission in a V-type system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (10): Art. No. 105502 MAY 28 2010
61. He, Jun; Zhang, Yong-Sheng; Guo, Guang-Can
Time reversible evolution via nonadiabatic coupling in adiabatic dark subspace
OPTICS COMMUNICATIONS 283 (10): 2174-2177 MAY 15 2010
60. Deng, ZJ; Liang, LM; Chen, JM; Wu, CW
State transfer and entanglement with atomic ensembles in a one-dimensional fibre-coupled cavity chain
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (6): Art. No. 065506 MAR 28 2010
59. Deng Li; Niu Yueping; Xiang Yang; Jin Shiqi; Gong Shangqing
Creation of an arbitrary coherent superposition state with chirped delayed pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (3): Art. No. 035401 FEB 14 2010
58. Amnat-Talab, M.; Nader-Ali, R.; Guerin, S.; Niari, M. Saadati
Creation of atomic W state in a cavity by adiabatic passage
OPTICS COMMUNICATIONS 283 (4): 622-627 FEB 15 2010
57. Gambhir, Monica; Lahon, Siddhartha; Jha, Pradeep Kumar; Mohan, Man
Laser-induced adiabatic population transfer in asymmetric quantum wells
NANO 4 (5): 289-297 OCT 2009
56. Dreisow, F; Ornigotti, M; Szameit, A; Heinrich, M; Keil, R; Nolte, S; Tunnermann, A; Longhi, S
Polychromatic beam splitting by fractional stimulated Raman adiabatic passage
APPLIED PHYSICS LETTERS 95 (26): Art. No. 261102 DEC 28 2009
55. Sun, Hui; Feng, Xun-Li; Wu, Chunfeng; Liu, Jin-Ming; Gong, Shangqing; Oh, C. H.
Optical rotation of heavy hole spins by non-Abelian geometrical means
PHYSICAL REVIEW B 80 (23): Art. No. 235404 DEC 2009
54. Kou, Jun; Wan, Ren-Gang; Kang, Zhi-Hui; Zhang, Xiao-Jun; Wang, Hai-Hua; Jiang, Yun; Gao, Jin-Yue
Measurement of coherence dynamics based on coherent anti-Stokes Raman scattering
OPTICS COMMUNICATIONS 282 (23): 4573-4576 DEC 1 2009
53. Evangelos Voutsinas, John Boviatsis, Antonios Fountoulakis
Control of a double quantum dot structure by stimulated Raman adiabatic passage
physica status solidi (c) 4 439 (2007)
52. Dridi, G; Guerin, S; Hakobyan, V; Jauslin, HR; Eleuch, H
Ultrafast stimulated Raman parallel adiabatic passage by shaped pulses
PHYSICAL REVIEW A 80 (4): Art. No. 043408 OCT 2009
51. Beil, Fabian; Klein, Jens; Halfmann, Thomas
Optically driven atomic coherences in a Pr³⁺:Y₂SiO₅ crystal
PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS 7 (1): 32-38 FEB 2009
50. Lue, Xin-You; Zheng, Li-Li; Huang, Pei; Li, Jin; Yang, Xiaoxue
Adiabatic passage scheme for entanglement between two distant microwave cavities interacting with single-molecule magnets
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 26 (6): 1162-1168 JUN 2009
49. Song, Xiao-Li; Li, Ai-Jun; Wang, Lei; Kang, Zhi-Hui; Kou, Jun; Zhang, Bing; Wang, Chun-Liang; Jiang, Yun; Gao, Jin-Yue
Storage and switching of multiple optical signals among three channels
PHYSICAL REVIEW A 79 (5): Art. No. 053857 MAY 2009
48. Guerin, S; Jauslin, HR
Control of quantum dynamics by laser pulses: Adiabatic floquet theory
ADVANCES IN CHEMICAL PHYSICS, VOL 125 125: 147-267 2003
47. He, Jun; Zhang, Yong-Sheng; Zhou, Xiang-Fa; Chen, Qun-Feng; Guo, Guang-Can
Arbitrary quantum superposition state for three-level system using oscillating dark states
OPTICS COMMUNICATIONS 282 (6): 1167-1170 MAR 15 2009
46. Kozlov, Victor V.; Kozlova, Ekaterina B.
Adiabatic and nonadiabatic preparation of a ground-state coherence in an optically thick lambda medium
OPTICS COMMUNICATIONS 282 (5): 892-895 MAR 1 2009
45. Klein, J; Beil, F; Halfmann, T
Experimental investigations of stimulated Raman adiabatic passage in a doped solid
PHYSICAL REVIEW A 78 (3): Art. No. 033416 SEP 2008
44. Daems, D; Guerin, S
Analog Grover search by adiabatic passage in a cavity-laser-atom system
PHYSICAL REVIEW A 78 (2): Art. No. 022330 Part A AUG 2008
43. Li, Qifang; Kuang, Ye
Preparing of coherent superposition state in serial multi-Lambda-type system by stimulated Raman adiabatic passage
CHINESE OPTICS LETTERS 6 (7): 469-471 JUL 10 2008
42. Tsubouchi, Masaaki; Momose, Takamasa
Rovibrational wave-packet manipulation using shaped midinfrared femtosecond pulses toward quantum computation: Optimization of pulse shape by a genetic algorithm
PHYSICAL REVIEW A 77 (5): Art. No. 052326 Part A MAY 2008
41. Tsubouchi, M; Khramov, A; Momose, T
Rovibrational wave-packet manipulation using shaped midinfrared femtosecond pulses
PHYSICAL REVIEW A 77 (2): Art. No. 023405 FEB 2008
40. Wang, Hai-Hua; Wang, Lei; Wei, Xiao-Gang; Li, Ya-Juan; Du, Dun-Mao; Kang, Zhi-Hui; Jiang, Yun; Gao, Jin-Yue
Storage and selective release of optical information based on fractional stimulated Raman adiabatic passage in a solid
APPLIED PHYSICS LETTERS 92 (4): Art. No. 041107 JAN 28 2008
39. Chen, Li-Bo; Ye, Ming-Yong; Lin, Gong-Wei; Du, Qian-Hua; Lin, Xiu-Min
Generation of entanglement via adiabatic passage
PHYSICAL REVIEW A 76 (6): Art. No. 062304 DEC 2007
38. Daems, D; Guerin, S
Adiabatic quantum search scheme with atoms in a cavity driven by lasers
PHYSICAL REVIEW LETTERS 99 (17): Art. No. 170503 OCT 26 2007
37. Graefe, S.; Kiefer, W.; Engel, V.
On the limitations of adiabatic population transfer between molecular electronic states induced by intense femtosecond laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (13): Art. No. 134306 OCT 7 2007
36. Song XH, Yang WF, Gong SQ, et al.
Polarization evolution of a few-cycle ultrashort laser pulse propagating in a degenerate three-level medium
PHYSICAL REVIEW A 76 (3): Art. No. 033827 SEP 2007
35. Klein J, Beil F, Halfmann T
Robust population transfer by stimulated raman adiabatic passage in a Pr³⁺:Y₂SiO₅ crystal
PHYSICAL REVIEW LETTERS 99 (11): Art. No. 113003 SEP 14 2007
34. Oberst M, Vewinger F, Lvovsky AI
Time-resolved probing of the ground state coherence in rubidium
OPTICS LETTERS 32 (12): 1755-1757 JUN 15 2007
33. Bateman, J., Freearge, T.
Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry
2007 Physical Review A - Atomic, Molecular, and Optical Physics 76 (1), art. no. 013416

32. Song, X.-L., Wang, L., Lin, R.-Z., Kang, Z.-H., Li, X., Jiang, Y., Gao, J.-Y.
Observation of CARS signal via maximal atomic coherence prepared by F-STIRAP
in a three-level atomic system
OPTICS EXPRESS 15 (12): 7499-7505 JUN 11 2007
31. Song KH, Xiang SH, Liu Q, et al.
Quantum computation and W-state generation using superconducting flux qubits
coupled to a cavity without geometric and dynamical manipulation
PHYSICAL REVIEW A 75 (3): Art. No. 032347 MAR 2007
30. Merkel W, Mack H, Freyberger M, et al.
Coherent transport of single atoms in optical lattices
PHYSICAL REVIEW A 75 (3): Art. No. 033420 MAR 2007
29. Skryabin DV, Yulin AV
Raman solitons with group velocity dispersion
PHYSICAL REVIEW E 74 (4): Art. No. 046616 Part 2 OCT 2006
28. Sugny D, Kontz C, Ndong M, et al.
Laser control in a bifurcating region
PHYSICAL REVIEW A 74 (4): Art. No. 043419 OCT 2006
27. Lin XM, Zhou ZW, Wang CZ, et al.
Implementing conditional quantum phase gate via cavity decay
JOURNAL OF MODERN OPTICS 53 (15): 2207-2213 OCT 15 2006
26. Arkhipkin VG, Timofeev IV
Induction of the maximum Raman coherence in an extended medium through
fractional adiabatic passage
OPTICS AND SPECTROSCOPY 100 (3): 433-436 MAY 2006
25. Lacour X, Sangouard N, Guerin S, et al.
Arbitrary state controlled-unitary gate by adiabatic passage
PHYSICAL REVIEW A 73 (4): Art. No. 042321 APR 2006
24. Sangouard N, Lacour X, Guerin S, et al.
CNOT gate by adiabatic passage with an optical cavity
EUROPEAN PHYSICAL JOURNAL D 37 (3): 451-456 MAR 2006
23. Lin XM, Zhou ZW, Ye MY, et al.
One-step implementation of a multiqubit controlled-phase-flip gate
PHYSICAL REVIEW A 73 (1): Art. No. 012323 JAN 2006
22. Yan X, He QY, LaRocca GC, et al.
Dynamic control of four-wave-mixing enhancement in coherently driven four-
level atoms
PHYSICAL REVIEW A 73 (1): Art. No. 013816 JAN 2006
21. Sangouard N, Lacour X, Guerin S, et al.
Fast SWAP gate by adiabatic passage
PHYSICAL REVIEW A 72 (6): Art. No. 062309 DEC 2005
20. Gong S, Niu Y
Creation of arbitrary coherent superposition states in four-level systems
OPTICS AND SPECTROSCOPY 99 (2): 270-273 AUG 2005 (Optika i Spektroskopiya
99 (2), pp. 286-289)
19. Malinovsky VS, Sola IR
Quantum control for entanglement preparation
QUANTUM INFORMATION & COMPUTATION 5 (4-5): 364-379 JUL 2005
18. Amnat-Talab M, Guerin S, Jauslin HR
Decoherence-free creation of atom-atom entanglement in a cavity via fractional
adiabatic passage
PHYSICAL REVIEW A 72 (1): Art. No. 012339 Part A-B JUL 2005
17. Brandes T
Coherent and collective quantum optical effects in mesoscopic systems
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 408 (5-6): 315-474 MAR
2005
16. Amnat-Talab M, Guerin S, Sangouard N, et al.
Atom-photon, atom-atom, and photon-photon entanglement preparation by
fractional adiabatic passage
PHYSICAL REVIEW A 71 (2): Art. No. 023805 FEB 2005
15. Wang T, Kostrun M, Yelin SF
Multiple beam splitter for single photons
PHYSICAL REVIEW A 70 (5): Art. No. 053822 NOV 2004
14. Malinovsky VS, Sola IR
Quantum control of entanglement by phase manipulation of time-delayed pulse
sequences. II
PHYSICAL REVIEW A 70 (4): Art. No. 042305 OCT 2004
13. Malinovsky VS, Sola IR
Quantum phase control of entanglement
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 190502 NOV 5 2004
12. Niu YP, Gong SQ, Li RX, et al.
Creation of atomic coherent superposition states via the technique of stimulated
Raman adiabatic passage using a Lambda-type system with a manifold of levels
PHYSICAL REVIEW A 70 (2): Art. No. 023805 AUG 2004
11. Niu YP, Gong SQ
Manipulation of population transfer to atomic superposition states: An extension
of stimulated Raman adiabatic passage to a four-level ladder system
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 73 (8): 2131-2134 AUG 2004
10. Paspalakis, E., Kylstra, N.J.
Coherent manipulation of superconducting quantum interference devices with
adiabatic passage
2004 Journal of Modern Optics 51 (11), pp. 1679-1689
9. Sangouard N, Guerin S, Yatsenko LP, et al.
Preparation of coherent superposition in a three-state system by adiabatic
passage
PHYSICAL REVIEW A 70 (1): Art. No. 013415 JUL 2004
8. Kis Z, Paspalakis E
Arbitrary rotation and entanglement of flux SQUID qubits
PHYSICAL REVIEW B 69 (2): Art. No. 024510 JAN 2004
7. Scully MO, Kattawar GW, Lucht RP, et al.
FAST CARS: Engineering a laser spectroscopic technique for rapid identification of
bacterial spores
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES
OF AMERICA 99 (17): 10994-11001 AUG 20 2002
6. Stenholm S
Adiabatic processes in quantum optics
ACTA PHYSICA POLONICA A 101 (3): 425-435 MAR 2002
5. Kis Z, Renzoni F
Qubit rotation by stimulated Raman adiabatic passage
PHYSICAL REVIEW A 65 (3): Art. No. 032318 Part A MAR 2002
4. Paspalakis E, Knight PL
Transparency and parametric generation in a four-level system
JOURNAL OF MODERN OPTICS 49 (1-2): 87-95 Sp. Iss. SI JAN 15 2002
3. Paspalakis E, Knight PL
On pulse propagation in a coherently prepared multi-level medium
JOURNAL OF MODERN OPTICS 49 (1-2): 201-206 Sp. Iss. SI JAN 15 2002
2. Brandes T, Renzoni F, Blick RH
Adiabatic steering and determination of dephasing rates in double-dot qubits
PHYSICAL REVIEW B 64 (3): Art. No. 035319 JUL 15 2001
1. Renzoni F, Stenholm S
Adiabatic transfer of atomic coherence
OPTICS COMMUNICATIONS 189 (1-3): 69-77 MAR 1 2001
- =====
- 32. N. V. Vitanov**
**Pulse-order invariance of the initial-state population in multistate chains driven
by delayed laser pulses**
Phys. Rev. A 60, 3308-3310 (1999)
- =====
- 33. Vitanov NV, Stenholm S**
Adiabatic population transfer via multiple intermediate states
PHYSICAL REVIEW A 60 (5): 3820-3832 NOV 1999
45. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020

44. A. Yang, S. Botsi, S. Kumar, S. B. Pal, M. M. Lam, I. Cebaite, A. Laugharn, and K. Dieckmann
Singlet Pathway to the Ground State of Ultracold Polar Molecules
Phys. Rev. Lett. 124, 133203 – Published 1 April 2020
43. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430
Published: DEC 30 2019
42. Liu, Lan; Zhang, De-Chao; Yang, Huan; Liu, Ya-Xiong; Nan, Jue; Rui, Jun; Zhao, Bo; Pan, Jian-Wei
Observation of Interference between Resonant and Detuned STIRAP in the Adiabatic Creation of (23)Na(40)K Molecules
PHYSICAL REVIEW LETTERS, 122 (25):10.1103/PhysRevLett.122.253201 JUN 25 2019
41. Castellini, Alessia; Jauslin, Hans Rudolf; Rousseaux, Benjamin; et al.
Quantum plasmonics with multi-emitters: application to stimulated Raman adiabatic passage
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 223
Published: DEC 21 2018
40. Hiluf, Dawit
All optical programmable logic array (PLA)
Journal of Physics Conference Series, Applied Nanotechnology and Nanoscience International Conference (ANNIC 2017), 987 10.1088/1742-6596/987/1/012033 2018
39. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
38. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
37. Gustin, Chris; Hughes, Stephen
Influence of electron-phonon scattering for an on-demand quantum dot single-photon source using cavity-assisted adiabatic passage
PHYSICAL REVIEW B, 96 (8):10.1103/PhysRevB.96.085305 AUG 10 2017
36. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
35. Verma, JK; Pathak, PK
Highly efficient two-photon generation from a coherently pumped quantum dot embedded in a microcavity
PHYSICAL REVIEW B, 94 (8):10.1103/PhysRevB.94.085309 AUG 29 2016
34. Seck, Christopher M.; Kokish, Mark G.; Dietrich, Matthew R.; Odom, Brian C.
Raman sideband cooling of a Ba-138(+) ion using a Zeeman interval
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.053415 MAY 17 2016
33. Zhai, Jingjing; Zhang, Lu; Zhang, Keye; Qian, Jing; Zhang, Weiping
Efficiency limitation for realizing an atom-molecule adiabatic transfer based on a chainwise system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 32 (10):2164-2171; 10.1364/JOSAB.32.002164 OCT 1 2015
32. Takekoshi, Tetsu; Reichsoellner, Lukas; Schindewolf, Andreas; Hutson, Jeremy M.; Le Sueur, C. Ruth; Dulieu, Olivier; Ferlaino, Francesca; Grimm, Rudolf; Naegerl, Hanns-Christoph
Ultracold Dense Samples of Dipolar RbCs Molecules in the Rovibrational and Hyperfine Ground State
PHYSICAL REVIEW LETTERS, 113 (20):10.1103/PhysRevLett.113.205301 NOV 12 2014
31. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014
30. Jakubetz, Werner
Limitations of STIRAP-like population transfer in extended systems: The three-level system embedded in a web of background states
JOURNAL OF CHEMICAL PHYSICS, 137 (22):10.1063/1.4770053 DEC 14 2012
29. Koch, Christiane P.; Shapiro, Moshe
Coherent Control of Ultracold Photoassociation
CHEMICAL REVIEWS, 112 (9):4928-4948; SI 10.1021/cr2003882 SEP 2012
28. Yang, Xihua; Huang, Yihua; Zhang, Zhenhua; Yan, Xiaona
Enhancement of coherent population transfer in a double Lambda-type four-level system via a train of pulse pairs
OPTICS COMMUNICATIONS, 285 (8):2101-2105; 10.1016/j.optcom.2011.12.076 APR 15 2012
27. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)
26. MacKie, M., Phou, P., Boyce, H., Shinn, M., Katz, L.
Feshbach-resonant Raman photoassociation in a Bose-Einstein condensate
Physical Review A - Atomic, Molecular, and Optical Physics 84(4), 043614 (2011)
25. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
24. Cui, Ni; Niu, Yueping; Gong, Shangqing
Tunneling-induced coherent electron population transfer in an asymmetric quantum well
OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011
23. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010
22. Gunceler, Deniz; Bulutay, Ceyhan
dc-switchable and single-nanocrystal-addressable coherent population transfer
APPLIED PHYSICS LETTERS 97 (24): Art. No. 241909 DEC 13 2010
21. Pathak, PK; Hughes, S
Coherently triggered single photons from a quantum-dot cavity system
PHYSICAL REVIEW B 82 (4): Art. No. 045308 JUL 15 2010
20. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009
19. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
18. Tsukanov, AV
Resonant optical electron transfer in one-dimensional multiwell structures
JOURNAL OF PHYSICS-CONDENSED MATTER 20 (31): Art. No. 315204 AUG 6 2008
17. Li, X; Parker, GA; Brumer, P; Thanopoulos, I; Shapiro, M
Theory of laser enhancement and suppression of cold reactions: The fermion-boson Li-6+Li-7(2)<->((h)over-bar omega 0) Li-6 Li-7+Li-7 radiative collision
JOURNAL OF CHEMICAL PHYSICS 128 (12): Art. No. 124314 MAR 28 2008
16. Evangelos Voutsinas, John Boviatsis, Antonios Fountoulakis
Control of a double quantum dot structure by stimulated Raman adiabatic passage
physica status solidi (c) 4 439 (2007)
15. Tsukanov AV
Single-qubit operations in the double-donor structure driven by optical and voltage pulses
PHYSICAL REVIEW B 76 (3): Art. No. 035328 JUL 2007
14. Merkel W, Mack H, Freyberger M, et al.
Coherent transport of single atoms in optical lattices
PHYSICAL REVIEW A 75 (3): Art. No. 033420 MAR 2007
13. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
12. Cheng TW, Darmawan H, Brown A
Stimulated Raman adiabatic passage in molecules: The effects of background

- states
PHYSICAL REVIEW A 75 (1): Art. No. 013411 JAN 2007
11. Thanopoulos I, Shapiro M
Enhanced selectivity and yield in multichannel photodissociation reactions:
Application to CH₃
JOURNAL OF CHEMICAL PHYSICS 125 (13): Art. No. 133314 OCT 7 2006
10. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006
9. Fewell MP
Adiabatic elimination, the rotating-wave approximation and two-photon transitions
OPTICS COMMUNICATIONS 253 (1-3): 125-137 SEP 1 2005
8. Larson J, Andersson E
Cavity-state preparation using adiabatic transfer
PHYSICAL REVIEW A 71 (5): Art. No. 053814 MAY 2005
7. Nesterenko VO, Reinhard PG, Kleinig W, et al.
Infrared electron modes in light deformed clusters
PHYSICAL REVIEW A 70 (2): Art. No. 023205 AUG 2004
6. Korolkov MV, Schmidt B
Quantum molecular dynamics driven by short and intense light pulses: Towards the limits of the Floquet picture
COMPUTER PHYSICS COMMUNICATIONS 161 (1-2): 1-17 AUG 1 2004
5. Gong JB, Rice SA
Complete quantum control of the population transfer branching ratio between two degenerate target states
JOURNAL OF CHEMICAL PHYSICS 121 (3): 1364-1372 JUL 15 2004
4. Gong JB, Rice SA
Selective photochemistry via adiabatic passage: Degenerate product states with different lifetimes
JOURNAL OF CHEMICAL PHYSICS 120 (11): 5117-5127 MAR 15 2004
3. Chen PC, Piermarocchi C, Sham LJ, et al.
Theory of quantum optical control of a single spin in a quantum dot
PHYSICAL REVIEW B 69 (7): Art. No. 075320 FEB 2004
2. Karpati A, Kis Z
Adiabatic creation of coherent superposition states via multiple intermediate states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003
1. Li WD, Lai YZ, Liang JQ
Effect of Kerr-like medium on atomic level-occupation probability
OPTICS COMMUNICATIONS 186 (4-6): 303-309 DEC 15 2000
- =====
- 34. Unanyan RG, Vitanov NV, Shore BW, Bergmann K**
Coherent properties of a tripod system coupled via a continuum
PHYSICAL REVIEW A 61 (4): Art. No. 043408 APR 2000
25. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
24. Demekhin, Philipp V.; Cederbaum, Lorenz S.
Quantum oscillations between close-lying states mediated by the electronic continuum in intense high-frequency pulses
PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.013417 JAN 28 2015
23. Thuan Bui Dinh; Van Cao Long; Leonski, Wieslaw; Perina, Jan, Jr.
Electromagnetically induced transparency for a double Fano-profile system
EUROPEAN PHYSICAL JOURNAL D, 68 (6):10.1140/epjd/e2014-50100-1 JUN 23 2014
22. Lin, Tzung-Yi; Hsiao, Fu-Chen; Jhang, Yao-Wun; et al.
Mode conversion using optical analogy of shortcut to adiabatic passage in engineered multimode waveguides
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 24085-24092 Published: OCT 8 2012
21. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)
20. Cui, Ni; Niu, Yueping; Gong, Shangqing
Tunneling-induced coherent electron population transfer in an asymmetric quantum well
OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011
19. Qi, Yihong; Niu, Yueping; Zhou, Fengxue; Peng, Yandong; Gong, Shangqing
Phase control of coherent pulse propagation and switching based on electromagnetically induced transparency in a four-level atomic system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 44 (8): Art. No. 085502 APR 28 2011
18. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010
17. Dreisow, F; Szameit, A; Heinrich, M; Keil, R; Nolte, S; Tunnermann, A; Longhi, S
Adiabatic transfer of light via a continuum in optical waveguides
OPTICS LETTERS 34 (16): 2405-2407 AUG 15 2009
16. Auzinsh, M; Bezuglov, NN; Miculis, K
Manipulation of dark states and control of coherent processes with spectrally broad light
PHYSICAL REVIEW A 78 (5): Art. No. 053415 NOV 2008
15. Longhi, S
Transfer of light waves in optical waveguides via a continuum
PHYSICAL REVIEW A 78 (1): Art. No. 013815 JUL 2008
14. Yan, Tian-Min; Han, Yong-Chang; Yuan, Kai-Jun; Cong, Shu-Lin
Steering population transfer via continuum structure of the Li-2 molecule with ultrashort laser pulses
CHEMICAL PHYSICS 348 (1-3): 39-44 JUN 2 2008
13. Han YC, Wang SM, Yuan KJ, et al.
Population transfer of the Na-2 molecule via continuum state
CHEMICAL PHYSICS 333 (2-3): 119-127 MAR 30 2007
12. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
11. Thanopoulos I, Shapiro M
Enhanced selectivity and yield in multichannel photodissociation reactions:
Application to CH₃
JOURNAL OF CHEMICAL PHYSICS 125 (13): Art. No. 133314 OCT 7 2006
10. Li Y
Propagation of light in an ensemble of tripod level atoms
COMMUNICATIONS IN THEORETICAL PHYSICS 46 (1): 135-140 JUL 15 2006
9. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006
8. Popov AK, Kimberg VV, George TF
Large enhancement of fully resonant sum-frequency generation through quantum control via continuum states
PHYSICAL REVIEW A 69 (4): Art. No. 043816 APR 2004
7. Chen, P., Piermarocchi, C., Sham, L.J., Gammon, D., Steel, D.G.
Theory of quantum optical control of a single spin in a quantum dot
2004 Physical Review B - Condensed Matter and Materials Physics 69 (7), art. no. 075320, pp. 753201-753208
6. Popov, A.K., Kimberg, V.V., George, T.F.
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
2003 Physical Review A - Atomic, Molecular, and Optical Physics 68 (3), pp. 033407/1-033407/9
5. Magunov AI, Strakhova SI
Interference of laser-induced resonances in the continuous structures of a helium

atom
QUANTUM ELECTRONICS 33 (3): 231-234 MAR 2003

4. Karpati A, Kis Z
Adiabatic creation of coherent superposition states via multiple intermediate states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003

3. Magunov AI, Rotter I, Strakhova SI
Avoided crossing in laser-induced continuum structures
LASER PHYSICS 12 (2): 429-434 FEB 2002

2. Raczynski A, Rezmerska A, Zaremba J
Population transfer through coupled continue
PHYSICAL REVIEW A 63 (2): Art. No. 025402 FEB 2001

1. Magunov AI, Rotter I, Strakhova SI
Laser-induced continuum structures and double poles of the S-matrix
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 34 (1): 29-47 JAN 14 2001

=====
35. Vitanov NV, Shore BW, Unanyan RG, Bergmann K
Measuring a coherent superposition
OPTICS COMMUNICATIONS 179 (1-6): 73-83 MAY 25 2000

4. Kim, Hyosub; Song, Yungheung; Lee, Han-gyeol; Ahn, Jaewook
Rabi oscillations of Morris-Shore-transformed N-state systems by elliptically polarized ultrafast laser pulses
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053421 MAY 26 2015

3. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004

2. Paspalakis E, Knight PL
Transparency and parametric generation in a four-level system
JOURNAL OF MODERN OPTICS 49 (1-2): 87-95 Sp. Iss. SI JAN 15 2002

1. Kis Z, Stenholm S
Measuring the density matrix by local addressing
PHYSICAL REVIEW A 64 (6): Art. No. 065401 DEC 2001

=====
36. Vitanov NV
Measuring a coherent superposition of multiple states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 33 (12): 2333-2346 JUN 28 2000

11. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

10. Kim, Hyosub; Song, Yungheung; Lee, Han-gyeol; Ahn, Jaewook
Rabi oscillations of Morris-Shore-transformed N-state systems by elliptically polarized ultrafast laser pulses
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053421 MAY 26 2015

9. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014

8. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)

7. Vewinger, Frank; Shore, Bruce W.; Bergmann, Klaas
Superpositions of Degenerate Quantum States: Preparation and Detection in Atomic Beams
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 58 58: 113-172 2010

6. Shore, Bruce W.
Coherent manipulations of atoms using laser light

ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

5. Vewinger F, Heinz M, Shore BW, et al.
Amplitude and phase control of a coherent superposition of degenerate states. I. Theory
PHYSICAL REVIEW A 75 (4): Art. No. 043406 APR 2007

4. Vewinger F, Heinz M, Schneider U, et al.
Amplitude and phase control of a coherent superposition of degenerate states. II. Experiment
PHYSICAL REVIEW A 75 (4): Art. No. 043407 APR 2007

3. Shore BW
Coherent manipulation of atomic excitation
Bulgarian Journal of Physics 33, 52-70 (2005)

2. Shore BW
Coherence and transient nonlinearity in laser probing
SPECTROCHIMICA ACTA PART B-ATOMIC SPECTROSCOPY 58 (6): 969-998 JUN 30 2003

1. Kis Z, Stenholm S
Measuring the density matrix by local addressing
PHYSICAL REVIEW A 64 (6): Art. No. 065401 DEC 2001

=====
37. Rickes T, Yatsenko LP, Steuerwald S, Halfmann T, Shore BW, Vitanov NV, Bergmann K
Efficient adiabatic population transfer by two-photon excitation assisted by a laser-induced Stark shift
JOURNAL OF CHEMICAL PHYSICS 113 (2): 534-546 JUL 8 2000

97. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

96. Toth, Attila; Csehi, Andras
Probing strong-field two-photon transitions through dynamic interference
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 3 Article Number: 035005 Published: FEB 17 2021

95. Shirkhaghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020

94. Lahad, Ohr; Finkelstein, Ran; Davidson, Omri; Michel, Ohad; Poem, Eilon; Firstenberg, Ofer
Recovering the Homogeneous Absorption of Inhomogeneous Media
PHYSICAL REVIEW LETTERS Volume: 123 Issue: 17 Article Number: 173203 Published: OCT 25 2019

93. Batarfi, H. A.
Fractional Model of a Pulsed-Driven Qubit
NONLINEAR OPTICS QUANTUM OPTICS-CONCEPTS IN MODERN OPTICS Volume: 49 Issue: 3-4 Pages: 223-234 Published: 2018

92. Golkar, Sare; Tavassoly, Mohammad Kazem
Coping with attenuation of quantum correlations of two qubit systems in dissipative environments: multi-photon transitions
EUROPEAN PHYSICAL JOURNAL D, 72 (10):10.1140/epjd/e2018-90212-x OCT 18 2018

91. Bahar, Eyal; Ding, Xiaoyue; Dahan, Asaf; Suchowski, Haim; Moses, Jeffrey
Adiabatic four-wave mixing frequency conversion
OPTICS EXPRESS, 26 (20):25582-25601; 10.1364/OE.26.025582 OCT 1 2018

90. Boscain, Ugo; Sigalotti, Mario
Ensemble control of parameter-dependent quantum systems by adiabatic evolution
2017 IEEE 56TH ANNUAL CONFERENCE ON DECISION AND CONTROL (CDC), 2017

89. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19; 10.1007/s10773-017-3535-z JAN 2018

88. Han, Yong-Chang
Steering population transfer between electronic states of the Na-2 molecule beyond the rotating wave approximation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (22):10.1088/1361-6455/aa90d9 NOV 28 2017
87. Yang, Jian; Wang, Shuo; Zhan, Wei-Shen; Jing, Da; Zhang, You-De
Controlling vibrational population distribution of the Na-2 molecule by ultrashort pulses in the three-state system
EUROPEAN PHYSICAL JOURNAL D, 71 (7):10.1140/epjd/e2017-80145-3 JUL 2017
86. Owens, Alec; Zak, Emil J.; Chubb, Katy L.; Yurchenko, Sergei N.; Tennyson, Jonathan; Yachmenev, Andrey
Simulating electric field interactions with polar molecules using spectroscopic databases
SCIENTIFIC REPORTS, 7 10.1038/srep45068 MAR 24 2017
85. Avanaqi, K. Nasiri; Telnov, Dmitry A.; Chu, Shih-I
Harmonic generation of Li atoms in one- and two-photon Rabi-flopping regimes
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.053410 NOV 10 2016
84. Miao, Qiang; Zheng, Yujun
Single-photon emission of two-level system via rapid adiabatic passage
SCIENTIFIC REPORTS, 6 10.1038/srep32827 SEP 7 2016
83. Lee, Han-gyeol; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Femtosecond Stark-Chirped Rapid Adiabatic Passage by Single Spectrally Shaped Pulse
IEEE 2015 CONFERENCE ON LASERS AND ELECTRO-OPTICS (CLEO), 2015
82. Alharbey, R.A.
Transient spectrum of sin²-pulsed-driven qubit
International Journal of Pure and Applied Mathematics 100(2), pp. 193-209 (2015)
81. Fushitani, M; Liu, CN; Matsuda, A; Endo, T; Toida, Y; Nagasono, M; Togashi, T; Yabashi, M; Ishikawa, T; Hikosaka, Y; Morishita, T; Hishikawa, A
Femtosecond two-photon Rabi oscillations in excited He driven by ultrashort intense laser fields
NATURE PHOTONICS, 10 (2):102-+; 10.1038/NPHOTON.2015.228 FEB 2016
80. Dong, Wenpu; Li, Yongqiang; Wang, Xiaowei; Yuan, Jianmin; Zhao, Zengxiu
Analysis of interference in attosecond transient absorption in adiabatic condition
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033412 SEP 14 2015
79. Lu, Zhenzhong; Sun, Yanling; Ma, Lin; Liu, Jifang
Bichromatic Laser-Induced Quadrupole-Dipole Collisional Energy Transfer in Ca-Sr
JOURNAL OF PHYSICAL CHEMISTRY A, 119 (10):1957-1963; 10.1021/acs.jpca.5b00722 MAR 12 2015
78. Shu, Xiaoqin; Deng, Chi; Kuang, Ye; Yang, Jianhui; Liu, Yiding
Population Transfer in Multilevel System via Modified Stimulated Raman adiabatic passage
Applied Mechanics and Materials, Applied Decisions in Area of Mechanical Engineering and Industrial Manufacturing, 577 112-115; 10.4028/www.scientific.net/AMM.577.112 2014 Edited by: Fan KC
3rd International Conference on Mechanical, Control, and Electronic Information (ICMCEI), JUN 27-29, 2014, Taipei, TAIWAN
77. Hassan, SS; Alharbey, RA; Al-Zaki, H
Transient spectrum of sin(2)-pulsed driven harmonic oscillator
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 23 (4):10.1142/S0218863514500520 DEC 2014
76. Yao Hong-Bin; Li Wen-Liang; Zhang Ji; Peng Min
Quantum control of K-2 molecule in an intense laser field: Selective population of dressed states
ACTA PHYSICA SINICA, 63 (17):10.7498/aps.63.178201 SEP 5 2014
75. Shi Xuan; Wei LianFu; Oh, Choo Hiap
Quantum computation with surface-state electrons by rapid population passages
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 57 (9):1718-1724; 10.1007/s11433-014-5547-5 SEP 2014
74. Liu, Ji-Cai; Zhang, Ye-Qi; Chen, Lei
Coherent control of nondegenerate two-photon absorption by femtosecond laser pulses
JOURNAL OF MODERN OPTICS, 61 (10):781-786; SI 10.1080/09500340.2013.821534 2014
73. Mukherjee, Nandini; Dong, Wenrui; Zare, Richard N.
Coherent superposition of M-states in a single rovibrational level of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 140 (7):10.1063/1.4865131 FEB 21 2014
72. Shi Xuan; Oh, C. H.; Wei Lian-Fu
Stark-Chirped Rapid Adiabatic Passage in Presence of Dissipation for Quantum Computation
COMMUNICATIONS IN THEORETICAL PHYSICS, 61 (2):235-240; FEB 2014
71. Sharaby, YA; Joshi, A; Hassan, SS
Coherent population transfer in V-type atomic system
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (4):10.1142/S0218863513500446 DEC 2013
70. Dong, Wenrui; Mukherjee, Nandini; Zare, Richard N.
Optical preparation of H-2 rovibrational levels with almost complete population transfer
JOURNAL OF CHEMICAL PHYSICS, 139 (7):10.1063/1.4818526 AUG 21 2013
69. Pascual-Winter, MF; Tongning, RC; Chaneliere, T; Le Gouet, JL
Securing coherence rephasing with a pair of adiabatic rapid passages
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/5/055024 MAY 29 2013
68. Wang, Tao; Yang, Tian-gang; Xiao, Chun-lei; Dai, Dong-xu; Yang, Xue-ming
Efficient Coherent Population Transfer of D-2 Molecules by Stark-induced Adiabatic Raman Passage
CHINESE JOURNAL OF CHEMICAL PHYSICS, 26 (1):8-12; 10.1063/1674-0068/26/01/8-12 FEB 27 2013
67. Wang, Tao; Yang, Tiangang; Xiao, Chunlei; Dai, Dongxu; Yang, Xueming
Highly Efficient Pumping of Vibrationally Excited HD Molecules via Stark-Induced Adiabatic Raman Passage
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 4 (3):368-371; 10.1021/jz302103u FEB 7 2013
66. Mukherjee, Nandini; Dong, Wenrui; Harrison, John A.; Zare, Richard N.
Communication: Transfer of more than half the population to a selected rovibrational state of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 138 (5):10.1063/1.4790402 FEB 7 2013
65. Xu, Qianqian ; Yao, Duanzheng ; Liu, Xiaona ; et al.
Adiabatic self-induced transparency in GaN/AlN inhomogeneously broadened quantum-dot ensemble
OPTICS AND LASER TECHNOLOGY Volume: 45 Pages: 768-774 DOI: 10.1016/j.optlastec.2012.04.038 Published: FEB 2013
64. Boscain, Ugo V.; Chittaro, Francesca; Mason, Paolo; Sigalotti, Mario
Adiabatic Control of the Schrodinger Equation via Conical Intersections of the Eigenvalues
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, 57 (8):1970-1983; SI 10.1109/TAC.2012.2195862 AUG 2012
63. Xu, QQ; Yao, DZ; Liu, XN; Zhou, Q; Xiong, GG
Solitary propagation effect of a well-defined chirped femtosecond laser pulse in a resonance-absorbing medium
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023853 AUG 29 2012
62. Yao Hong-Bin; Zheng Yu-Jun
Autler-Townes splitting in photoelectron spectra of K-2 molecule
CHINESE PHYSICS B, 21 (2):10.1088/1674-1056/21/2/023302 FEB 2012
61. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)
60. Mukherjee, Nandini; Zare, Richard N.
Can stimulated Raman pumping cause large population transfers in isolated molecules?
JOURNAL OF CHEMICAL PHYSICS, 135 (18):10.1063/1.3657832 NOV 14 2011
59. Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage for preparing polarized molecules
JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011
58. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
57. Yao, Hongbin; Zheng, Yujun

- Quantum control of a molecular system in an intense field via the selective population of dressed states
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (19): 8900-8907 2011
56. Yu, Dingshan; Chen, Yujie; Li, Baojun; Zhao, Fuli; Ding, Cairong; Chen, Xudong
Optical emission from disordered multi-branched ZnO nanorods formed by catalyst-free growth
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 103 (2): 329-334 MAY 2011
55. Johnson, J. Bruce; Johnson, Michael J.; Lyon, Kevin
Limitations and guidelines for measuring the spectral width of a single pulse of light with a Fabry-Perot interferometer
APPLIED OPTICS 50 (3): 347-355 JAN 20 2011
54. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010
53. Lazarou, Constantinos; Keller, Matthias; Garraway, Barry M.
Adiabatic passage methods in cooling trapped molecular ions
QUANTUM OPTICS 7727: Art. No. 772708 2010
52. Wang, M.-H., Zhu, G.-P., Xu, C.-X.
Investigation on fabrication and photoluminescence property of an individual ZnO hexagonal microneedle
Faguang Xuebao/Chinese Journal of Luminescence 31(1), pp. 105-108 (2010)
51. Nie, W; Huang, JS; Shi, X; Wei, LF
Quantum state engineering with flux-biased Josephson phase qubits by rapid adiabatic passages
PHYSICAL REVIEW A 82 (3): Art. No. 032319 SEP 21 2010
50. Lazarou, C; Keller, M; Garraway, BM
Molecular heat pump for rotational states
PHYSICAL REVIEW A 81 (1): Art. No. 013418 JAN 2010
49. Radonjic, M; Jelenkovic, BM
Stark-Chirped Rapid Adiabatic Passage in a Multilevel Atom
ACTA PHYSICA POLONICA A 116 (4): 476-478 OCT 2009
48. Schoenfeldt, Johann-Heinrich; Twamley, Jason; Rebic, Stojan
Optimized control of Stark-shift-chirped rapid adiabatic passage in a Lambda-type three-level system
PHYSICAL REVIEW A 80 (4): Art. No. 043401 OCT 2009
47. G. P. Zhu et al.,
Appl. Phys. Lett. 94, 051106 (2009)
Two-photon excited whispering-gallery mode ultraviolet laser from an individual ZnO microneedle
46. Radonjic, M; Jelenkovic, BM
Stark-chirped rapid adiabatic passage among degenerate-level manifolds
PHYSICAL REVIEW A 80 (4): Art. No. 043416 OCT 2009
45. Guerin, S; Jauslin, HR
Control of quantum dynamics by laser pulses: Adiabatic floquet theory
ADVANCES IN CHEMICAL PHYSICS, VOL 125: 147-267 2009
44. Ghosal, Subhas; Doyle, Richard J.; Koch, Christiane P.; Hutson, Jeremy M.
Stimulating the production of deeply bound RbCs molecules with laser pulses: the role of spin-orbit coupling in forming ultracold molecules
NEW JOURNAL OF PHYSICS 11: Art. No. 055011 MAY 14 2009
43. Zhu, GP; Xu, CX; Zhu, J; Lv, CG; Cui, YP
Two-photon excited whispering-gallery mode ultraviolet laser from an individual ZnO microneedle
APPLIED PHYSICS LETTERS 94 (5): Art. No. 051106 FEB 2 2009
42. Zhi-wei Dong, Zhang, C.-F., Liu, K.-J., (...), Deng, H., Qian, S.-X.
Frontiers of Physics in China 3, 181 (2008)
Multi-photon excitation in ZnO materials
41. Dong, Z.-W., Zhang, C.-F., Liu, K.-J., Yan, Y.-L., Qian, S.-X.
Multi-photon excitation in ZnO material by femtosecond pulses
2008 Proceedings of SPIE - The International Society for Optical Engineering 6839,68390H
40. Wei, LF; Johansson, JR; Cen, LX; Ashhab, S; Nori, F
Controllable coherent population transfers in superconducting qubits for quantum computing
PHYSICAL REVIEW LETTERS 100 (11): Art. No. 113601 MAR 21 2008
39. Choi, Hyeonho; Son, Won-Joon; Shin, Seokmin; Chang, Bo Y.; Sola, Ignacio R.
Selective photodissociation in diatomic molecules by dynamical Stark-shift control
JOURNAL OF CHEMICAL PHYSICS 128 (10): Art. No. 104315 MAR 14 2008
38. Shu, Chuan-Cun; Yuan, Kai-Jun; Han, Yong-Chang; Hu, Wen-Hui; Cong, Shu-Lin
Steering population transfer of a five-level polar NaK molecule by Stark shifts
CHEMICAL PHYSICS 344 (1-2): 121-127 FEB 22 2008
37. Shu, Xiaoqin; Kuang, Ye; Qin, Jiaqian; Li, Qifang
Population transfer in multilevel system through modified stimulated Raman adiabatic passage
CHINESE OPTICS LETTERS 5 (7): 373-375 JUL 10 2007
36. Qin Jia-Qian; Kuang Ye; Shu Xiao-Qin
Creation of coherent superposition states in multilevel systems
COMMUNICATIONS IN THEORETICAL PHYSICS 48 (5): 908-912 NOV 15 2007
35. Chang, BY; Sola, IR
Raman excitation of rovibrational coherent and incoherent states via adiabatic passage assisted by dynamic Stark effect
CHEMICAL PHYSICS 338 (2-3): 228-236 SEP 25 2007
34. Bateman J, Freearge T
Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry
PHYSICAL REVIEW A 76 (1): Art. No. 013416 JUL 2007
33. Shu, X., Kuang, Y., Qin, J., Li, Q.
Population transfer in multilevel system through modified stimulated Raman adiabatic passage
2007 Chinese Optics Letters 5 (7), pp. 373-375
32. Chang BY, Choi HH, Shin S, et al.
Quantum-state-selective two-photon excitation of multilevel systems assisted by the Stark shift
PHYSICAL REVIEW A 75 (6): Art. No. 063405 JUN 2007
31. Dong ZW, Zhang CF, You GJ, et al.
Multi-photon excitation UV emission by femtosecond pulses and nonlinearity in ZnO single crystal
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (21): Art. No. 216202 MAY 30 2007
30. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
29. Zou, S., Kondorskiy, A., Mil'nikov, G., Nakamura, H.
Laser control of chemical dynamics. I. Control of electronic transitions by quadratic chirping
Springer Series in Chemical Physics 85, pp. 95-117 (2007)
28. Nagaya K, Lin SH, Nakamura H
Control of nonadiabatic dissociation dynamics with the use of laser-induced wave packet interferences
JOURNAL OF CHEMICAL PHYSICS 125 (21): Art. No. 214311 DEC 7 2006
27. Two-photon induced ultraviolet semiconductor laser assisted by the Rabi flopping
Zhang, C., Dong, Z., You, G., Qian, S.
Conference on Lasers and Electro-Optics and 2006 Quantum Electronics and Laser Science Conference, CLEO/QELS 2006 4629058
26. Sola IR, Gonzalez-Vazquez J, Malinovsky VS
Optical control of a spin switch in the weak spin-orbit coupling limit
PHYSICAL REVIEW A 74 (4): Art. No. 043418 OCT 2006
25. Zhang CF, Dong ZW, You GJ, et al.
Femtosecond pulse excited two-photon photoluminescence and second harmonic generation in ZnO nanowires
APPLIED PHYSICS LETTERS 89 (4): Art. No. 042117 JUL 24 2006
24. Tamura H, Nanbu S, Ishida T, et al.
Laser control of reactions of photoswitching functional molecules

23. Emelin, M.Yu., Ryabikin, M.Yu., Sergeev, A.M.
Attosecond pulse production using excited atoms and molecules
AIP Conference Proceedings 827, pp. 418-428 2006

22. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006

21. Buffa R, Tognetti MV, Anscombe MP, et al.
Propagation dynamics of coherence and nonlinear mixing in an ionizing three-level medium
PHYSICAL REVIEW A 72 (5): Art. No. 053811 NOV 2005

20. Gundry S, Anscombe MP, Abdulla AM, et al.
Off-resonant preparation of a vibrational coherence for enhanced stimulated Raman scattering
PHYSICAL REVIEW A 72 (3): Art. No. 033824 SEP 2005

19. Fleischhauer M, Imamoglu A, Marangos JP
Electromagnetically induced transparency: Optics in coherent media
REVIEWS OF MODERN PHYSICS 77 (2): 633-673 APR 2005

18. Emelin MY, Ryabikin MY, Sergeev AM
Emission of an extremely short light pulse by an electron wavepacket detached from an excited atom
LASER PHYSICS 15 (6): 903-908 JUN 2005

17. Yang, W., Gong, S., Niu, Y., Xu, Z.
Coherent population transfer in a double- Λ system driven by few-cycle laser pulses
2005 Proceedings of SPIE - The International Society for Optical Engineering 5646, pp. 25-32

16. Mohring B, Bienert M, Haug F, et al.
Extracting atoms on demand with lasers
PHYSICAL REVIEW A 71 (5): Art. No. 053601 MAY 2005

15. Gilb S, Nestorov V, Leone SR, et al.
Kr ($n=5-10, s, d, g$) electronic wave packets: Electron time-of-flight resolution and the ac-Stark shift during wave-packet preparation
PHYSICAL REVIEW A 71 (4): Art. No. 042709 APR 2005

14. Popov AK, Myslivets SA, George TF
Nonlinear interference effects and all-optical switching in optically dense inhomogeneously broadened media
PHYSICAL REVIEW A 71 (4): Art. No. 043811 APR 2005

13. Emelin MY, Ryabikin MY, Sergeev AM, et al.
High-efficiency generation of attosecond pulses during atomic ionization from excited electronic
EUROPHYSICS LETTERS 69 (6): 913-919 MAR 2005

12. Zou SY, Kondorskiy A, Mil'nikov G, Nakamura, H
Laser control of electronic transitions of wave packet by using quadratically chirped pulses
JOURNAL OF CHEMICAL PHYSICS 122 (8): Art. No. 084112 FEB 22 2005

11. Trallero-Herrero C, Cardoza D, Weinacht TC, et al.
Coherent control of strong field multiphoton absorption in the presence of dynamic Stark shifts
PHYSICAL REVIEW A 71 (1): Art. No. 013423 JAN 2005

10. Niu YP, Gong SQ, Li RX, et al.
Creation of atomic coherent superposition states via the technique of stimulated Raman adiabatic passage using a Λ -type system with a manifold of levels
PHYSICAL REVIEW A 70 (2): Art. No. 023805 AUG 2004

9. Delagnes JC, Bouchene MA
Effect of a transient light shift on the propagation of an ultrashort pulse in a resonant atomic medium
PHYSICAL REVIEW A 69 (6): Art. No. 063813 JUN 2004

8. Legare F
Control of population transfer in degenerate systems by nonresonant Stark shifts
PHYSICAL REVIEW A 68 (6): Art. No. 063403 DEC 2003

7. Arkhipkin VG, Myslivets SA, Timofeev IV

Stark-chirped rapid adiabatic passage: Propagation of laser pulses and spacetime evolution of populations and of two-photon coherence
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97 (4): 711-721 2003

6. Popov AK, Kimberg VV, George TF
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
PHYSICAL REVIEW A 68 (3): Art. No. 033407 SEP 2003

5. Buffa R, Anscombe MP, Marangos JP
Evolution of maximal coherence and nonlinear mixing in an ionizing three-level medium
PHYSICAL REVIEW A 67 (3): Art. No. 033801 MAR 2003

4. Gong SQ, Feng XL, Xu ZZ
Generation of Fock state and quantum entanglement in a coupled ladder atom-cavity system
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 5 (1): 52-55 FEB 2003

3. Nagaya K, Teranishi Y, Nakamura H
Control of molecular processes by a sequence of linearly chirped pulses
JOURNAL OF CHEMICAL PHYSICS 117 (21): 9588-9604 DEC 1 2002

2. Korsunsky EA, Fleischhauer M
Resonant nonlinear optics in coherently prepared media: Full analytic solutions
PHYSICAL REVIEW A 66 (3): Art. No. 033808 SEP 2002

1. Dove T, Schmidt TW, Lopez-Martens RB, et al.
Optical control of electronic state populations via the dynamic Stark effect
CHEMICAL PHYSICS 267 (1-3): 115-129 JUN 1 2001

=====
38. Vitanov NV, Halfmann T, Shore BW, Bergmann K
Laser-induced population transfer by adiabatic passage techniques
ANNUAL REVIEW OF PHYSICAL CHEMISTRY 52: 763-809 2001

627. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

626. Aleksanyan, A. Yu
Effective Full Population Transfer in M-System Using Scanning Technique
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES
Volume: 56 Issue: 1 Pages: 6-12 Published: JAN 2021

625. Zhang, D. W.; Teng, J. H.; Mu, S. J.; Li, Hong
Preparing Greenberger-Horne-Zeilinger States by Lypunov Control
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS [early access icon] Early Access: APR 2021

624. Khan, Mubassir; Rahman, Amin Ur; Bacha, Bakht Amin; Wahid, Umer; Ullah, Arif
Gaussian Pulse Distortion in a Nonlinear Induced Kerr Atomic Medium
BRAZILIAN JOURNAL OF PHYSICS [early access icon] Early Access: MAY 2021

623. Song, Xue-Ke; Meng, Fei; Liu, Bao-Jie; Wang, Dong; Ye, Liu; Yung, Man-Hong
Robust stimulated Raman shortcut-to-adiabatic passage with invariant-based optimal control
OPTICS EXPRESS Volume: 29 Issue: 6 Pages: 7998-8014 Published: MAR 15 2021

622. Taras, Adam K.; Tuniz, Alessandro; Bajwa, Musawer A.; Ng, Vincent; Dawes, Judith M.; Poulton, Christopher G.; De Sterke, C. Martijn
Shortcuts to adiabaticity in waveguide couplers-theory and implementation
ADVANCES IN PHYSICS-X Volume: 6 Issue: 1 Article Number: 1894978
Published: JAN 1 2021

621. Li, Bing-Jie; Liu, Shuai; Wang, Yu; Kang, Yi-Hao; Shi, Zhi-Cheng; Xia, Yan
Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS [early access icon] Early Access: MAR 2021

620. Devolder, Adrien; Desouter-Lecomte, Michele; Atabek, Osman; Luc-Koenig, Eliane; Dulieu, Olivier
Laser control of ultracold molecule formation: The case of RbSr
PHYSICAL REVIEW A Volume: 103 Issue: 3 Article Number: 033301

Published: MAR 2 2021

619. Shirkhaghah, N.; Saadati-Niari, M.; Nedaee-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published:
MAR-APR 2021
618. Zhang, Hao; Qin, Guo-Qing; Song, Xue-Ke; Long, Gui-Lu
Color-detuning-dynamics-based quantum sensing with dressed states driving
OPTICS EXPRESS Volume: 29 Issue: 4 Pages: 5358-5366 Published: FEB 15
2021
617. Li, Danyu; Zheng, Wen; Chu, Ji; Yang, Xiaopei; Song, Shuqing; Han, Zhikun;
Dong, Yuqian; Wang, Zhimin; Yu, Xiangmin; Lan, Dong; Zhao, Jie; Li, Shaoyong;
Tan, Xinsheng; Yu, Yang
Coherent state transfer between superconducting qubits via stimulated Raman
adiabatic passage
APPLIED PHYSICS LETTERS Volume: 118 Issue: 10 Article Number: 104003
Published: MAR 8 2021
616. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaee-
Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic
passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR
2021
615. Wustelt, Philipp; Kuebel, Matthias; Paulus, Gerhard G.; Saylor, A. Max
Strong-field laser-induced fragmentation of small molecules from fast to slow
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 69 Book
Series: Advances In Atomic Molecular and Optical Physics Volume: 69 Pages:
67-162 Published: 2020
614. Dogra, Shruti; Vepsalainen, Antti; Paraoanu, G. S.
Majorana representation of adiabatic and superadiabatic processes in three-level
systems
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 4 Article Number: 043079
Published: OCT 15 2020
613. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui;
Zhu, Jie; Zhu, Xue-Feng
Acoustic topological adiabatic passage via a level crossing
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY Volume: 64 Issue: 4
Special Issue: SI Article Number: 244302 Published: APR 2021
612. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill,
Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033216
Published: AUG 7 2020
611. Khosravi, Soroush D.; Scipioni, Marco; Gibson, George N.
Toward an ultrafast double-pulse stretcher-compressor
JOURNAL OF MODERN OPTICS [early access icon] Early Access: DEC 2020
610. Bernardo, Bertulio de Lima
Time-rescaled quantum dynamics as a shortcut to adiabaticity
Physical Review Research 2, 013133 – Published 6 February 2020
609. Song, Yunheung; Lim, Jongseok; Ahn, Jaewook
Berry-phase gates for fast and robust control of atomic clock states
Physical Review Research 2, 023045 – Published 16 April 2020
608. Wan, Ting; Wang, Tengfei; Zhou, Wenhui; Chen, Changshui
Coupling modulation for efficient wavelength conversion with the Stark-chirped
rapid adiabatic passage
RESULTS IN PHYSICS Volume: 19 Article Number: 103387 Published: DEC
2020
607. Werther, Michael; Grossmann, Frank
Stabilization of adiabatic population transfer by strong coupling to a phonon bath
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063710
Published: DEC 11 2020
606. Feilhauer, J.; Schumer, A.; Doppler, J.; Mailybaev, A. A.; Bohm, J.; Kuhl, U.;
Moiseyev, N.; Rotter, S.
Encircling exceptional points as a non-Hermitian extension of rapid adiabatic
passage
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 040201
Published: OCT 7 2020
605. Li, Hong; Zhang, Si-Qi; Li, Mei-Xuan; Liu, Xiao-Han
Lewis-Riesenfeld Invariants in Two-level Quantum System Without the Rotating-
Wave Approximation
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 59 Issue: 11
Pages: 3613-3622 Published: NOV 2020
604. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Stimulated Raman adiabatic passage: Effects of system parameters on population
transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1
2020
603. Tang Kai; Hu Zhengfeng; Liu Chengpu; Chen Xi
Beam Splitting via Non-Hermitian Stimulated Raman Shortcut to Adiabatic
Passage
CHINESE JOURNAL OF LASERS-ZHONGGUO JIGUANG Volume: 47 Issue: 9
Article Number: 0912001 Published: SEP 2020
602. Chen, Ya-Zhou; Wang, Shuo
Selective excitation of vibrational states in three-state Na(2)molecule by a chirped
laser pulse
LASER PHYSICS Volume: 30 Issue: 11 Article Number: 115701 Published:
NOV 2020
601. Martikyan, V; Devra, A.; Guery-Odelin, D.; Glaser, S. J.; Sugny, D.
Robust control of an ensemble of springs: Application to ion cyclotron resonance
and two-level quantum systems
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053104
Published: NOV 4 2020
600. Sarreshtedari, Farrokh; Rashedi, Alireza; Ghashghaei, Fahime;(Sabooni,
Mahmood
Engineering of the Cesium Zeeman sublevel populations using sequences of laser
pulses and RF excitation
PHYSICA SCRIPTA Volume: 96 Issue: 1 Article Number: 015401 Published:
JAN 2021
599. Foroozandeh, Mohammadali
Spin dynamics during chirped pulses: applications to homonuclear decoupling
and broadband excitation
JOURNAL OF MAGNETIC RESONANCE Volume: 318 Article Number: 106768
Published: SEP 2020
598. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Yuan, Mingrui;
Zhang, Wentao; Han, Jiaguang
Quantum Engineering Enables Broadband and Robust Terahertz Surface Plasmon-
Polaritons Coupler
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 27
Issue: 2 Article Number: 8400107 Published: MAR-APR 2021
597. Duca, Alessandro; Joly, Romain; Turaev, Dmitry
Permuting quantum eigenmodes by a quasi-adiabatic motion of a potential wall
JOURNAL OF MATHEMATICAL PHYSICS Volume: 61 Issue: 10 Article Number:
101511 Published: OCT 1 2020
596. Perez-Obiol, Axel; Polo, Juan; Cheon, Taksu
Current production in ring condensates with a weak Current production in ring
condensates with a weak link
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063302
Published: DEC 3 2020
595. Ukhtary, M. Shoufie; Saito, Riichiro
Surface plasmons in graphene and carbon nanotubes
CARBON Volume: 167 Pages: 455-474 Published: OCT 15 2020
594. Marcel Binz, Lukas Bruder, Lipeng Chen, Maxim F. Gelin, Wolfgang Domcke,
and Frank Stienkemeier
Effects of high pulse intensity and chirp in two-dimensional electronic
spectroscopy of an atomic vapor
OPTICS EXPRESS Volume: 28 Issue: 18 Pages: 25806-25829 Published: AUG
31 2020
593. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui;
Zhu, Xue-Feng
Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled
Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043
Published: JUL 15 2020

592. Lavigne, Cyrille; Brumer, Paul
Pulsed two-photon coherent control of channelrhodopsin-2 photocurrent in live brain cells
JOURNAL OF CHEMICAL PHYSICS Volume: 153 Issue: 3 Article Number: 034303 Published: JUL 21 2020
591. van den Berg, Jana L.; Neumann, Kallie Ilene; Harrison, John A.; Weir, Hayley; Hohenstein, Edward G.; Martinez, Todd J.; Zare, Richard N.
Strong, Nonresonant Radiation Enhances Cis-Trans Photoisomerization of Stilbene in Solution
JOURNAL OF PHYSICAL CHEMISTRY A Volume: 124 Issue: 29 Pages: 5999-6008 Published: JUL 23 2020
590. Augier, Nicolas; Boscain, Ugo; Sigalotti, Mario
On the compatibility between the adiabatic and the rotating wave approximations in quantum control
2019 IEEE 58TH CONFERENCE ON DECISION AND CONTROL (CDC) Book Series: IEEE Conference on Decision and Control Pages: 2292-2297 Published: 2019
589. Tian, Liang; Sun, Li-Li; Zhu, Xiao-Yu; Song, Xue-Ke; Yan, Lei-Lei; Liang, Er-Jun; Su, Shi-Lei; Feng, Mang
Fast achievement of quantum state transfer and distributed quantum entanglement by dressed states
CHINESE PHYSICS B Volume: 29 Issue: 5 Article Number: 050306 Published: MAY 2020
588. Zhou, Ming-Ti; Liu, Jian-Long; Sun, Peng-Fei; An, Zi-Ye; Li, Jun; Bao, Xiao-Hui; Pan, Jian-Wei
Experimental creation of single Rydberg excitations via adiabatic passage
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 013706 Published: JUL 6 2020
587. Chen, Disheng; Zheludev, Nikolay; Gao, Wei-bo
Building Blocks for Quantum Network Based on Group-IV Split-Vacancy Centers in Diamond
ADVANCED QUANTUM TECHNOLOGIES Volume: 3 Issue: 2 Special Issue: SI Article Number: 1900069 Published: FEB 2020
586. Tang, Kai; Hu, Zhengfeng; Chen, Xi; Liu, Chengpu
Hermitian and non-Hermitian shortcuts to adiabaticity for fast creation of maximum coherence and beam splitting
JOURNAL OF THE EUROPEAN OPTICAL SOCIETY-RAPID PUBLICATIONS Volume: 16 Issue: 1 Article Number: 18 Published: JUL 11 2020
585. Shirkhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published: MAY-JUN 2020
584. Perreault, William E.; Zhou, Haowen; Mukherjee, Nandini; Zare, Richard N.
Harnessing the Power of Adiabatic Curve Crossing to Populate the Highly Vibrationally Excited H-2 ($v=7, j=0$) Level
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 16 Article Number: 163202 Published: APR 24 2020
583. Stefanatos, Dionisis; Paspalakis, Emmanuel
Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 11 Article Number: 115304 Published: MAR 20 2020
582. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
581. Gale, Evan P. G.; Mehdi, Zain; Oberg, Lachlan M.; Ratcliffe, Alexander K.; Haine, Simon A.; Hope, Joseph J.
Optimized fast gates for quantum computing with trapped ions
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 052328 Published: MAY 18 2020
580. Dou, Fu-Quan; Yan, Zhi-Ming; Liu, Xuan-Qing; Wang, Wen-Yuan; Shu, Chuan-Cun
Accelerating adiabatic light transfer and split in three-waveguide couplers via dressed state
OPTIK Volume: 210 Article Number: UNSP 164516 Published: MAY 2020
579. Xu-Sheng Xu, Hao Zhang, Xiang-Yu Kong, Min Wang, and Gui-Lu Long
Frequency-tuning-induced state transfer in optical microcavities
PHOTONICS RESEARCH Volume: 8 Issue: 4 Pages: 490-496 Published: APR 1 2020
578. Masuda, Shumpei; Tan, Kuan Yen; Nakahara, Mikio
Theoretical Study on Spin-Selective Coherent Electron Transfer in a Quantum Dot Array
UNIVERSE Volume: 6 Issue: 1 Article Number: 2 Published: JAN 2020
577. Ran, Du; Shan, Wu-Jiang; Shi, Zhi-Cheng; Yang, Zhen-Biao; Song, Jie; Xia, Yan
Pulse reverse engineering for controlling two-level quantum systems
PHYSICAL REVIEW A Volume: 101 Issue: 2 Article Number: 023822 Published: FEB 14 2020
576. Shirkhanghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
575. Martikyan, V; Guery-Odelin, D.; Sugny, D.
Comparison between optimal control and shortcut to adiabaticity protocols in a linear control system
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 013423 Published: JAN 15 2020
574. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430 Published: DEC 30 2019
573. Huang, Wei; Ang, Lay-Kee; Kyoseva, Elica
Shortcut to adiabatic light transfer in waveguide couplers with a sign flip in the phase mismatch
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 3 Article Number: 035104 Published: JAN 16 2020
572. Kuang, Sen; Dong, Daoyi; Petersen, Ian R.
Lyapunov Control of Quantum Systems Based on Energy-Level Connectivity Graphs
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY Volume: 27 Issue: 6 Pages: 2315-2329 Published: NOV 2019
571. Huang, Wei; Yin, Shan; Zhang, Wentao; Wang, Kaili; Zhang, Yuting; Han, Jianguang
Robust and broadband integrated terahertz coupler conducted with adiabatic following
NEW JOURNAL OF PHYSICS Volume: 21 Issue: 11 Article Number: 113004 Published: NOV 2019
570. Chiang, Ying-Chih; Engin, Selma; Bao, Peng; Otto, Frank; Kolorene, Premysl; Votavova, Petra; Miteva, Tsveta; Gao, Jiali; Sisourat, Nicolas
Molecular-bond breaking induced by interatomic decay processes
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 052701 Published: NOV 11 2019
569. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410 Published: NOV 18 2019
568. Reiter, DE; Kuhn, T; Axt, VM
Distinctive characteristics of carrier-phonon interactions in optically driven semiconductor quantum dots
ADVANCES IN PHYSICS-X, 4 (1):10.1080/23746149.2019.1655478 JAN 1 2019
567. Price, Phillip; Yelin, S. F.
Optimal population transfer in combined Feshbach resonances and stimulated-Raman-adiabatic-passage processes
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.033421 SEP 30 2019
566. Hernandez-Castillo, A. O.; Abeysekera, Chamara; Robicheaux, F.; Zwier, Timothy S.
Propagating molecular rotational coherences through single-frequency pulses in the strong field regime
JOURNAL OF CHEMICAL PHYSICS, 151 (8):10.1063/1.5099049 AUG 28 2019
565. Yang, Zhen; Tan, Xinsheng; Dong, Yuqian; Yang, Xiaopei; Song, Shuqing; Han, Zhikun; Chu, Ji; Li, Zhiyuan; Lan, Dong; Yu, Haifeng; Yu, Yang
Realization of arbitrary state-transfer via superadiabatic passages in a superconducting circuit

- APPLIED PHYSICS LETTERS, 115 (7):10.1063/1.5111060 AUG 12 2019
564. Ahmadiouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Investigation of robust population transfer using quadratically chirped laser interacting with a two-level system
PHYSICA SCRIPTA, 94 (10):10.1088/1402-4896/ab254d OCT 2019
563. Stefanatos, Dionisis; Paspalakis, Emmanuel
Resonant shortcuts for adiabatic rapid passage with only z-field control
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019
562. Leibscher, Monika; Giesen, Thomas F.; Koch, Christiane P.
Principles of enantio-selective excitation in three-wave mixing spectroscopy of chiral molecules
JOURNAL OF CHEMICAL PHYSICS, 151 (1):10.1063/1.5097406 JUL 7 2019
561. Xu, Kebiao; Xie, Tianyu; Shi, Fazhan; Wang, Zhen-Yu; Xu, Xiangkun; Wang, Pengfei; Wang, Ya; Plenio, Martin B.; Du, Jiangfeng
Breaking the quantum adiabatic speed limit by jumping along geodesics
SCIENCE ADVANCES, 5 (6):10.1126/sciadv.aax3800 JUN 2019
560. Perreault, William E.; Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage examined through the preparation of D-2 ($v=2, j=0$) and D-2 ($v=2, j=2, m=0$)
JOURNAL OF CHEMICAL PHYSICS, 150 (23):10.1063/1.5109261 JUN 21 2019
559. Porotti, Riccardo; Tamascelli, Dario; Restelli, Marcello; Prati, Enrico
Coherent transport of quantum states by deep reinforcement learning
COMMUNICATIONS PHYSICS, 2 10.1038/s42005-019-0169-x JUN 20 2019
558. Dey, Amit; Yarlagadda, Sudhakar
Oxides: An answer to the qubit problem?
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, 33 (14):10.1142/S0217979219300032 JUN 10 2019
557. Ahmadiouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Robust population transfer in a two-level system using finite chirping method
PHYSICA SCRIPTA, 94 (8):10.1088/1402-4896/ab1689 AUG 2019
556. De, Amrit
Fast two-quadrature adiabatic quantum gates for weakly nonlinear qubits: a tight-binding approach
QUANTUM INFORMATION PROCESSING, 18 (6):10.1007/s11128-019-2285-7 JUN 2019
555. Zilberberg, Oded; Romito, Alessandro
Sensing electrons during an adiabatic coherent transport passage
PHYSICAL REVIEW B, 99 (16):10.1103/PhysRevB.99.165422 APR 17 2019
554. Lu, Mei; Zhang, Chun-Ling; Zhang, Bin; Lin, Wen-Shuo
Shortcuts to adiabatic passage for the generation of maximally entangled states in a distributed atom-cavity system
LASER PHYSICS LETTERS, 16 (4):10.1088/1612-202X/ab09e6 APR 2019
553. Yan, Ying; Li, Yichao; Kinoshita, Adam; Walther, Andreas; Shi, Chunyan; Rippe, Lars; Moser, Joel; Kroll, Stefan; Chen, Xi
Inverse engineering of shortcut pulses for high fidelity initialization on qubits closely spaced in frequency
OPTICS EXPRESS, 27 (6):8267-8282; 10.1364/OE.27.008267 MAR 18 2019
552. Ng, Vincent; Tuniz, Alessandro; Dawes, Judith M.; de Sterke, C. Martijn
Insights from a systematic study of crosstalk in adiabatic couplers
OSA CONTINUUM, 2 (3):629-639; 10.1364/OSAC.2.000629 MAR 15 2019
551. Impens, Francois; Guery-Odelin, David
Fast quantum control in dissipative systems using dissipationless solutions
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-39731-z MAR 11 2019
550. Zhang, Hao; Song, Xue-Ke; Ai, Qing; Wang, Haibo; Yang, Guo-Jian; Deng, Fu-Guo
Fast and robust quantum control for multimode interactions using shortcuts to adiabaticity
OPTICS EXPRESS, 27 (5):7384-7392; 10.1364/OE.27.007384 MAR 4 2019
549. Shen, Ya-Xi; Peng, Yu-Gui; Zhao, De-Gang; Chen, Xin-Cheng; Zhu, Jie; Zhu, Xue-Feng
One-Way Localized Adiabatic Passage in an Acoustic System
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.094501 MAR 8 2019
548. Stefanatos, Dionisis; Paspalakis, Emmanuel
Efficient generation of the triplet Bell state between coupled spins using transitionless quantum driving and optimal control
PHYSICAL REVIEW A, 99 (2):10.1103/PhysRevA.99.022327 FEB 25 2019
547. Mostafavi, Fatemeh; Yuan, Luqi; Ramezani, Hamidreza
Eigenstates Transition without Undergoing an Adiabatic Process
PHYSICAL REVIEW LETTERS, 122 (5):10.1103/PhysRevLett.122.050404 FEB 8 2019
546. Peaudecerf, B; Andia, M; Brown, M; Haller, E; Kuhr, S
Microwave preparation of two-dimensional fermionic spin mixtures
NEW JOURNAL OF PHYSICS, 21 10.1088/1367-2630/aafb89 JAN 25 2019
545. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256; 10.1016/bs.aamop.2018.02.003 2018
544. Chaneliere, Thierry; Hetet, Gabriel; Sangouard, Nicolas
Quantum Optical Memory Protocols in Atomic Ensembles
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 77-150; 10.1016/bs.aamop.2018.02.002 2018
543. Benmachiche, Abderrahim; Bahloul, Derradj; Mahmoud, Gharib Subhi; Messikh, Azeddine
Rotation Gates with Controlled Adiabatic Evolutions in Open Systems
OPEN SYSTEMS & INFORMATION DYNAMICS, 25 (3):10.1142/S1230161218500130 SEP 2018
542. Hadas, Itai; Hareli, Liran; Bahabad, Alon
High-order harmonic generation with controllable temporal coherence generated from a coherently excited medium
PHYSICAL REVIEW A, 98 (5):10.1103/PhysRevA.98.053425 NOV 16 2018
541. Van Damme, L; Ansel, Q; Glaser, SJ; Sugny, D
Time-optimal selective pulses of two uncoupled spin-1/2 particles
PHYSICAL REVIEW A, 98 (4):10.1103/PhysRevA.98.043421 OCT 16 2018
540. Saalmann, Ulf; Giri, Sajal Kumar; Rost, Jan M.
Adiabatic Passage to the Continuum: Controlling Ionization with Chirped Laser Pulses
PHYSICAL REVIEW LETTERS, 121 (15):10.1103/PhysRevLett.121.153203 OCT 11 2018
539. Hiluf, Dawit
All optical programmable logic array (PLA)
Journal of Physics Conference Series, Applied Nanotechnology and Nanoscience International Conference (ANNIC 2017), 987 10.1088/1742-6596/987/1/012033 2018
538. Dimova, E; Stefflekova, V; Karatodorov, S; Kyoseva, E
Experimental demonstration of efficient and robust second harmonic generation using the adiabatic temperature gradient method
Journal of Physics Conference Series, 20th International Summer School on Vacuum, Electron and Ion Technologies, SEP 25-29, 2017, 992 10.1088/1742-6596/992/1/012007 2018
537. Petrosyan, David; Molmer, Klaus
Deterministic Free-Space Source of Single Photons Using Rydberg Atoms
PHYSICAL REVIEW LETTERS, 121 (12):10.1103/PhysRevLett.121.123605 SEP 20 2018
536. Ma, Ling-hui; Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Shortcuts to adiabatic for implementing controlled-not gate with superconducting quantum interference device qubits
QUANTUM INFORMATION PROCESSING, 17 (11):10.1007/s11128-018-2056-x NOV 2018
535. Sponselee, K; Freystatzky, L; Abeln, B; Diem, M; Hundt, B; Kochanek, A; Ponath, T; Santra, B; Mathey, L; Sengstock, K; Becker, C
Dynamics of ultracold quantum gases in the dissipative Fermi-Hubbard model
QUANTUM SCIENCE AND TECHNOLOGY, 4 (1):10.1088/2058-9565/aadccd JAN 2019
534. Skelt, AH; Godby, RW; D'Amico, I
Measuring adiabaticity in nonequilibrium quantum systems
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.012104 JUL 3 2018

533. Shirkhaghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
532. Tagliaferri, MLV; Bavdaz, PL; Huang, W; Dzurak, AS; Culcer, D; Veldhorst, M
Impact of valley phase and splitting on readout of silicon spin qubits
PHYSICAL REVIEW B, 97 (24):10.1103/PhysRevB.97.245412 JUN 14 2018
531. Li, Mengmeng; Tan, Xinsheng; Dai, Kunzhe; Zhao, Peng; Yu, Haifeng; Yu, Yang
Demonstration of superadiabatic population transfer in superconducting qubit
CHINESE PHYSICS B, 27 (6):10.1088/1674-1056/27/6/063202 JUN 2018
530. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
529. Kazemi, Seyedeh Hamideh; Mahmoudi, Mohammad
Coherent population transfer with Laguerre-Gaussian pulses
JOURNAL OF MODERN OPTICS, 65 (13):1515-1520;
10.1080/09500340.2018.1455910 2018
528. Attal, Yoann; Berger, Perrine; Morvan, Loic; Nouchi, Pascale; Dolfi, Daniel; Chaneliere, Thierry; Louchet-Chauvet, Anne
Rate equation reformulation including coherent excitation: application to periodic protocols based on spectral hole-burning
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (6):1260-1270; 10.1364/JOSAB.35.001260 JUN 1 2018
527. Waqas, Mohsin; Ayaz, M. Q.; Waseem, M.; Qamar, Sajid; Qamar, Shahid
Gain assisted coherent control of microwave pulse in a one dimensional array of artificial atoms
PHYSICA SCRIPTA, 93 (6):10.1088/1402-4896/aab9fe JUN 2018
526. Waqas, Mohsin; Ayaz, M. Q.; Waseem, M.; Qamar, Sajid; Qamar, Shahid
Gain assisted coherent control of microwave pulse in a one dimensional array of artificial atoms
PHYSICA SCRIPTA, 93 (6):10.1088/1402-4896/aab9fe JUN 2018
525. Vepsalainen, A; Danilin, S; Paroanu, GS
Optimal superadiabatic population transfer and gates by dynamical phase corrections
QUANTUM SCIENCE AND TECHNOLOGY, 3 (2):10.1088/2058-9565/aaa640 APR 2018
524. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Pulse design for multilevel systems by utilizing Lie transforms
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033407 MAR 19 2018
523. Lu, Mei; Chen, Qing-Qin
Shortcuts to adiabatic passage for the generation of a maximal Bell state and W state in an atom-cavity system
LASER PHYSICS LETTERS, 15 (5):10.1088/1612-202X/aaadef MAY 2018
522. Padan, Alon; Suchowski, Haim
A quantum retrograde canon: complete population inversion in $n(2)$ -state systems
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aab320 APR 13 2018
521. Paul, Koushik; Sarma, Amarendra K.
Fast and efficient wireless power transfer via transitionless quantum driving
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-22562-9 MAR 7 2018
520. Zhang, Wei; Liu, Xiaosong; Wu, Honglin; Song, Yunfei; Liu, Weilong; Yang, Yanqiang
Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (7):10.1088/1361-6455/aab1aa APR 14 2018
519. Niu, Dong-Hua; Wang, Shuo; Zhan, Wei-Shen; Tao, Hong-Cai; Wang, Si-Qi
Steering population transfer of the Na-2 molecule by an ultrashort pulse train
LASER PHYSICS, 28 (5):10.1088/1555-6611/aaac6c MAY 2018
518. Dutta, Shovan; Mueller, Erich J.
Coherent generation of photonic fractional quantum Hall states in a cavity and the search for anyonic quasiparticles
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033825 MAR 15 2018
517. Mathisen, Thomas; Larson, Jonas
Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018
516. Shao, Hua-Chieh; Starace, Anthony F.
Time-resolved electron ($e,2e$) momentum spectroscopy: Application to laser-driven electron population transfer in atoms
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.022702 FEB 5 2018
515. Oukraou, Hassan; Coda, Virginie; Rangelov, Andon A.; Montemezzani, Germano
Broadband photonic transport between waveguides by adiabatic elimination
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.023811 FEB 6 2018
514. Werdecker, Jorn; van Reijzen, Maarten E.; Chen, Bo-Jung; Beck, Rainer D.
Vibrational Energy Redistribution in a Gas-Surface Encounter: State-to-State Scattering of CH₄ from Ni(111)
PHYSICAL REVIEW LETTERS, 120 (5):10.1103/PhysRevLett.120.053402 JAN 31 2018
513. Masuda, Shumpei; Tan, Kuan Yen; Nakahara, Mikio
Spin-selective electron transfer in a quantum dot array
PHYSICAL REVIEW B, 97 (4):10.1103/PhysRevB.97.045418 JAN 17 2018
512. Epstein, Itai; Suchowski, Haim; Weisman, Dror; Remez, Roei; Arie, Ady
Observation of linear plasmonic breathers and adiabatic elimination in a plasmonic multi-level coupled system
OPTICS EXPRESS, 26 (2):1433-1442; 10.1364/OE.26.001433 JAN 22 2018
511. Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan; Zheng, Shi-Biao
Improving Shortcuts to Non-Hermitian Adiabaticity for Fast Population Transfer in Open Quantum Systems
ANNALEN DER PHYSIK, 530 (1):10.1002/andp.201700247 JAN 2018
510. Shao, Hua-Chieh; Starace, Anthony F.
Imaging Electronic Motions by Ultrafast Electron Diffraction
ULTRAFAST NONLINEAR IMAGING AND SPECTROSCOPY V, 10380
10.1117/12.2273560 2017
Edited by: Liu Z; Khoo IC; Psaltis D; Shi K, Proceedings of SPIE, AUG 06-07, 2017, San Diego, CA
509. Palacino-Gonzalez, Elisa; Gelin, Maxim F.; Domcke, Wolfgang
Theoretical aspects of femtosecond double-pump single-molecule spectroscopy. II. Strong-field regime
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 19 (48):32307-32319;
10.1039/c7cp04810f DEC 28 2017
508. Huang, Wei; Liang, Shi-Jun; Kyoseva, Elica; Ang, Lay Kee
Adiabatic control of surface plasmon-polaritons in a 3-layers graphene curved configuration
CARBON, 127 187-192; 10.1016/j.carbon.2017.10.087 FEB 2018
507. Feng, Zhi-Bo; Lu, Xiao-Jing; Li, M.; Yan, Run-Ying; Zhou, Yun-Qing
Speeding up adiabatic population transfer in a Josephson qutrit via counter-diabatic driving
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa8fea DEC 8 2017
506. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017
505. Wu, Jin-Lei; Ji, Xin; Zhang, Shou
Dressed-state scheme for a fast CNOT gate
QUANTUM INFORMATION PROCESSING, 16 (12):10.1007/s11128-017-1747-z DEC 2017
504. Aydinoglan, Gunes; Guven, Kaan
Asymmetric Rosen-Zener-like transition through a soliton-surface-plasmon photonic Josephson junction with spatially varying coupling
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053802 NOV 1 2017
503. Niu, Ying-Yu; Wang, Rong; Qiu, Ming-Hui; Xiu, Jun-Ling; Han, Yong-Chang
Effect of phase coherence on population transfer in three harmonic laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (21):10.1088/1361-6455/aa8d9d NOV 14 2017

502. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017
501. Han, Yong-Chang
Steering population transfer between electronic states of the Na-2 molecule beyond the rotating wave approximation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (22):10.1088/1361-6455/aa90d9 NOV 28 2017
500. Wu, Qi-Cheng; Huang, Bi-Hua; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Perfect quantum state engineering by the combination of the counterdiabatic driving and the reverse-engineering technique
ANNALS OF PHYSICS, 385 40-56; 10.1016/j.aop.2017.07.010 OCT 2017
499. Shao, Hua-Chieh; Starace, Anthony F.
Energy-resolved coherent diffraction from laser-driven electronic motion in atoms
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.042706 OCT 12 2017
498. Peng, Rui; Zheng, Yue; Liu, Si-Wen; Li, Xiao-Pan; Wu, Jin-Lei; Ji, Xin
Shortcuts to adiabaticity for rapidly generating two-atom qutrit entanglement
QUANTUM INFORMATION PROCESSING, 16 (7):10.1007/s11128-017-1623-x JUL 2017
497. Liu, Yen-Huang; Tseng, Shuo-Yen
Robust coherent superposition of states using quasiadiabatic inverse engineering
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (20):10.1088/1361-6455/aa8b4e OCT 28 2017
496. Wu, Jin-Lei; Ji, Xin; Zhang, Shou
Shortcut to adiabatic passage in a three-level system via a chosen path and its application in a complicated system
OPTICS EXPRESS, 25 (18):21084-21093; SEP 4 2017
495. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384; 10.1080/09500340.2017.1361478 2017
494. Ran, Du; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Speeding up adiabatic passage by adding Lyapunov control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033803 SEP 1 2017
493. Kang, Yi-Hao; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Fast and Robust Quantum Information Transfer in Annular and Radial Superconducting Networks
ANNALEN DER PHYSIK, 529 (9):10.1002/andp.201700154 SEP 2017
492. Kang, Yi-Hao; Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan
Invariant-Based Pulse Design for Three-Level Systems Without the Rotating-Wave Approximation
ANNALEN DER PHYSIK, 529 (9):10.1002/andp.201700004 SEP 2017
491. Jo, Hanlae; Lee, Han-gyeol; Guerin, Stephane; Ahn, Jaewook
Robust two-level system control by a detuned and chirped laser pulse
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033403 SEP 6 2017
490. Dutta, Shovan; Mueller, Erich J.
Protocol to engineer Fulde-Ferrell-Larkin-Ovchinnikov states in a cold Fermi gas
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023612 AUG 14 2017
489. Braun, Hendrike; Bayer, Tim; Pengel, Dominik; Wollenhaupt, Matthias; Baumert, Thomas
Simultaneous observation of transient and final state dynamics in ultrafast strong-field excitation via time-resolved photoelectron spectroscopy
JOURNAL OF MODERN OPTICS, 64 (10-11):1042-1053; 10.1080/09500340.2016.1278282 2017
488. Roller, Eva-Maria; Besteiro, Lucas V.; Pupp, Claudia; Khorashad, Larousse Khosravi; Govorov, Alexander O.; Liedl, Tim
Hotspot-mediated non-dissipative and ultrafast plasmon passage
NATURE PHYSICS, 13 (8):761-+; 10.1038/NPHYS4120 AUG 2017
487. Weinberg, Phillip; Bukov, Marin; D'Alessio, Luca; Polkovnikov, Anatoli; Vajna, Szabolcs; Kolodrubetz, Michael
Adiabatic perturbation theory and geometry of periodically-driven systems
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 688 1-35; 10.1016/j.physrep.2017.05.003 MAY 12 2017
486. Pan, Huilin; Mondal, Sohedul; Yang, Chung-Hsin; Liu, Kopin
Imaging characterization of the rapid adiabatic passage in a source-rotatable, crossed-beam scattering experiment
JOURNAL OF CHEMICAL PHYSICS, 147 (1):10.1063/1.4982615 JUL 7 2017
485. Zhou, Brian B.; Baksic, Alexandre; Ribeiro, Hugo; Yale, Christopher G.; Heremans, F. Joseph; Jerger, Paul C.; Auer, Adrian; Burkard, Guido; Clerk, Aashish A.; Awschalom, David D.
Accelerated quantum control using superadiabatic dynamics in a solid-state lambda system
NATURE PHYSICS, 13 (4):330-334; 10.1038/NPHYS3967 APR 2017
484. Peng, Rui; Zheng, Yue; Liu, Si-Wen; Li, Xiao-Pan; Wu, Jin-Lei; Ji, Xin
Shortcuts to adiabaticity for rapidly generating two-atom qutrit entanglement
QUANTUM INFORMATION PROCESSING, 16 (7):10.1007/s11128-017-1623-x JUL 2017
483. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited quantum states of molecular hydrogen
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (14):10.1088/1361-6455/aa786f JUL 28 2017
482. Longhi, Stefano
Nonadiabatic robust excitation transfer assisted by an imaginary gauge field
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.062122 JUN 27 2017
481. Falci, G; Di Stefano, PG; Ridolfo, A; D'Arrigo, A; Paroanu, GS; Paladino, E
Advances in quantum control of three-level superconducting circuit architectures
FORTSCHRITTE DER PHYSIK-PROGRESS OF PHYSICS, 65 (6-8):SI 10.1002/prop.201600077 JUN 2017
480. Van Damme, L; Ansel, Q; Glaser, SJ; Sugny, D
Robust optimal control of two-level quantum systems
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.063403 JUN 2 2017
479. Pan, Huilin; Mondal, Sohedul; Yang, Chung-Hsin; Liu, Kopin
Imaging characterization of the rapid adiabatic passage in a source-rotatable, crossed-beam scattering experiment
JOURNAL OF CHEMICAL PHYSICS Volume: 147 Issue: 1 Article Number: 013928 Published: JUL 7 2017
478. Braun, Hendrike; Bayer, Tim; Pengel, Dominik; Wollenhaupt, Matthias; Baumert, Thomas
Simultaneous observation of transient and final state dynamics in ultrafast strong-field excitation via time-resolved photoelectron spectroscopy
JOURNAL OF MODERN OPTICS, 64 (10-11):1042-1053; 10.1080/09500340.2016.1278282 2017
477. Yang, Xiao-Qin; Huang, Dian-Yang; Xue, Peng; Gong, Yong-Yong; Wu, Jin-Lei; Ji, Xin
Feasible superadiabatic-based shortcuts for the fast generation of 3D entanglement between two atoms
LASER PHYSICS LETTERS, 14 (5):10.1088/1612-202X/aa6886 MAY 2017
476. Avetisyan, AA; Djotyan, AP; Mouloupoulos, K
Nonlinear properties of gated graphene in a strong electromagnetic field
PHYSICS OF ATOMIC NUCLEI, 80 (2):307-314; 10.1134/S1063778817020041 MAR 2017
475. Wu, Jin-Lei; Ji, Xin; Zhang, Shou
Fast adiabatic quantum state transfer and entanglement generation between two atoms via dressed states
SCIENTIFIC REPORTS, 7 10.1038/srep46255 APR 11 2017
474. Silveri, MP; Tuorila, JA; Thuneberg, EV; Paroanu, GS
Quantum systems under frequency modulation
REPORTS ON PROGRESS IN PHYSICS, 80 (5):10.1088/1361-6633/aa5170 MAY 2017
473. Kang, Yi-Hao; Wu, Qi-Cheng; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Accelerating adiabatic quantum transfer for three-level Lambda-type structure systems via picture transformation
ANNALS OF PHYSICS, 379 102-111; 10.1016/j.aop.2017.02.015 APR 2017
472. Fu, Mingkai; Ma, Haitao; Cao, Jianwei; Bian, Wensheng
Laser cooling of CaBr molecules and production of ultracold Br atoms: A theoretical study including spin-orbit coupling

471. Chen, Jingwei; Wei, L. F.
Deterministic generations of photonic NOON states in cavities via shortcuts to adiabaticity
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.033838 MAR 28 2017
470. Zhou, Brian B.; Baksic, Alexandre; Ribeiro, Hugo; Yale, Christopher G.; Heremans, F. Joseph; Jerger, Paul C.; Auer, Adrian; Burkard, Guido; Clerk, Aashish A.; Awschalom, David D.
Accelerated quantum control using superadiabatic dynamics in a solid-state lambda system
NATURE PHYSICS, 13 (4):330-334; 10.1038/NPHYS3967 APR 2017
469. Shu, Chuan-Cun; Dong, Daoyi; Petersen, Ian R.; Henriksen, Niels E.
Complete elimination of nonlinear light-matter interactions with broadband ultrafast laser pulses
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.033809 MAR 10 2017
468. Gevorgyan, Mariam; Guerin, Stephane; Leroy, Claude; Ishkhanyan, Artur; Jauslin, Hans-Rudolf
Adiabatic tracking for photo- and magneto-association of Bose-Einstein condensates with Kerr nonlinearities
EUROPEAN PHYSICAL JOURNAL D, 70 (12):10.1140/epjd/e2016-70396-9 DEC 1 2016
467. Tanaka, Atushi; Cheon, Taksu
Adiabatic cycles in quantum systems with contact interactions
NANOSYSTEMS-PHYSICS CHEMISTRY MATHEMATICS, 8 (1):121-126; 10.17586/2220-8054-2017-8-1-121-126 FEB 2017
466. Ribeiro, Hugo; Baksic, Alexandre; Clerk, Aashish A.
Systematic Magnus-Based Approach for Suppressing Leakage and Nonadiabatic Errors in Quantum Dynamics
PHYSICAL REVIEW X, 7 (1):10.1103/PhysRevX.7.011021 FEB 22 2017
465. Yang, Yu-Feng; Chen, Ye-Hong; Wu, Qi-Cheng; Kang, Yi-Hao; Huang, Bi-Hua; Xia, Yan
Rapid generation of a three-dimensional entangled state for two atoms trapped in a cavity via shortcuts to adiabatic passage
QUANTUM INFORMATION PROCESSING, 16 (1):10.1007/s11128-016-1453-2 JAN 2017
464. Pengel, D; Kerbstadt, S; Johannmeyer, D; Englert, L; Bayer, T; Wollenhaupt, M
Electron Vortices in Femtosecond Multiphoton Ionization
PHYSICAL REVIEW LETTERS, 118 (5):10.1103/PhysRevLett.118.053003 FEB 2 2017
463. Milner, Valery; Hepburn, John W.
LASER CONTROL OF ULTRAFAST MOLECULAR ROTATION
Edited by: Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 395-412; 2016
462. Masuda, Shumpei; Rice, Stuart A.
CONTROLLING QUANTUM DYNAMICS WITH ASSISTED ADIABATIC PROCESSES
Edited by: Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 51-135; 2016
461. Bayer, Tim; Wollenhaupt, Matthias; Braun, Hendrike; Baumert, Thomas
ULTRAFAST AND EFFICIENT CONTROL OF COHERENT ELECTRON DYNAMICS VIA SPODS
Edited by: Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 235-282; 2016
460. Svidzinsky, Anatoly A.; Eleuch, Hichem; Scully, Marlan O.
Rabi oscillations produced by adiabatic pulse due to initial atomic coherence
OPTICS LETTERS, 42 (1):65-68; 10.1364/OL.42.000065 JAN 1 2017
459. Kang, Yi-Hao; Huang, Bi-Hua; Lu, Pei-Min; Xia, Yan
Reverse engineering of a Hamiltonian for a three-level system via the Rodrigues' rotation formula
LASER PHYSICS LETTERS, 14 (2):10.1088/1612-202X/aa512d FEB 2017
458. Vepsalainen, Antti; Danilin, Sergey; Paladino, Elisabetta; Falci, Giuseppe; Paroanu, Gheorghe Sorin
Quantum Control in Qutrit Systems Using Hybrid Rabi-STIRAP Pulses
PHOTONICS, 3 (4):10.3390/photonics3040062 DEC 2016
457. Rancic, Marko J.; Stepanenko, Dimitrije
Coherent manipulation of single electron spins with Landau-Zener sweeps
PHYSICAL REVIEW B, 94 (24):10.1103/PhysRevB.94.241301 DEC 12 2016
456. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016
455. Benito, Monica; Niklas, Michael; Kohler, Sigmund
Full-counting statistics of time-dependent conductors
PHYSICAL REVIEW B, 94 (19):10.1103/PhysRevB.94.195433 NOV 21 2016
454. Zai, Jing-Bo; Zhan, Wei-Shen; Wang, Shuo; Dang, Hai-Ping; Han, Xiao
Population transfer of a NaH molecule via stimulated Raman adiabatic passage using dressed states
LASER PHYSICS, 26 (9):10.1088/1054-660X/26/9/096002 SEP 2016
453. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Fast preparation of W states with superconducting quantum interference devices by using dressed states
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052311 NOV 9 2016
452. Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Fast generation of W states of superconducting qubits with multiple Schrodinger dynamics
SCIENTIFIC REPORTS, 6 10.1038/srep36737 NOV 9 2016
451. Paul, Koushik; Sarma, Amarendra K.
High-fidelity entangled Bell states via shortcuts to adiabaticity
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052303 NOV 2 2016
450. Nedae-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
449. Leclerc, Arnaud; Viennot, David; Jolicard, Georges; Lefebvre, Roland; Atabek, Osman
Controlling vibrational cooling with zero-width resonances: An adiabatic Floquet approach
PHYSICAL REVIEW A, 94 (4):10.1103/PhysRevA.94.043409 OCT 10 2016
448. Niu, Ying-Yu; Wang, Rong; Qiu, Ming-Hui; Xiu, Jun-Ling
Coherent phase control of population transfer through ladder system in two laser pulses with omega and n omega
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY, 15 (6):10.1142/S021963361650053X SEP 2016
447. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016
446. Shao, Hua-Chieh; Starace, Anthony F.
Imaging population transfer in atoms with ultrafast electron pulses
PHYSICAL REVIEW A, 94 (3):10.1103/PhysRevA.94.030702 SEP 22 2016
445. Hernandez-Castillo, A. O.; Abeysekera, Chamara; Hays, Brian M.; Zwier, Timothy S.
Broadband multi-resonant strong field coherence breaking as a tool for single isomer microwave spectroscopy
JOURNAL OF CHEMICAL PHYSICS, 145 (11):10.1063/1.4962505 SEP 21 2016
444. Wang, Zhe; Xia, Yan; Chen, Ye-Hong; Song, Jie
Fast controlled preparation of two-atom maximally entangled state and N-atom W state in the direct coupled cavity systems via shortcuts to adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 70 (8):10.1140/epjd/e2016-60638-3 AUG 30 2016
443. Huang, Xiao-Bin; Chen, Ye-Hong; Wang, Zhe
Shortcuts to adiabatic passage for fast preparation of multipartite entanglement among atomic ensembles
EUROPEAN PHYSICAL JOURNAL D, 70 (8):10.1140/epjd/e2016-70275-5 AUG 30 2016
442. Du, Yan-Xiong; Liang, Zhen-Tao; Li, Yi-Chao; Yue, Xian-Xian; Lv, Qing-Xian; Huang, Wei; Chen, Xi; Yan, Hui; Zhu, Shi-Liang
Experimental realization of stimulated Raman shortcut-to-adiabatic passage with cold atoms
NATURE COMMUNICATIONS, 7 10.1038/ncomms12479 AUG 2016
441. Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan

- Transitionless-based shortcuts for the fast and robust generation of W states
OPTICS COMMUNICATIONS, 380 140-147; 10.1016/j.optcom.2016.05.068 DEC 1 2016
440. Chen, Xi; Ban, Yue; Hegerfeldt, Gerhard C.
Time-optimal quantum control of nonlinear two-level systems
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.023624 AUG 19 2016
439. Song, Yunheung; Lee, Han-gyeol; Jo, Hanlae; Ahn, Jaewook
Selective excitation in a three-state system using a hybrid adiabatic-nonadiabatic interaction
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.023412 AUG 18 2016
438. Ivanov, Andrei; Rozhdestvensky, Yuriy; Perlin, Evgeniy
Vibronic model of laser cooling with stimulated Raman adiabatic passage pumping for Yb³⁺-ion-doped crystals
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (8):1564-1573; 10.1364/JOSAB.33.001564 AUG 1 2016
437. Song, Kun-Huang; Chen, Ming-Feng
Shortcuts to adiabatic passage for generation of W states of distant atoms
QUANTUM INFORMATION PROCESSING, 15 (8):3169-3188; 10.1007/s11128-016-1338-4 AUG 2016
436. Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Xia, Yan; Song, Jie
Reverse engineering of a Hamiltonian by designing the evolution operators
SCIENTIFIC REPORTS, 6 10.1038/srep30151 JUL 22 2016
435. Wollenhaupt, Matthias; Bayer, Tim; Baumert, Thomas
Control of Ultrafast Electron Dynamics with Shaped Femtosecond Laser Pulses: From Atoms to Solids
Edited by: Kitzler M; Grafe S
ULTRAFast DYNAMICS DRIVEN BY INTENSE LIGHT PULSES: FROM ATOMS TO SOLIDS, FROM LASERS TO INTENSE X-RAYS, 86 63-122; 10.1007/978-3-319-20173-3_4 2016
434. Fu, Mingkai; Ma, Haitao; Cao, Jianwei; Bian, Wensheng
Extensive theoretical study on electronically excited states of calcium monochloride: Molecular laser cooling and production of ultracold chlorine atoms
JOURNAL OF CHEMICAL PHYSICS, 144 (18):10.1063/1.4948631 MAY 14 2016
433. Baksic, Alexandre; Ribeiro, Hugo; Clerk, Aashish A.
Speeding up Adiabatic Quantum State Transfer by Using Dressed States
PHYSICAL REVIEW LETTERS, 116 (23):10.1103/PhysRevLett.116.230503 JUN 9 2016
432. Song, Xue-Ke; Ai, Qing; Qiu, Jing; Deng, Fu-Guo
Physically feasible three-level transitionless quantum driving with multiple Schrodinger dynamics
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052324 MAY 19 2016
431. Sampedro, Pablo; Chang, Bo Y.; Sola, Ignacio R.
Protecting and accelerating adiabatic passage with time-delayed pulse sequences
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 18 (19):13443-13448; 10.1039/c6cp01680d MAY 21 2016
430. Song, Yang; Zhao, Shuang; Guo, Fu-Ming; Yang, Yu-Jun; Li, Su-Yu
Electron excitation from ground state to first excited state: Bohmian mechanics method
CHINESE PHYSICS B, 25 (3):10.1088/1674-1056/25/3/033204 MAR 2016
429. Varga-Umbrich, K; Bakos, JS; Djotyan, GP; Ignacz, PN; Raczkevi, B; Sorlei, Z; Szigeti, J; Kedves, MA
Stabilization and time resolved measurement of the frequency evolution of a modulated diode laser for chirped pulse generation
LASER PHYSICS, 26 (5):10.1088/1054-660X/26/5/055006 MAY 2016
428. Tanaka, Atushi; Cheon, Taksu
Complete population inversion of Bose particles by an adiabatic cycle
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/4/045023 APR 27 2016
427. Jolicard, Georges; Leclerc, Arnaud; Viennot, David; Killingbeck, John P.
Global integration of the Schrodinger equation within the wave operator formalism: the role of the effective Hamiltonian in multidimensional active spaces
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 49 (19):10.1088/1751-8113/49/19/195305 MAY 13 2016
426. Lin, Jing-bo; Liang, Yan; Song, Chong; Ji, Xin; Zhang, Shou
Generation of 3D entanglement between two spatially separated atoms via shortcuts to adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (4):519-524; 10.1364/JOSAB.33.000519 APR 1 2016
425. Polo, J; Benseny, A; Busch, T; Ahufinger, V; Mompert, J
Transport of ultracold atoms between concentric traps via spatial adiabatic passage
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/1/015010 JAN 14 2016
424. Jiang, Tao; Li, Changbiao; Ali, Imran; Wang, Ruimin; Li, Zepei; Zhang, Yanpeng
Dressing Role in Fourth-Order Fluorescence and Spontaneous Parametric Four-Wave Mixing
IEEE JOURNAL OF QUANTUM ELECTRONICS, 52 (4):10.1109/JQE.2016.2528681 APR 2016
423. Suchowski, Haim; Bruner, Barry D.; Israel, Yonatan; Ganany-Padowicz, Ayelet; Arie, Ady; Silberberg, Yaron
Broadband photon pair generation at 3 omega/2
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (2):10.1007/s00340-015-6304-9 FEB 2016
422. Chang, Bo Y.; Sola, Ignacio R.; Shin, Seokmin
Molecular events in the light of strong fields: A light-induced potential scenario
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, 116 (8):608-621; SI 10.1002/qua.25066 APR 15 2016
421. Mrejen, Michael; Suchowski, Haim; Hatakeyama, Taiki; Wu, Chihhui; Feng, Liang; O'Brien, Kevin; Wang, Yuan; Zhang, Xiang
Coupling Control Based on Adiabatic Elimination in Densely Integrated Nano-Photonics
IEEE 2015 CONFERENCE ON LASERS AND ELECTRO-OPTICS (CLEO), 2015
420. Lee, Han-gyeol; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Femtosecond Stark-Chirped Rapid Adiabatic Passage by Single Spectrally Shaped Pulse
IEEE 2015 CONFERENCE ON LASERS AND ELECTRO-OPTICS (CLEO), 2015
419. Kumar, KS; Vepsalainen, A; Danilin, S; Paroanu, GS
Stimulated Raman adiabatic passage in a three-level superconducting circuit
NATURE COMMUNICATIONS, 7 10.1038/ncomms10628 FEB 2016
418. Lee, Han-gyeol; Song, Yunheung; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Quantum dynamics of a two-state system induced by a chirped zero-area pulse
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023423 FEB 23 2016
417. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense, inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016
416. Tikman, Y; Yavuz, I; Ciappina, MF; Chacon, A; Altun, Z; Lewenstein, M
High-order-harmonic generation from Rydberg atoms driven by plasmon-enhanced laser fields
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023410 FEB 10 2016
415. Rousseaux, B; Dzsotjan, D; des Francs, GC; Jauslin, HR; Couteau, C; Guerin, S
Adiabatic passage mediated by plasmons: A route towards a decoherence-free quantum plasmonic platform
PHYSICAL REVIEW B, 93 (4):10.1103/PhysRevB.93.045422 JAN 22 2016
414. Prentner, Robert; Quack, Martin; Stohner, Juergen; Willeke, Martin
Wavepacket Dynamics of the Axially Chiral Molecule Cl-O-O-Cl under Coherent Radiative Excitation and Including Electroweak Parity Violation
JOURNAL OF PHYSICAL CHEMISTRY A, 119 (51):12805-12822; 10.1021/acs.jpca.5b08958 DEC 24 2015
413. Yang Rong-Can; Ye Li-Xiang; Lin Xiu; Chen Xiang
Generation of Three-Qutrit Singlet States with Two-Level Trapped Ions
COMMUNICATIONS IN THEORETICAL PHYSICS, 64 (4):391-394; OCT 1 2015
412. Glaser, Steffen J.; Boscain, Ugo; Calarco, Tommaso; Koch, Christiane P.; Koeckenberger, Walter; Kosloff, Ronnie; Kuprov, Ilya; Luy, Burkhard; Schirmer, Sophie; Schulte-Herbrueggen, Thomas; Sugny, Dominique; Wilhelm, Frank K.
Training Schrodinger's cat: quantum optimal control Strategic report on current status, visions and goals for research in Europe
EUROPEAN PHYSICAL JOURNAL D, 69 (12):10.1140/epjd/e2015-60464-1 DEC 17 2015
411. Amnat-Talab, Mahdi; Saadati-Niari, Maghsoud

- Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
410. Huang, Xiao-Bin; Zhong, Zhi-Rong; Chen, Ye-Hong
Generation of multi-atom entangled states in coupled cavities via transitionless quantum driving
QUANTUM INFORMATION PROCESSING, 14 (12):4475-4492; 10.1007/s11128-015-1138-2 DEC 2015
409. Aslanyan, AL; Aslanyan, LS; Chilingaryan, YS
On the Jones matrix method in a twisted anisotropic medium
OPTICS AND SPECTROSCOPY, 119 (5):869-874; 10.1134/S0030400X15100069 NOV 2015
408. Mrejen, Michael; Suchowski, Haim; Hatakeyama, Taiki; Wang, Yuan; Zhang, Xiang
Experimental Realization of Two Decoupled Directional Couplers in a Subwavelength Packing by Adiabatic Elimination
NANO LETTERS, 15 (11):7383-7387; 10.1021/acs.nanolett.5b02790 NOV 2015
407. Dridi, G; Lapert, M; Salomon, J; Glaser, SJ; Sugny, D
Discrete-valued-pulse optimal control algorithms: Application to spin systems
PHYSICAL REVIEW A, 92 (4):10.1103/PhysRevA.92.043417 OCT 22 2015
406. Yang, Xihua; Xiao, Min
Electromagnetically Induced Entanglement
SCIENTIFIC REPORTS, 5 10.1038/srep13609 AUG 28 2015
405. Masuda, Shumpei; Rice, Stuart A.
Rotation of the Orientation of the Wave Function Distribution of a Charged Particle and its Utilization
JOURNAL OF PHYSICAL CHEMISTRY B, 119 (34):11079-11088; 10.1021/acs.jpcc.5b02681 AUG 27 2015
404. Chang, Bo Y; Shin, Seokmin; Sola, Ignacio R.
"Stirred, Not Shaken": Vibrational Coherence Can Speed Up Electronic Absorption
JOURNAL OF PHYSICAL CHEMISTRY A, 119 (34):9091-9097; 10.1021/acs.jpca.5b05994 AUG 27 2015
403. Lane, Ian C.
Production of ultracold hydrogen and deuterium via Doppler-cooled Feshbach molecules
PHYSICAL REVIEW A, 92 (2):10.1103/PhysRevA.92.022511 AUG 24 2015
402. Zhang Chun-Ling; Chen Mei-Feng
Quantum state transfer between atomic ensembles trapped in separate cavities via adiabatic passage
CHINESE PHYSICS B, 24 (7):10.1088/1674-1056/24/7/070310 JUL 2015
401. Folpini, Giulia; Morrill, Drew; Somma, Carmine; Reimann, Klaus; Woerner, Michael; Elsaesser, Thomas; Biermann, Klaus
Nonresonant coherent control: Intersubband excitations manipulated by a nonresonant terahertz pulse
PHYSICAL REVIEW B, 92 (8):10.1103/PhysRevB.92.085306 AUG 17 2015
400. Ndong, Mamadou; Djotyan, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI 10.1088/0953-4075/48/17/174007 SEP 14 2015
399. Di Stefano, PG; Paladino, E; D'Arrigo, A; Spagnolo, B; Falci, G
DESIGN OF A LAMBDA CONFIGURATION IN ARTIFICIAL COHERENT NANOSTRUCTURES
ROMANIAN JOURNAL OF PHYSICS, 60 (5-6):676-685; 2015
398. Capron, Nathalie; Casier, Bastien; Sisourat, Nicolas; Piancastelli, Maria Novella; Simon, Marc; Carniato, Stephane
Probing keto-enol tautomerism using photoelectron spectroscopy
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 17 (30):19991-19996; 10.1039/c5cp02023a 2015
397. Masuda, Shumpei; Rice, Stuart A.
A model study of assisted adiabatic transfer of population in the presence of collisional dephasing
JOURNAL OF CHEMICAL PHYSICS, 142 (24):10.1063/1.4922779 JUN 28 2015
396. Chen, Li; Ueta, Hirokazu; Chadwick, Helen; Beck, Rainer D.
The Negligible Role of C-H Stretch Excitation in the Physisorption of CH₄ on Pt(111)
JOURNAL OF PHYSICAL CHEMISTRY C, 119 (26):14499-14505; SI 10.1021/jp5064897 JUL 2 2015
395. Bader, Philipp; Blanes, Sergio; Seydaoglu, Muaz
THE SCALING, SPLITTING, AND SQUARING METHOD FOR THE EXPONENTIAL OF PERTURBED MATRICES
SIAM JOURNAL ON MATRIX ANALYSIS AND APPLICATIONS, 36 (2):594-614; 10.1137/14098003X 2015
394. Masuda, Shumpei; Rice, Stuart A.
Selective Vibrational Population Transfer using Combined Stimulated Raman Adiabatic Passage and Counter-Diabatic Fields
JOURNAL OF PHYSICAL CHEMISTRY C, 119 (26):14513-14523; SI 10.1021/jp507923s JUL 2 2015
393. Mrejen, Michael; Suchowski, Haim; Hatakeyama, Taiki; Wu, Chihhui; Feng, Liang; O'Brien, Kevin; Wang, Yuan; Zhang, Xiang
Adiabatic elimination-based coupling control in densely packed subwavelength waveguides
NATURE COMMUNICATIONS, 6 10.1038/ncomms8565 JUN 2015
392. Kuznetsova, Elena
Chirped pulse excitation of two-atom Rydberg states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (13):10.1088/0953-4075/48/13/135501 JUL 14 2015
391. Wang, Bin-Bin; Han, Yong-Chang; Pang, Yu-Hui; Cong, Shu-Lin; Niu, Ying-Yu
Isotope effects on the formation of the lowest rovibrational level of NaH molecule via pump-dump photoassociation
THEORETICAL CHEMISTRY ACCOUNTS, 134 (7):10.1007/s00214-015-1680-0 JUN 11 2015
390. Di Stefano, PG; Paladino, E; D'Arrigo, A; Falci, G
Population transfer in a Lambda system induced by detunings
PHYSICAL REVIEW B, 91 (22):10.1103/PhysRevB.91.224506 JUN 10 2015
389. Lehto, J. M. S.; Suominen, K-A
Geometry of adiabatic Hamiltonians for two-level quantum systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 48 Issue: 23 Article Number: 235301 Published: JUN 10 2015
388. Kim, Hyosub; Song, Yungheung; Lee, Han-gyeol; Ahn, Jaewook
Rabi oscillations of Morris-Shore-transformed N-state systems by elliptically polarized ultrafast laser pulses
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053421 MAY 26 2015
387. Dupont-Nivet, M; Casuilis, M; Laudat, T; Westbrook, Cl; Schwartz, S
Microwave-stimulated Raman adiabatic passage in a Bose-Einstein condensate on an atom chip
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053420 MAY 26 2015
386. Sola, Ignacio R.; Gonzalez-Vazquez, Jesus; de Nalda, Rebeca; Banares, Luis
Strong field laser control of photochemistry
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 17 (20):13183-13200; 10.1039/c5cp00627a 2015
385. Leclerc, Arnaud; Jolicard, Georges
Global integration of the Schrodinger equation: a short iterative scheme within the wave operator formalism using discrete Fourier transforms
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (22):10.1088/1751-8113/48/22/225205 JUN 5 2015
384. Chang, Bo Y; Shin, Seokmin; Sola, Ignacio R.
Ultrafast Population Inversion without the Strong Field Catch: The Parallel Transfer
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 6 (9):1724-1728; 10.1021/acs.jpcllett.5b00651 MAY 7 2015
383. Paul, Koushik; Sarma, Amarendra K.
Shortcut to adiabatic passage in a waveguide coupler with a complex-hyperbolic-secant scheme
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053406 MAY 11 2015
382. Chruscinski, Dariusz; Messina, Antonino; Militello, Benedetto; Napoli, Anna
Interaction-free evolution in the presence of time-dependent Hamiltonians
PHYSICAL REVIEW A, 91 (4):10.1103/PhysRevA.91.042123 APR 20 2015
381. Carini, JL; Kallush, S; Kosloff, R; Gould, PL
Enhancement of ultracold molecule formation by local control in the nanosecond regime

380. Masuda, Shumpei; Rice, Stuart A.

Fast-Forward Assisted STIRAP

JOURNAL OF PHYSICAL CHEMISTRY A, 119 (14):3479-3487;
10.1021/acs.jpca.5b00525 APR 9 2015

379. Xia, Keyu; Twamley, Jason

Solid-state optical interconnect between distant superconducting quantum chips
PHYSICAL REVIEW A, 91 (4):10.1103/PhysRevA.91.042307 APR 8 2015

378. Miyabe, S; Bucksbaum, P

Transient Impulsive Electronic Raman Redistribution

PHYSICAL REVIEW LETTERS, 114 (14):10.1103/PhysRevLett.114.143005 APR 10 2015

377. Chen, Jingwei; Wei, L. F.

Implementation speed of deterministic population passages compared to that of Rabi pulses

PHYSICAL REVIEW A, 91 (2):10.1103/PhysRevA.91.023405 FEB 5 2015

376. Liang, Yan; Su, Shi-Lei; Wu, Qi-Cheng; Ji, Xin; Zhang, Shou

Adiabatic passage for three-dimensional entanglement generation through quantum Zeno dynamics

OPTICS EXPRESS, 23 (4):5064-5077; 10.1364/OE.23.005064 FEB 23 2015

375. Feng, Zhi-Bo

Robust quantum state transfer between a Cooper-pair box and diamond nitrogen-vacancy centers

PHYSICAL REVIEW A, 91 (3):10.1103/PhysRevA.91.032307 MAR 13 2015

374. Chen, Ye-Hong; Xia, Yan; Chen, Qing-Qin; Song, Jie

Fast and noise-resistant implementation of quantum phase gates and creation of quantum entangled states

PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.012325 JAN 20 2015

373. Novelli, Anna; Belzig, Wolfgang; Nitzan, Abraham

Landau-Zener evolution under weak measurement: manifestation of the Zeno effect under diabatic and adiabatic measurement protocols

NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/1/013001 JAN 9 2015

372. Xue, Xiaobo; Pan, Duo; Zhang, Xiaogang; Zhuang, Wei; Chen, Jingbiao

Population Inversion on Sr-88 Atomic Beam for Active Optical Clock

2014 IEEE INTERNATIONAL FREQUENCY CONTROL SYMPOSIUM (FCS), 217-220; 2014

371. Hadas, Itai; Bahabad, Alon

Macroscopic Manipulation of High-Order-Harmonic Generation Through Bound-State Coherent Control

PHYSICAL REVIEW LETTERS, 113 (25):10.1103/PhysRevLett.113.253902 DEC 19 2014

370. Wang, Binbin; Pang, Yuhui; Han, Yong-Chang; Cong, Shu-Lin

Vibrational population transfer of the HF molecule: One-photon and two-photon transitions

JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY, 13 (7):10.1142/S0219633614500618 NOV 2014

369. Zhang, Jun; Greenman, Loren; Deng, Xiaotian; Whaley, K. Birgitta

Robust Control Pulses Design for Electron Shuttling in Solid-State Devices

IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY, 22 (6):2354-2359; 10.1109/TCST.2014.2308515 NOV 2014

368. Romanenko, VI; Udovitskaya, YG; Romanenko, AV; Yatsenko, LP

Cooling and trapping of atoms and molecules by counterpropagating pulse trains
PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.053421 NOV 19 2014

367. Chen, Ye-Hong; Xia, Yan; Chen, Qing-Qin; Song, Jie

Shortcuts to adiabatic passage for multiparticles in distant cavities: applications to fast and noise-resistant quantum population transfer, entangled states' preparation and transition

LASER PHYSICS LETTERS, 11 (11):10.1088/1612-2011/11/11/115201 NOV 2014

366. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong

Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

365. Li, Suyu; Guo, Fuming; Chen, Anmin; Yang, Yujun; Jin, Mingxing

Single rotational state preparation via coherent control of laser pulse

LASER PHYSICS, 24 (10):10.1088/1054-660X/24/10/105202 OCT 2014

364. Renaud, Nicolas; Grozema, Ferdinand C.

Cooperative biexciton generation and destructive interference in coupled quantum dots using adiabatic rapid passage

PHYSICAL REVIEW B Volume: 90 Issue: 16 Article Number: 165307
Published: OCT 22 2014

363. Mathew, Reuble; Gamouras, Angela; Dilcher, Eric; Ramachandran, Ajan P.; Yang, Hong Yi Shi; Freisem, Sabine; Deppe, Dennis G.; Hall, Kimberley C.

Applications of femtosecond pulse engineering in the control of excitons in quantum dots

Proceedings of SPIE, Spintronics VII, AUG 17-21, 2014, San Diego, CA
Edited by: Drouhin HJ; Wegrowe JE; Razeghi M

362. Chakhmakchyan, Levon; Leroy, Claude; Ananikian, Nerses; Guerin, Stephane

Generation of entanglement in systems of intercoupled qubits

PHYSICAL REVIEW A, 90 (4):10.1103/PhysRevA.90.042324 OCT 20 2014

361. Reiter, DE; Kuhn, T; Glassl, M; Axt, VM

The role of phonons for exciton and biexciton generation in an optically driven quantum dot

JOURNAL OF PHYSICS-CONDENSED MATTER, 26 (42):10.1088/0953-8984/26/42/423203 OCT 22 2014

360. Golubev, Nikolay V.; Kuleff, Alexander I.

Control of populations of two-level systems by a single resonant laser pulse

PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.035401 SEP 9 2014

359. Saab, Mohamad; Doriol, Loic Joubert; Lasorne, Benjamin; Guerin, Stephane; Gatti, Fabien

A quantum dynamics study of the benzopyran ring opening guided by laser pulses

CHEMICAL PHYSICS, 442 93-102; 10.1016/j.chemphys.2014.01.016 OCT 17 2014

358. Sukharev, Maxim

Control of optical properties of hybrid materials with chirped femtosecond laser pulses under strong coupling conditions

JOURNAL OF CHEMICAL PHYSICS, 141 (8):10.1063/1.4893967 AUG 28 2014

357. Longhi, S

Adiabatic quantum state transfer in tight-binding chains using periodic driving fields

EPL, 107 (5):10.1209/0295-5075/107/50003 SEP 2014

356. Yao Hong-Bin; Li Wen-Liang; Zhang Ji; Peng Min

Quantum control of K-2 molecule in an intense laser field: Selective population of dressed states

ACTA PHYSICA SINICA, 63 (17):10.7498/aps.63.178201 SEP 5 2014

355. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang

Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble

PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014

354. Greentree, Andrew D.; Koiller, Belita

Dark-state adiabatic passage with spin-one particles

PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.012319 JUL 14 2014

353. Mathew, Reuble; Dilcher, Eric; Gamouras, Angela; Ramachandran, Ajan; Yang, Hong Yi Shi; Freisem, Sabine; Deppe, Dennis; Hall, Kimberley C.

Subpicosecond adiabatic rapid passage on a single semiconductor quantum dot: Phonon-mediated dephasing in the strong-driving regime

PHYSICAL REVIEW B, 90 (3):10.1103/PhysRevB.90.035316 JUL 25 2014

352. Herrera, Felipe; Cao, Yudong; Kais, Sabre; Whaley, K. Birgitta

Infrared-dressed entanglement of cold open-shell polar molecules for universal matchgate quantum computing

NEW JOURNAL OF PHYSICS, 16 10.1088/1367-2630/16/7/075001 JUL 4 2014

351. Torosov, Boyan T.; Della Valle, Giuseppe; Longhi, Stefano

Non-Hermitian shortcut to stimulated Raman adiabatic passage

PHYSICAL REVIEW A, 89 (6):10.1103/PhysRevA.89.063412 JUN 12 2014

350. Ruschhaupt, A; Muga, JG

Shortcuts to adiabaticity in two-level systems: control and optimization

JOURNAL OF MODERN OPTICS, 61 (10):828-832; SI
10.1080/09500340.2013.846431 2014

349. Romanenko, Victor I.; Romanenko, Alexander V.; Udovitskaya, Yelena G.; Yatsenko, Leonid P.
Laser control of atomic and molecular motion by sequences of counterpropagating light pulses
JOURNAL OF MODERN OPTICS, 61 (10):839-844; SI 10.1080/09500340.2013.854421 2014
348. Demeter, Gabor
Coherence rephasing combined with spin-wave storage using chirped control pulses
PHYSICAL REVIEW A, 89 (6):10.1103/PhysRevA.89.063806 JUN 11 2014
347. Engin, Selma; Sisourat, Nicolas; Selles, Patricia; Taieeb, Richard; Carniato, Stephane
Theoretical study of Raman chirped adiabatic passage by X-ray absorption spectroscopy: Highly excited electronic states and rotational effects
JOURNAL OF CHEMICAL PHYSICS, 140 (23):10.1063/1.4882281 JUN 21 2014
346. Kiely, A; Ruschhaupt, A
Inhibiting unwanted transitions in population transfer in two- and three-level quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (11):10.1088/0953-4075/47/11/115501 JUN 14 2014
345. Lee, Chao-Kuei; Lin, Yuan-Yao; Lin, Sung-Hui; Lin, Gong-Ru; Pan, Ci-Ling
Chirped-pulse manipulated carrier dynamics in low-temperature molecular-beam-epitaxy grown GaAs
APPLIED PHYSICS LETTERS, 104 (17):10.1063/1.4875027 APR 28 2014
344. Suchowski, Haim; Porat, Gil; Arie, Ady
Adiabatic processes in frequency conversion
LASER & PHOTONICS REVIEWS, 8 (3):333-367; 10.1002/lpor.201300107 MAY 2014
343. Haikka, P; Molmer, K
Dissipative Landau-Zener level crossing subject to continuous measurement: Excitation despite decay
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.052114 MAY 15 2014
342. Boscain, Ugo; Caponigro, Marco; Sigalotti, Mario
Multi-input Schrodinger equation: Controllability, tracking, and application to the quantum angular momentum
JOURNAL OF DIFFERENTIAL EQUATIONS, 256 (11):3524-3551; 10.1016/j.jde.2014.02.004 JUN 1 2014
341. Chen, Ye-Hong; Xia, Yan; Chen, Qing-Qin; Song, Jie
Efficient shortcuts to adiabatic passage for fast population transfer in multiparticle systems
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033856 MAR 27 2014
340. Botha, LR; De Clercq, LE; Smit, AM; Botha, N; Ronander, E; Strydom, HJ
Quantum coherent control of the vibrational dynamics of a polyatomic molecule using adaptive feedback control of a femtosecond laser
PRAMANA-JOURNAL OF PHYSICS, 82 (2):249-253; SI 10.1007/s12043-013-0671-8 FEB 2014
339. Kumar, Pawan; Kumar, Parvendra; Sarma, Amarendra K.
Simultaneous control of optical dipole force and coherence creation by super-Gaussian femtosecond pulses in A-like atomic systems
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033422 MAR 19 2014
338. Sandor, N; Demeter, G; Dzsotjan, D; Djotyan, GP
Coherence creation in an optically thick medium by matched propagation of a chirped-laser-pulse pair
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033823 MAR 12 2014
337. Rodriguez-Lara, BM; Moya-Cessa, HM; Christodoulides, DN
Propagation and perfect transmission in three-waveguide axially varying couplers
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013802 JAN 2 2014
336. Jayich, AM; Vutha, AC; Hummon, MT; Porto, JV; Campbell, WC
Continuous all-optical deceleration and single-photon cooling of molecular beams
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023425 FEB 21 2014
335. Carreno, F; Anton, M. A.; Melle, Sonia; Calderon, Oscar G.; Cabrera-Granado, E.; Cox, Joel; Singh
Plasmon-enhanced terahertz emission in self-assembled quantum dots by femtosecond pulses, Mahi R.; Egatz-Gomez, A.
JOURNAL OF APPLIED PHYSICS, 115 (6):10.1063/1.4863781 FEB 14 2014
334. Chadwick, Helen; Hundt, P. Morten; van Reijzen, Maarten E.; Yoder, Bruce L.; Beck, Rainer D.
Quantum state specific reactant preparation in a molecular beam by rapid adiabatic passage
JOURNAL OF CHEMICAL PHYSICS, 140 (3):10.1063/1.4861054 JAN 21 2014
333. Toikka, LA; Karki, O; Suominen, KA
Creation and revival of ring dark solitons in an annular Bose-Einstein condensate
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (2):10.1088/0953-4075/47/2/021002 JAN 28 2014
332. Sharaby, YA; Joshi, A; Hassan, SS
COHERENT POPULATION TRANSFER IN V-TYPE ATOMIC SYSTEM
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (4):10.1142/S0218863513500446 DEC 2013
331. Guerin, S; Gevorgyan, M; Leroy, C; Jauslin, HR; Ishkhanyan, A
Efficient adiabatic tracking of driven quantum nonlinear systems
PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.063622 DEC 11 2013
330. Ueta, Hirokazu; Chen, Li; Beck, Rainer D.; Colon-Diaz, Inara; Jackson, Bret
Quantum state-resolved CH4 dissociation on Pt(111): coverage dependent barrier heights from experiment and density functional theory
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 15 (47):20526-20535; 10.1039/c3cp52244j 2013
329. Talebian, E
A short review note on the qubits and SWAP
OPTIK, 124 (20):4400-4401; 10.1016/j.jlleo.2013.01.027 2013
328. Hope, AP; Nguyen, TG; Greentree, AD; Mitchell, A
Long-range coupling of silicon photonic waveguides using lateral leakage and adiabatic passage
OPTICS EXPRESS, 21 (19):22705-22716; 10.1364/OE.21.022705 SEP 23 2013
327. Kime, L; Fioretti, A; Bruneau, Y; Porfido, N; Fuso, F; Viteau, M; Khalili, G; Santic, N; Gloter, A; Rasser, B; Sudraud, P; Pillet, P; Comparat, D
High-flux monochromatic ion and electron beams based on laser-cooled atoms
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.033424 SEP 30 2013
326. Kumar, Parvendra; Sarma, Amarendra K.
Ultrafast and selective coherent population transfer in four-level atoms by a single nonlinearly chirped femtosecond pulse
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.033823 SEP 13 2013
325. Xia, Keyu; Twamley, Jason
All-Optical Switching and Router via the Direct Quantum Control of Coupling between Cavity Modes
PHYSICAL REVIEW X, 3 (3):10.1103/PhysRevX.3.031013 SEP 5 2013
324. Engin, Selma; Sisourat, Nicolas; Selles, Patricia; Taieeb, Richard; Carniato, Stephane
Raman Chirped Adiabatic Passage Probed by X-ray Spectroscopy
JOURNAL OF PHYSICAL CHEMISTRY A, 117 (34):8132-8138; 10.1021/jp401125a AUG 29 2013
323. Lu, Xiao-Jing; Chen, Xi; Ruschhaupt, A.; Alonso, D.; Guerin, S.; Muga, J. G.
Fast and robust population transfer in two-level quantum systems with dephasing noise and/or systematic frequency errors
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.033406 SEP 5 2013
322. Dong, Wenrui; Mukherjee, Nandini; Zare, Richard N.
Optical preparation of H-2 rovibrational levels with almost complete population transfer
JOURNAL OF CHEMICAL PHYSICS, 139 (7):10.1063/1.4818526 AUG 21 2013
321. Sandor, Nora; Djotyan, Gagik P.
Propagation of Raman-resonant frequency chirped laser pulses in a medium of lambda-atoms
PHOTON COUNTING APPLICATIONS IV; AND QUANTUM OPTICS AND QUANTUM INFORMATION TRANSFER AND PROCESSING, 8773 10.1117/12.2017217 2013
Proceedings of SPIE, Editor(s): Prochazka I; Fiuorasek J; Sobolewski R
320. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian
High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013
319. Torrontegui, Erik; Ibanez, Sara; Martinez-Garaot, Sofia; Modugno, Michele;

- del Campo, Adolfo; Guery-Odelin, David; Ruschhaupt, Andreas; Chen, Xi; Gonzalo Muga, Juan
Shortcuts to Adiabaticity
Editor(s): Arimondo E; Berman PR; Lin CC
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 62, 62 117-169; 10.1016/B978-0-12-408090-4.00002-5 2013
318. Pasquiou, Benjamin; Bayerle, Alex; Tzanova, Slava M.; Stellmer, Simon; Szczepkowski, Jacek; Parigger, Mark; Grimm, Rudolf; Schreck, Florian
Quantum degenerate mixtures of strontium and rubidium atoms
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023601 AUG 1 2013
317. Daems, D; Ruschhaupt, A; Sugny, D; Guerin, S
Robust Quantum Control by a Single-Shot Shaped Pulse
PHYSICAL REVIEW LETTERS, 111 (5):10.1103/PhysRevLett.111.050404 JUL 31 2013
316. Kamsap, MR; Ekogo, TB; Pedregosa-Gutierrez, J; Hagel, G; Houssin, M; Morizot, O; Knoop, M; Champenois, C
Coherent internal state transfer by a three-photon STIRAP-like scheme for many-atom samples
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (14):10.1088/0953-4075/46/14/145502 JUL 28 2013
315. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013
314. Falci, G; La Cognata, A; Berritta, M; D'Arrigo, A; Paladino, E; Spagnolo, B
Design of a Lambda system for population transfer in superconducting nanocircuits
PHYSICAL REVIEW B, 87 (21):10.1103/PhysRevB.87.214515 JUN 20 2013
313. Zhang, Jingfu; Shim, Jeong Hyun; Niemeyer, Ingo; Taniguchi, T.; Teraji, T.; Abe, H.; Onoda, S.; Yamamoto, T.; Ohshima, T.; Isoya, J.; Suter, Dieter
Experimental Implementation of Assisted Quantum Adiabatic Passage in a Single Spin
PHYSICAL REVIEW LETTERS, 110 (24):10.1103/PhysRevLett.110.240501 JUN 11 2013
312. Chen, Li; Ueta, Hirokazu; Bisson, Regis; Beck, Rainer D.
Quantum state-resolved gas/surface reaction dynamics probed by reflection absorption infrared spectroscopy
REVIEW OF SCIENTIFIC INSTRUMENTS, 84 (5):10.1063/1.4803933 MAY 2013
311. Pascual-Winter, MF; Tongning, RC; Chaneliere, T; Le Gouet, JL
Securing coherence rephasing with a pair of adiabatic rapid passages
NEW JOURNAL OF PHYSICS, 15 10.1088/1367-2630/15/5/055024 MAY 29 2013
310. Torosov, Boyan T.; Della Valle, Giuseppe; Longhi, Stefano
Non-Hermitian shortcut to adiabaticity
PHYSICAL REVIEW A, 87 (5):10.1103/PhysRevA.87.052502 MAY 6 2013
309. Gelin, Maxim F.; Egorova, Dassia; Domcke, Wolfgang
Strong-pump strong-probe spectroscopy: effects of higher excited electronic states
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 15 (21):8119-8131; 10.1039/c3cp44454f 2013
308. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Population transfer and generation of arbitrary superpositions of quantum states in a four-level system using a single-chirped laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30 (4):1017-1021; APR 2013
307. Miyake, Shinichirou; Ohshima, Yasuhiro
Injection-seeded optical parametric amplifier for generating chirped nanosecond pulses
OPTICS EXPRESS, 21 (5):5269-5274; MAR 11 2013
306. Wang, Tao; Yang, Tian-gang; Xiao, Chun-lei; Dai, Dong-xu; Yang, Xue-ming
Efficient Coherent Population Transfer of D-2 Molecules by Stark-induced Adiabatic Raman Passage
CHINESE JOURNAL OF CHEMICAL PHYSICS, 26 (1):8-12; 10.1063/1674-0068/26/01/8-12 FEB 27 2013
305. Ping, Jing; Ye, Yin; Xu, Luting; Li, Xin-Qi; Yan, YiJing; Gurvitz, Shmuel
Undetectable quantum transfer through a continuum
PHYSICS LETTERS A, 377 (9):676-681; 10.1016/j.physleta.2013.01.010 MAR 15 2013
304. Nakamura, Satoshi; Goto, Hayato; Ichimura, Kouichi
Quantum phase gate via stimulated Raman adiabatic passage with time-dependent two-photon detuning
OPTICS COMMUNICATIONS, 293 160-165; 10.1016/j.optcom.2012.11.001 APR 15 2013
303. Wang, Tao; Yang, Tiangang; Xiao, Chunlei; Dai, Dongxu; Yang, Xueming
Highly Efficient Pumping of Vibrationally Excited HD Molecules via Stark-Induced Adiabatic Raman Passage
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 4 (3):368-371; 10.1021/jz302103u FEB 7 2013
302. Mukherjee, Nandini; Dong, Wenrui; Harrison, John A.; Zare, Richard N.
Communication: Transfer of more than half the population to a selected rovibrational state of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 138 (5):10.1063/1.4790402 FEB 7 2013
301. Zhang, GP
Hidden identity in a generic Lambda system: applications to coherent population trapping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (3):10.1088/0953-4075/46/3/035504 FEB 14 2013
300. Su Wan-Jun; Shen Li-Tuo; Wu Huai-Zhi; Lin Xiu
Non-Geometric Conditional Phase Gate by Quantum Zeno Dynamics in Laser-Excited Nitrogen-Vacancy Centers
COMMUNICATIONS IN THEORETICAL PHYSICS, 59 (1):11-16; 10.1088/0253-6102/59/1/03 JAN 2013
299. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.; Montemezzani, Germano
Broadband adiabatic light transfer in optically induced waveguide arrays
PHYSICAL REVIEW A, 87 (1):10.1103/PhysRevA.87.013806 JAN 7 2013
298. Xu, Qianqian ; Yao, Duanzheng ; Liu, Xiaona ; et al.
Adiabatic self-induced transparency in GaN/AlN inhomogeneously broadened quantum-dot ensemble
OPTICS AND LASER TECHNOLOGY Volume: 45 Pages: 768-774 DOI: 10.1016/j.optlastec.2012.04.038 Published: FEB 2013
297. Noguchi, Atsushi; Toyoda, Kenji; Urabe, Shinji
Generation of Dicke States with Phonon-Mediated Multilevel Stimulated Raman Adiabatic Passage
PHYSICAL REVIEW LETTERS, 109 (26):10.1103/PhysRevLett.109.260502 DEC 27 2012
296. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakchyan, L; Guerin, S; Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT 2012
295. Falci, G; Berritta, M; Russo, A; D'Arrigo, A; Paladino, E
Effects of low-frequency noise in driven coherent nanodevices
PHYSICA SCRIPTA, T151 10.1088/0031-8949/2012/T151/014020 NOV 2012
294. Deng, Li; Nakajima, Takashi
Generation of vacuum-ultraviolet pulses with a Doppler-broadened gas utilizing high atomic coherence
OPTICS EXPRESS, 20 (16):17566-17580; JUL 30 2012
293. Anna, Jessica M.; Baiz, Carlos R.; Ross, Matthew R.; McCanne, Robert; Kubarych, Kevin J.
Ultrafast equilibrium and non-equilibrium chemical reaction dynamics probed with multidimensional infrared spectroscopy
INTERNATIONAL REVIEWS IN PHYSICAL CHEMISTRY, 31 (3):367-419; 10.1080/0144235X.2012.716610 2012
292. Schmitz, David; Shubert, V. Alvin; Betz, Thomas; Schnell, Melanie
Multi-resonance effects within a single chirp in broadband rotational spectroscopy: The rapid adiabatic passage regime for benzonitrile
JOURNAL OF MOLECULAR SPECTROSCOPY, 280 77-84; SI 10.1016/j.jms.2012.08.001 OCT 2012
291. Lane, Ian C.
Ultracold fluorine production via Doppler cooled BeF
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 14 Issue: 43 Pages: 15078-

15087 DOI: 10.1039/c2cp42709e Published: 2012

290. Debnath, A. ; Meier, C. ; Chatel, B. ; et al.

Chirped laser excitation of quantum dot excitons coupled to a phonon bath
PHYSICAL REVIEW B Volume: 86 Issue: 16 Article Number: 161304 DOI:
10.1103/PhysRevB.86.161304 Published: OCT 22 2012

289. Molouki, L; Yahyavi, M; Esmaili, P; Talebian, E

Generation of SWAP gate between two remote cavities via an optical fiber by
adiabatic passage
EUROPEAN PHYSICAL JOURNAL PLUS, 127 (11):10.1140/epjp/i2012-12134-7 NOV
2012

288. Chung, Kelvin ; Karle, Timothy J. ; Rab, Masum ; et al.

Broadband and robust optical waveguide devices using coherent tunnelling
adiabatic passage
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 23108-23116 Published: OCT 8
2012

287. Porat, Gil; Arie, Ady

Efficient two-process frequency conversion through a dark intermediate state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29
(10):2901-2909; OCT 2012

286. Bitter, M; Shapiro, EA; Milner, V

Enhancing strong-field-induced molecular vibration with femtosecond pulse
shaping
PHYSICAL REVIEW A, 86 (4):10.1103/PhysRevA.86.043421 OCT 17 2012

285. Anton, M. A.; Carreno, F.; Melle, Sonia; Calderon, Oscar G.; Cabrera-
Granado, E.; Cox, Joel; Singh, Mahi R.

Plasmonic effects in excitonic population transfer in a driven semiconductor-
metal nanoparticle hybrid system
PHYSICAL REVIEW B, 86 (15):10.1103/PhysRevB.86.155305 OCT 5 2012

284. Ruschhaupt, A.; Chen, Xi; Alonso, D.; Muga, J. G.

Optimally robust shortcuts to population inversion in two-level quantum systems
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/9/093040 SEP 21 2012

283. Stellmer, Simon; Pasquiou, Benjamin; Grimm, Rudolf; Schreck, Florian

Creation of Ultracold Sr-2 Molecules in the Electronic Ground State
PHYSICAL REVIEW LETTERS, 109 (11):10.1103/PhysRevLett.109.115302 SEP 13
2012

282. Garanovich, Ivan L.; Longhi, Stefano; Sukhorukov, Andrey A.; Kivshar, Yuri S.

Light propagation and localization in modulated photonic lattices and waveguides
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 518 (1-2):1-79;
10.1016/j.physrep.2012.03.005 SEP 2012

281. Xu, QQ; Yao, DZ; Liu, XN; Zhou, Q; Xiong, GG

Solitary propagation effect of a well-defined chirped femtosecond laser pulse in a
resonance-absorbing medium
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023853 AUG 29 2012

280. Hundt, P. Morten; Bisson, Regis; Beck, Rainer D.

The sticking probability of D2O-water on ice: Isotope effects and the influence of
vibrational excitation
JOURNAL OF CHEMICAL PHYSICS, 137 (7):10.1063/1.4742914 AUG 21 2012

279. Chen, Xi; Muga, J. G.

Engineering of fast population transfer in three-level systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033405 SEP 6 2012

278. Amnat-Talab, M; Saadati-Niari, M; Guerin, S

Quantum state engineering in ion-traps via adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30249-3 AUG 2012

277. McCormack, EA; Lowth, HS; Bell, MT; Weidmann, D; Ritchie, GAD

Population transfer and rapid passage effects in a low pressure gas using a
continuous wave quantum cascade laser
JOURNAL OF CHEMICAL PHYSICS, 137 (3):10.1063/1.4734020 JUL 21 2012

276. Chen Bing; Shen QingHui; Fan Wei; Xu Yan

Long-range adiabatic quantum state transfer through a linear array of quantum
dots
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 55 (9):1635-1640;
10.1007/s11433-012-4841-3 SEP 2012

275. Assemat, E; Sugny, D

Connection between optimal control theory and adiabatic-passage techniques in

quantum systems

PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023406 AUG 6 2012

274. Pyragas, Viktoras; Juzeliunas, Gediminas

Stability of linear and nonlinear lambda and tripod systems in the presence of
amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45
(16):10.1088/0953-4075/45/16/165503 AUG 28 2012

273. Brierley, RT; Creatore, C; Littlewood, PB; Eastham, PR

Adiabatic State Preparation of Interacting Two-Level Systems
PHYSICAL REVIEW LETTERS, 109 (4):10.1103/PhysRevLett.109.043002 JUL 23
2012

272. Kovachy, Tim; Chiow, Sheng-wey; Kasevich, Mark A.

Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012

271. Chen, Bing; Fan, Wei; Xu, Yan; Chen, Zhao-yang; Feng, Xun-li; Oh, C. H.

Long-range adiabatic quantum state transfer through a tight-binding chain as a
quantum data bus
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012302 JUL 5 2012

270. Sandor, N; Bakos, JS; Sorlei, Z; Djotyan, GP

Creation of coherent superpositions between metastable atomic states in
Doppler-broadened media
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011),
350 10.1088/1742-6596/350/1/012002 2012
Editors: Bhattacharjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series

269. Galperin, Michael; Nitzan, Abraham

Molecular optoelectronics: the interaction of molecular conduction junctions
with light
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 14 (26):9421-9438;
10.1039/c2cp40636e 2012

268. Yan, Xiang-an; Wang, Li-qiang

Study of the maximum conversion efficiency of the four-wave mixing process
based on the Hamiltonian approach
OPTIK, 123 (11):964-970; 10.1016/j.ijleo.2011.06.061 2012

267. Brif, Constantin; Chakrabarti, Raj; Rabitz, Herschel

CONTROL OF QUANTUM PHENOMENA
ADVANCES IN CHEMICAL PHYSICS, VOL 148, 148 1-76; 2012

266. Shevchenko, SN; Omelyanchouk, AN; Il'ichev, E

Multiphoton transitions in Josephson-junction qubits
LOW TEMPERATURE PHYSICS, 38 (4):283-300; 10.1063/1.3701717 APR 2012

265. Dridi, G; Guerin, S

Adiabatic passage for a lossy two-level quantum system by a complex time
method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45
(18):10.1088/1751-8113/45/18/185303 MAY 11 2012

264. Kumar, Parvendra; Sarma, Amarendra K.

Gaussian and sinc-shaped few-cycle-pulse-driven ultrafast coherent population
transfer in Lambda-like atomic systems
PHYSICAL REVIEW A, 85 (4):10.1103/PhysRevA.85.043417 APR 20 2012

263. Pusch, Andreas; Hamm, Joachim M.; Hess, Ortwin

Dynamic transition from complete population transfer to self-induced
transparency
PHYSICAL REVIEW A, 85 (4):10.1103/PhysRevA.85.043807 APR 5 2012

262. Ivanov, Vladimir S.; Rozhdestvensky, Yuri V.; Suominen, Kalle-Antti

Theory of robust subrecoil cooling by stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033422 MAR 21 2012

261. Yang, Xihua; Huang, Yihua; Zhang, Zhenhua; Yan, Xiaona

Enhancement of coherent population transfer in a double Lambda-type four-level
system via a train of pulse pairs
OPTICS COMMUNICATIONS, 285 (8):2101-2105; 10.1016/j.optcom.2011.12.076
APR 15 2012

260. Noel, T; Dietrich, MR; Kurz, N; Shu, G; Wright, J; Blinov, BB

Adiabatic passage in the presence of noise
PHYSICAL REVIEW A, 85 (2):10.1103/PhysRevA.85.023401 FEB 1 2012

259. Eleuch, H; Guerin, S; Jauslin, HR
Effects of an environment on a cavity-quantum-electrodynamics system controlled by bichromatic adiabatic passage
PHYSICAL REVIEW A, 85 (1):10.1103/PhysRevA.85.013830 JAN 23 2012
258. Zhang Yan-Feng; Li Gang; Zhang Yu-Chi; Zhang Peng-Fei; Wang Jun-Min; Zhang Tian-Cai
Generation of Raman light source with an anti-reflection-coated edge-emitting laser diode in an external cavity
ACTA PHYSICA SINICA, 60 (10):2011
257. Jing, Hui; Jiang, Ya-jing; Deng, Yuan-gang
Quantum superchemistry of de Broglie waves: New wonderland at ultracold temperature
FRONTIERS OF PHYSICS, 6 (1):15-45; 10.1007/s11467-010-0155-y MAR 2011
256. Mukherjee, Nandini; Zare, Richard N.
Can stimulated Raman pumping cause large population transfers in isolated molecules?
JOURNAL OF CHEMICAL PHYSICS, 135 (18):10.1063/1.3657832 NOV 14 2011
255. Hill, Charles D.; Greentree, Andrew D.; Hollenberg, Lloyd C. L.
Parallel interaction-free measurement using spatial adiabatic passage
NEW JOURNAL OF PHYSICS, 13 10.1088/1367-2630/13/12/125002 DEC 6 2011
254. Yoder, Bruce L.; Bisson, Regis; Hundt, P. Morten; Beck, Rainer D.
Alignment dependent chemisorption of vibrationally excited CH(4)(nu(3)) on Ni(100), Ni(110), and Ni(111)
JOURNAL OF CHEMICAL PHYSICS, 135 (22):10.1063/1.3665136 DEC 14 2011
253. Hsiao, Fu-Chen; Lin, Tzung-Yi; Tseng, Shuo-Yen
Bandwidth Analysis of Waveguide Mode Converters Based on Optical Analogy of Stimulated Raman Adiabatic Passage in Engineered Multimode Waveguides
IEEE PHOTONICS JOURNAL, 3 (6):1198-1205; 10.1109/JPHOT.2011.2176479 DEC 2011
252. Suchowski, H; Bruner, BD; Ganany-Padowicz, A; Juwiler, I; Arie, A; Silberberg, Y
Adiabatic frequency conversion of ultrafast pulses
APPLIED PHYSICS B-LASERS AND OPTICS, 105 (4):697-702; 10.1007/s00340-011-4591-3 DEC 2011
251. Wollenhaupt, Matthias; Baumert, Thomas
Ultrafast laser control of electron dynamics in atoms, molecules and solids
FARADAY DISCUSSIONS 153 9-26 10.1039/c1fd00109d 2011
250. Yang, Xihua; Sheng, Jiteng; Xiao, Min
Electromagnetically induced absorption via incoherent collisions
PHYSICAL REVIEW A 84 (4): 10.1103/PhysRevA.84.043837 OCT 21 2011
249. Yan, Dong; Cui, Cui-Li; Zhang, Mei; Wu, Jin-Hui
Coherent population transfer and quantum entanglement generation involving a Rydberg state by stimulated Raman adiabatic passage
PHYSICAL REVIEW A 84 (4): 10.1103/PhysRevA.84.043405 OCT 5 2011
248. Xu, Qiang; Wang, Yao-xiong; Shuang, Feng; Rabitz, Herschel
Hamiltonian Reduction of Quantum Systems Controlled by Pulses
CHINESE JOURNAL OF CHEMICAL PHYSICS 24 (4): 378-382 10.1088/1674-0068/24/04/378-382 AUG 2011
247. Watanabe, T; Nomura, S; Toyoda, K; Urabe, S
Sideband excitation of trapped ions by rapid adiabatic passage for manipulation of motional states
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033412 SEP 14 2011
246. Jing, Hui; Jiang, Ya-jing; Deng, Yuan-gang
Quantum superchemistry of de Broglie waves: New wonderland at ultracold temperature
FRONTIERS OF PHYSICS 6 (1): 15-45 10.1007/s11467-010-0155-y MAR 2011
245. Rangelov, Andon A.
Achromatic polarization retarder realized with slowly varying linear and circular birefringence
OPTICS LETTERS 36 (14): 2716-2718 JUL 15 2011
244. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011
243. Leghtas, Z; Sarlette, A; Rouchon, P
Adiabatic passage and ensemble control of quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 44 (15): 10.1088/0953-4075/44/15/154017 AUG 14 2011
242. Jaritz, G; Hohenester, U
Controlled cavity-assisted generation of single and entangled photons in semiconductor quantum dots
EUROPEAN PHYSICAL JOURNAL B 82 (1): 29-35 10.1140/epjb/e2011-20258-y JUL 2011
241. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
240. Schneider, Johannes; Wollenhaupt, Matthias; Winzenburg, Andreas; Bayer, Tim; Koehler, Jens; Faust, Ruediger; Baumert, Thomas
Efficient and robust strong-field control of population transfer in sensitizer dyes with designed femtosecond laser pulses
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (19): 8733-8746 2011
239. Yao, Hongbin; Zheng, Yujun
Quantum control of a molecular system in an intense field via the selective population of dressed states
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (19): 8900-8907 2011
238. La Cognata, A; Caldara, P; Valenti, D; Spagnolo, B; D'Arrigo, A; Paladino, E; Falci, G
EFFECT OF LOW-FREQUENCY NOISE ON ADIABATIC PASSAGE IN A SUPERCONDUCTING NANOCIRCUIT
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION 9: 1-15 Suppl. 1 JAN 2011
237. Loiko, Y; Ahufinger, V; Corbalan, R; Birkel, G; Mompart, J
Filtering of matter-wave vibrational states via spatial adiabatic passage
PHYSICAL REVIEW A 83 (3): Art. No. 033629 MAR 30 2011
236. Rech, Jerome; Kehrein, Stefan
Effect of Measurement Backaction on Adiabatic Coherent Electron Transport
PHYSICAL REVIEW LETTERS 106 (13): Art. No. 136808 MAR 31 2011
235. Maeda, H; Gurian, JH; Gallagher, TF
Population transfer by multiphoton adiabatic rapid passage
PHYSICAL REVIEW A 83 (3): Art. No. 033416 MAR 21 2011
234. Leclerc, A; Guerin, S; Jolicard, G; Killingbeck, JP
Quantum dynamics by the constrained adiabatic trajectory method
PHYSICAL REVIEW A 83 (3): Art. No. 032113 MAR 16 2011
233. Johnson, J. Bruce; Johnson, Michael J.; Lyon, Kevin
Limitations and guidelines for measuring the spectral width of a single pulse of light with a Fabry-Perot interferometer
APPLIED OPTICS 50 (3): 347-355 JAN 20 2011
232. Jing, Hui; Jiang, Ya-jing; Deng, Yuan-gang
Quantum superchemistry of de Broglie waves: New wonderland at ultracold temperature
FRONTIERS OF PHYSICS IN CHINA 6 (1): 15-45 MAR 2011
231. Toyoda, K; Watanabe, T; Kimura, T; Nomura, S; Haze, S; Urabe, S
Generation of Dicke states using adiabatic passage
PHYSICAL REVIEW A 83 (2): Art. No. 022315 FEB 17 2011
230. Amnat-Talab, M; Saadati-Niari, M; Guerin, S; Nader-Ali, R
Superposition of states by adiabatic passage in N-pod systems
PHYSICAL REVIEW A 83 (1): Art. No. 013817 JAN 21 2011
229. Chen, Bing; Fan, Wei; Xu, Yan
Adiabatic quantum state transfer in a nonuniform triple-quantum-dot system
PHYSICAL REVIEW A 83 (1): Art. No. 014301 JAN 18 2011
228. Yan, Yonghong; Mol, J. A.; Verduijn, J.; Rogge, S.; Levine, R. D.; Remacle, F.
Electrically Addressing a Molecule-Like Donor Pair in Silicon: An Atomic Scale Cyclable Full Adder Logic
JOURNAL OF PHYSICAL CHEMISTRY C 114 (48): 20380-20386 DEC 9 2010
227. Huang Bin; Lin Xia; Lin Hui; Cai Zhen-Hua; Yang Rong-Can
Two-qutrit maximally entangled states prepared via adiabatic passage in ion-trapped system
CHINESE PHYSICS B 19 (12): Art. No. 124206 DEC 2010

226. Chen, Xin; Wang, Yaoxiong; Ge, Yunjian; Shi, Junhui; Rabitz, Herschel; Shuang, Feng
PERFECT POPULATION TRANSFER IN PULSE-DRIVEN QUANTUM CHAINS
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY 9 (5): 847-860 OCT 2010
225. Romanenko, VI; Romanenko, AV; Yatsenko, LP; Kazakov, GA; Litvinov, AN; Matisov, BG; Rozhdestvensky, YV
Dark resonances in the field of frequency-shifted feedback laser radiation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215402 NOV 14 2010
224. V.I. Romanenko
Stimulated Raman Adiabatic Passage in Phase-Fluctuating fields
Ukrainian Journal of Physics V. 51 P. 1054 (2006)
223. Issoufa, Youssouf Hamidou; Messikh, Azeddine
Effect of dephasing on single-qubit rotation gates
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215506 NOV 14 2010
222. Rahman, Rajib; Muller, Richard P.; Levy, James E.; Carroll, Malcolm S.; Klimeck, Gerhard; Greentree, Andrew D.; Hollenberg, Lloyd C. L.
Coherent electron transport by adiabatic passage in an imperfect donor chain
PHYSICAL REVIEW B 82 (15): Art. No. 155315 OCT 18 2010
221. Demeter, G
Quantum control of multilevel atoms with rotational degeneracy using short laser pulses
PHYSICAL REVIEW A 82 (4): Art. No. 043404 OCT 5 2010
220. Phillips, CR; Fejer, MM
Efficiency and phase of optical parametric amplification in chirped quasi-phase-matched gratings
OPTICS LETTERS 35 (18): 3093-3095 SEP 15 2010
219. Dridi, G; Guerin, S; Jauslin, HR; Viennot, D; Jolicard, G
Adiabatic approximation for quantum dissipative systems: Formulation, topology, and superadiabatic tracking
PHYSICAL REVIEW A 82 (2): Art. No. 022109 AUG 16 2010
218. Paspalakis, Emmanuel
Controlled Preparation of a Biexciton State in a Quantum Dot
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE 7 (9): 1717-1722 Sp. Iss. SI SEP 2010
217. Oreshkov, Ognian; Calsamiglia, John
Adiabatic Markovian Dynamics
PHYSICAL REVIEW LETTERS 105 (5): Art. No. 050503 JUL 30 2010
216. Van Donkelaar, Jessica A.; Greentree, Andrew D.; Alves, Andrew D. C.; Jong, Lenneke M.; Hollenberg, Lloyd C. L.; Jamieson, David N.
Top-down pathways to devices with few and single atoms placed to high precision
NEW JOURNAL OF PHYSICS 12: Art. No. 065016 JUN 28 2010
215. Brif, Constantin; Chakrabarti, Raj; Rabitz, Herschel
Control of quantum phenomena: past, present and future
NEW JOURNAL OF PHYSICS 12: Art. No. 075008 JUL 8 2010
214. Perez-Hernandez, Guillermo; Pelzer, Adam; Gonzalez, Leticia; Seideman, Tamar
Biologically inspired molecular machines driven by light. Optimal control of a unidirectional rotor
NEW JOURNAL OF PHYSICS 12: Art. No. 075007 JUL 8 2010
213. Shevchenko, S. N.; Ashhab, S.; Nori, Franco
Landau-Zener-Stueckelberg interferometry
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 492 (1): 1-30 JUL 2010
212. Yang, XH; Zhang, ZH; Wang, Z; Yan, XN
Ultrafast coherent population transfer driven by two few-cycle laser pulses
EUROPEAN PHYSICAL JOURNAL D 57 (2): 253-258 APR 2010
211. He, Jun; Zhang, Yong-Sheng; Guo, Guang-Can
Time reversible evolution via nonadiabatic coupling in adiabatic dark subspace
OPTICS COMMUNICATIONS 283 (10): 2174-2177 MAY 15 2010
210. Roy, Anahba; Reichl, L. E.
Quantum control of interacting bosons in periodic optical lattice
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES 42 (5): 1627-1632 MAR 2010
209. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona; Li, Chunfang
Selective and efficient control of coherent population transfer with time-separated chirped pulses
PHYSICAL REVIEW A 81 (3): Art. No. 035801 MAR 2010
208. Jong, Lenneke M.; Greentree, Andrew D.
Interferometry using spatial adiabatic passage in quantum dot networks
PHYSICAL REVIEW B 81 (3): Art. No. 035311 JAN 2010
207. Il'ichev, E; Shevchenko, SN; van der Ploeg, SHW; Grajcar, M; Temchenko, EA; Omelyanchouk, AN; Meyer, HG
Multiphoton excitations and inverse population in a system of two flux qubits
PHYSICAL REVIEW B 81 (1): Art. No. 012506 JAN 2010
206. Amnat-Talab, M.; Nader-Ali, R.; Guerin, S.; Niari, M. Saadati
Creation of atomic W state in a cavity by adiabatic passage
OPTICS COMMUNICATIONS 283 (4): 622-627 FEB 15 2010
205. Suchowski H, Oron D, Arie A, et al.
Adiabatic Sum-Frequency Conversion
2009 CONFERENCE ON LASERS AND ELECTRO-OPTICS AND QUANTUM ELECTRONICS AND LASER SCIENCE CONFERENCE (CLEO/QELS 2009), VOLS 1-5 Volume: Issue: Pages: 1977 Published: 2009
204. Ma, Xun; John, Sajeev
Switching dynamics and ultrafast inversion control of quantum dots for on-chip optical information processing
PHYSICAL REVIEW A 80 (6): Art. No. 063810 DEC 2009
203. Bhattacharya, Rangana; Chatterjee, Souvik; Bhattacharyya, S. S.
Population transfer to the E (1)Sigma(g) excited electronic state of Li-2 by femtosecond laser pulses with all possible interstate radiative couplings
PHYSICAL REVIEW A 80 (6): Art. No. 063423 DEC 2009
202. Zhdanovich, S; Shapiro, EA; Hepburn, JW; Shapiro, M; Milner, V
Complete transfer of populations from a single state to a preselected superposition of states using piecewise adiabatic passage: Experiment
PHYSICAL REVIEW A 80 (6): Art. No. 063405 DEC 2009
201. Sugny, D; Bomble, L; Ribeyre, T; Dulieu, O; Desouter-Lecomte, M
Rovibrational controlled-NOT gates using optimized stimulated Raman adiabatic passage techniques and optimal control theory
PHYSICAL REVIEW A 80 (4): Art. No. 042325 OCT 2009
200. Dridi, G; Guerin, S; Hakobyan, V; Jauslin, HR; Eleuch, H
Ultrafast stimulated Raman parallel adiabatic passage by shaped pulses
PHYSICAL REVIEW A 80 (4): Art. No. 043408 OCT 2009
199. Depenheuer, D; Kohl-Landgraf, J; Glasser, H; Walther, T
A pulsed laser system with large spectral coverage extended by non-linear frequency conversion
APPLIED PHYSICS B-LASERS AND OPTICS 97 (3): 583-589 NOV 2009
198. Schoenfeldt, Johann-Heinrich; Twamley, Jason; Rebic, Stojan
Optimized control of Stark-shift-chirped rapid adiabatic passage in a Lambda-type three-level system
PHYSICAL REVIEW A 80 (4): Art. No. 043401 OCT 2009
197. Su, Chun-Hsu; Greentree, Andrew D.; Munro, William J.; Nemoto, Kae; Hollenberg, Lloyd C. L.
Pulse shaping by coupled cavities: Single photons and qubits
PHYSICAL REVIEW A 80 (3): Art. No. 033811 SEP 2009
196. Jong, LM; Greentree, AD; Conrad, VI; Hollenberg, LCL; Jamieson, DN
Coherent tunneling adiabatic passage with the alternating coupling scheme
NANOTECHNOLOGY 20 (40): Art. No. 405402 OCT 7 2009
195. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona
Ultrafast coherent population transfer with a train of weak femtosecond pulse pairs
JOURNAL OF MODERN OPTICS 56 (14): 1582-1587 2009
194. Wu, Jin-Hui; Artoni, Maurizio; La Rocca, Giuseppe C.
LIGHT CONFINEMENT IN COHERENTLY DRIVEN DEFECT STATES IN SOLIDS
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS 51 (11): 2722-2726 NOV 2009
193. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic evolution for the Rb-87 atom-molecule conversion system

- JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (18): Art. No. 185301 SEP 28 2009
192. Sarkar, Chitrakshya; Bhattacharyya, S. S.; Saha, Samir
Coherent control of vibrational population transfer in the Li-2 molecule with femtosecond laser pulses in the presence of manifolds of rotational levels
PHYSICAL REVIEW A 80 (2): Art. No. 023407 AUG 2009
191. Schnell, Melanie; Meijer, Gerard
Cold Molecules: Preparation, Applications, and Challenges
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 48 (33): 6010-6031 2009
190. Kritzer, R; Meier, C; Engel, V
CHEMICAL PHYSICS LETTERS 477 (1-3): 75-79 JUL 28 2009
Local control of population transfer in molecules under fluctuating perturbations
189. Oztop, B; Oktel, MO; Mustecaphoglu, OE; You, L
Quantum entanglement of spin-1 bosons with coupled ground states in optical lattices
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (14): Art. No. 145505 JUL 28 2009
188. Wu, Chengyin; Zeng, Guiping; Gao, Yunan; Xu, Nan; Peng, Liang-You; Jiang, Hongbing; Gong, Qihuang
Controlling molecular rotational population by wave-packet interference
JOURNAL OF CHEMICAL PHYSICS 130 (23): Art. No. 231102 JUN 21 2009
187. Loiko, Yu.; Serrat, C.; Vilaseca, R.; Ahufinger, V.; Mompert, J.; Corbalan, R.
Doppler-free adiabatic self-induced transparency
PHYSICAL REVIEW A 79 (5): Art. No. 053809 MAY 2009
186. Engel, Volker; Meier, Christoph; Tannor, David J.
LOCAL CONTROL THEORY: RECENT APPLICATIONS TO ENERGY AND PARTICLE TRANSFER PROCESSES IN MOLECULES
ADVANCES IN CHEMICAL PHYSICS, VOL 141 141: 29-101 2009
185. Strasfeld, David B.; Shim, Sang-Hee; Zanni, Martin T.
NEW ADVANCES IN MID-IR PULSE SHAPING AND ITS APPLICATION TO 2D IR SPECTROSCOPY AND GROUND-STATE COHERENT CONTROL
ADVANCES IN CHEMICAL PHYSICS, VOL 141 141: 1-28 2009
184. Wollenhaupt M, Krug M, Kohler J, et al.
Photoelectron angular distributions from strong-field coherent electronic excitation
APPLIED PHYSICS B-LASERS AND OPTICS Volume: 95 Issue: 2 Pages: 245-259
Published: MAY 2009
183. Sugawara, M
A new quantum control scheme for multilevel systems based on effective decomposition by intense laser fields
JOURNAL OF CHEMICAL PHYSICS 130 (9): Art. No. 094103 MAR 7 2009
182. Jing, H; Cheng, J; Meystre, P
Coherent bimolecular reactions with quantum-degenerate matter waves
PHYSICAL REVIEW A 79 (2): Art. No. 023622 FEB 2009
181. Shu, Chuan-Cun; Yu, Jie; Yuan, Kai-Jun; Hu, Wen-Hui; Yang, Jing; Cong, Shu-Lin
Stimulated Raman adiabatic passage in molecular electronic states
PHYSICAL REVIEW A 79 (2): Art. No. 023418 FEB 2009
180. Wollenhaupt, Matthias; Bayer, Tim; Klumpp, Andrea; Sarpe-Tudoran, Cristian; Baumert, Thomas
Ultrafast Switching of Coherent Electronic Excitation: Great Promise for Reaction Control on the Femtosecond Time Scale
PHYSICS AND ENGINEERING OF NEW MATERIALS 127: 327-335 2009
179. He, Jun; Zhang, Yong-Sheng; Zhou, Xiang-Fa; Chen, Qun-Feng; Guo, Guang-Can
Arbitrary quantum superposition state for three-level system using oscillating dark states
OPTICS COMMUNICATIONS 282 (6): 1167-1170 MAR 15 2009
178. Xia, Keyu; Macovei, Mihai; Evers, Joerg; Keitel, Christoph H.
Robust coherent preparation of entangled states of two coupled flux qubits via dynamic control of the transition frequencies
PHYSICAL REVIEW B 79 (2): Art. No. 024519 JAN 2009
177. Murgida GE, Wisniacki DA, Tamborenea PI
Coherent control of localization, entanglement, and state superpositions in a double quantum dot with two electrons
PHYSICAL REVIEW B 79 (3): Art. No. 035326 JAN 2009
176. Bayer, T; Wollenhaupt, M; Sarpe-Tudoran, C; Baumert, T
Robust Photon Locking
PHYSICAL REVIEW LETTERS 102 (2): Art. No. 023004 JAN 16 2009
175. Bakos, JS; Djotyan, GP; Ignacz, PN; Kedves, MA; Raczkevi, B; Sorlei, Z; Szigeti, J
Generation of frequency-chirped laser pulses by an electro-optic amplitude modulator
OPTICS AND LASERS IN ENGINEERING 47 (1): 19-23 JAN 2009
174. Balint-Kurti, Gabriel G.; Zou, Shiyang; Brown, Alex
OPTIMAL CONTROL THEORY FOR MANIPULATING MOLECULAR PROCESSES
ADVANCES IN CHEMICAL PHYSICS, VOL 138 138: 43-94 2008
173. Siewert, J; Falci, G; Mangano, G; Paladino, E; Brandes, T
STIMULATED RAMAN ADIABATIC PASSAGE WITH A COOPER PAIR BOX
CONTROLLABLE QUANTUM STATES: MESOSCOPIC SUPERCONDUCTIVITY AND SPINTRONICS : 21-26 2008
172. Jong, Lenneke M.; Greentree, Andrew D.; Conrad, Vincent I.; Hollenberg, Lloyd C. L.; Jamieson, David N.
Coherent Tunneling Adiabatic Passage with the Alternating Coupling Scheme
2008 INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY : 160-163 2008
171. Greentree, Andrew D.; Jong, Lenneke M.; Van Donkelaar, Jessica A.; Devitt, Simon J.; Cole, Jared H.
Spatial adiabatic passage as a quantum wire
2008 INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY : 156-159 2008
170. Suchowski, Haim; Oron, Dan; Arie, Ady; Silberberg, Yaron
Geometrical representation of sum frequency generation and adiabatic frequency conversion
PHYSICAL REVIEW A 78 (6): Art. No. 063821 Part B DEC 2008
169. Wei, LF
Quantum computation based on population transfers by rapid adiabatic passages
SOLID -STATE QUANTUM COMPUTING, PROCEEDINGS 1074: 42-43 2008
168. Wang, Hai-Hua; Du, Dun-Mao; Fan, Yun-Fei; Li, Ai-Jun; Wang, Lei; Wei, Xiao-Gang; Kang, Zhi-Hui; Jiang, Yun; Wu, Jin-Hui; Gao, Jin-Yue
Enhanced four-wave mixing by atomic coherence in a Pr³⁺:Y₂SiO₅ crystal
APPLIED PHYSICS LETTERS 93 (23): Art. No. 231107 DEC 8 2008
167. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic fidelity for atom-molecule conversion in a nonlinear three-level Lambda system
PHYSICAL REVIEW A 78 (5): Art. No. 053410 NOV 2008
166. Lahini, Y; Pozzi, F; Sorel, M; Morandotti, R; Christodoulides, DN; Silberberg, Y
Effect of Nonlinearity on Adiabatic Evolution of Light
PHYSICAL REVIEW LETTERS 101 (19): Art. No. 193901 NOV 7 2008
165. Chen Ju-Mei; Li Cheng-Zu; Liang Lin-Mei; Chen Ping-Xing; Dai Hong-Yi
Generation of Atomic Cluster State via Adiabatic Evolution of Dark Eigenstates
COMMUNICATIONS IN THEORETICAL PHYSICS 50 (4): 974-978 OCT 15 2008
164. Alexander, AL; Lauro, R; Louchet, A; Chaneliere, T; Le Gouet, JL
Stimulated Raman adiabatic passage in Tm³⁺:YAG
PHYSICAL REVIEW B 78 (14): Art. No. 144407 OCT 2008
163. Demirplak, Mustafa; Rice, Stuart A.
On the consistency, extremal, and global properties of counteradiabatic fields
JOURNAL OF CHEMICAL PHYSICS 129 (15): Art. No. 154111 OCT 21 2008
162. Pelzer, A; Ramakrishna, S; Seideman, T
Optimal control of rotational motions in dissipative media
JOURNAL OF CHEMICAL PHYSICS 129 (13): Art. No. 134301 OCT 7 2008
161. Dong, P; Zheng, XH; Cao, ZL
IMPLEMENTATION OF ONE-QUBIT DEUTSCH-JOZSA ALGORITHM IN A TRIPLE-WELL SEMICONDUCTOR QUANTUM DOT SYSTEM
MODERN PHYSICS LETTERS B 22 (24): 2383-2389 SEP 20 2008
160. Zhang, Qun; Hepburn, John W.
In situ accurate determination of the zero time delay between two independent

- ultrashort laser pulses by observing the oscillation of an atomic excited wave packet
OPTICS LETTERS 33 (16): 1893-1895 AUG 15 2008
159. Daems, D; Guerin, S
Analog Grover search by adiabatic passage in a cavity-laser-atom system
PHYSICAL REVIEW A 78 (2): Art. No. 022330 Part A AUG 2008
158. Yang, Xihua; Zhu, Shiyao
Collision-assisted electromagnetically induced control of coherent population transfer
PHYSICAL REVIEW A 78 (2): Art. No. 023818 Part B AUG 2008
157. Sarkar, Chitrakshya; Bhattacharya, Rangana; Bhattacharyya, S. S.; Saha, Samir
Control of population transfer in a multilevel Li-2 molecule by stimulated hyper-Raman nonadiabatic passage with chirped laser pulses
PHYSICAL REVIEW A 78 (2): Art. No. 023406 Part B AUG 2008
156. Huang, Xiu-Hua; Lin, Gong-Wei; Ye, Ming-Yong; Tang, Yao-Xiang; Lin, Xiu-Min
Realization of a singlet state via adiabatic evolution of dark eigenstates
OPTICS COMMUNICATIONS 281 (17): 4545-4548 SEP 1 2008
155. Longhi, S
Transfer of light waves in optical waveguides via a continuum
PHYSICAL REVIEW A 78 (1): Art. No. 013815 JUL 2008
154. Fuehrer, Thorsten; Walther, Thomas
Novel approaches to tunable lasers: Extending mode-hop-free tuning range and spectral coverage
FREQUENZ 62 (3-4): 84-88 MAR-APR 2008
153. Zheng, An-Shou; Cheng, Yong-Jin; Liu, Ji-Bing; Li, Tei-Ping
Realization of the Greenberg-Horne-Zeilinger (GHZ) state and SWAP gate
Superconducting Quantum-interference devices in a cavity via adiabatic passage
MODERN PHYSICS LETTERS B 22 (15): 1507-1513 JUN 20 2008
152. Cole, JH; Greentree, AD; Hollenberg, LCL; Das Sarma, S
Spatial adiabatic passage in a realistic triple well structure
PHYSICAL REVIEW B 77 (23): Art. No. 235418 JUN 2008
151. Yang, Xihua; Zhu, Shiyao
Control of coherent population transfer via spontaneous decay-induced coherence
PHYSICAL REVIEW A 77 (6): Art. No. 063822 JUN 2008
150. Tsubouchi, Masaaki; Momose, Takamasa
Rovibrational wave-packet manipulation using shaped midinfrared femtosecond pulses toward quantum computation: Optimization of pulse shape by a genetic algorithm
PHYSICAL REVIEW A 77 (5): Art. No. 052326 Part A MAY 2008
149. Mangano, G; Siewert, J; Falci, G
Sensitivity to parameters of STIRAP in a Cooper pair box
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 259-268 JUL 2008
148. Yan, Tian-Min; Han, Yong-Chang; Yuan, Kai-Jun; Cong, Shu-Lin
Steering population transfer via continuum structure of the Li-2 molecule with ultrashort laser pulses
CHEMICAL PHYSICS 348 (1-3): 39-44 JUN 2 2008
147. Itin, AP; Watanabe, S; Konotop, VV
Nonlinear dynamical instabilities of a condensate system in an atom-molecule dark state
PHYSICAL REVIEW A 77 (4): Art. No. 043610 APR 2008
146. Zheng An-Shou; Shen Xiao-Fang; Liu Ji-Bing; Bi Jie; Du Qiu-Jiao
Preparation of W state with superconducting quantum-interference devices in a cavity via adiabatic passage
CHINESE PHYSICS LETTERS 25 (4): 1195-1197 APR 2008
145. Shir, OM; Beltrani, V; Back, T; Rabitz, H; Vrakking, MJJ
On the diversity of multiple optimal controls for quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074021 APR 14 2008
144. Selle, R; Brixner, T; Bayer, T; Wollenhaupt, M; Baumert, T
Modelling of ultrafast coherent strong-field dynamics in potassium with neural networks
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074019 APR 14 2008
143. Liu, Ji-Cai; Felicissimo, Viviane Costa; Guimaraes, Freddy Fernandes; Wang, Chuan-Kui; Gel'mukhanov, Faris
Coherent control of population and pulse propagation beyond the rotating wave approximation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074016 APR 14 2008
142. Lerch, Eliza-Beth W.; Dai, Xingcan; Torres, Elva A.; Ballard, Joshua B.; Stauffer, Hans U.; Leone, Stephen R.
Manipulation of ro-vibronic wave packet composition using chirped ultrafast laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074015 APR 14 2008
141. Bayer, Tim; Wollenhaupt, Matthias; Baumert, Thomas
Strong-field control landscapes of coherent electronic excitation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074007 APR 14 2008
140. Roy, A; Reichl, LE
Coherent control of trapped bosons
PHYSICAL REVIEW A 77 (3): Art. No. 033418 MAR 2008
139. Kamleitner, I; Cresser, J; Twamley, J
Adiabatic information transport in the presence of decoherence
PHYSICAL REVIEW A 77 (3): Art. No. 032331 MAR 2008
138. Wei, LF; Johansson, JR; Cen, LX; Ashhab, S; Nori, F
Controllable coherent population transfers in superconducting qubits for quantum computing
PHYSICAL REVIEW LETTERS 100 (11): Art. No. 113601 MAR 21 2008
137. Lu Dao-Ming; Zheng Shi-Biao
Entanglement and phase-covariant cloning for multiple trapped ions via adiabatic passage
COMMUNICATIONS IN THEORETICAL PHYSICS 49 (3): 649-651 MAR 15 2008
136. Tsubouchi, M; Khramov, A; Momose, T
Rovibrational wave-packet manipulation using shaped midinfrared femtosecond pulses
PHYSICAL REVIEW A 77 (2): Art. No. 023405 FEB 2008
135. Choi, Hyeonho; Son, Won-Joon; Shin, Seokmin; Chang, Bo Y.; Sola, Ignacio R.
Selective photodissociation in diatomic molecules by dynamical Stark-shift control
JOURNAL OF CHEMICAL PHYSICS 128 (10): Art. No. 104315 MAR 14 2008
134. Nest, M; Remacle, F; Levine, RD
Pump and probe ultrafast electron dynamics in LiH: a computational study
NEW JOURNAL OF PHYSICS 10: Art. No. 025019 FEB 29 2008
133. Ye, Sai-Yun; Zhong, Zhi-Rong; Zheng, Shi-Biao
Deterministic generation of three-dimensional entanglement for two atoms separately trapped in two optical cavities
PHYSICAL REVIEW A 77 (1): Art. No. 014303 JAN 2008
132. Ye, Sal-Yun; Zheng, Shi-Biao
Scheme for reliable realization of quantum logic gates for two atoms separately trapped in two distant cavities via optical fibers
OPTICS COMMUNICATIONS 281 (5): 1306-1311 MAR 1 2008
131. Fainberg, BD; Jouravlev, M; Nitzan, A
Light-induced current in molecular tunneling junctions excited with intense shaped pulses
PHYSICAL REVIEW B 76 (24): Art. No. 245329 DEC 2007
130. Brown, Alex
Effects of permanent dipole moments on stimulated Raman adiabatic passage
CHEMICAL PHYSICS 342 (1-3): 16-24 DEC 6 2007
129. Zhang, Wei-Min; Wu, Yin-Zhong; Soo, Chopin; Feng, Mang
Charge-to-spin conversion of electron entanglement states and spin-interaction-free solid-state quantum computation
PHYSICAL REVIEW B 76 (16): Art. No. 165311 OCT 2007
128. Ndong M, Bomble L, Sugny D, et al.
NOT gate in a cis-trans photoisomerization model
PHYSICAL REVIEW A 76 (4): Art. No. 043424 OCT 2007

127. Ye Sai-Yun
Teleportation of an unknown atomic state via adiabatic passage
COMMUNICATIONS IN THEORETICAL PHYSICS 48 (5): 834-836 NOV 15 2007
126. Jin, Guang-Ri; Kim, Sang Wook
Improvement of conversion efficiency of atom-molecule Bose-Einstein condensate
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 51: S151-S155 Suppl. 2 OCT 2007
125. Jang, HU; Blicek, J; Veshapidze, G; Trachy, ML; DePaola, BD
An auto-incrementing nanosecond delay circuit
REVIEW OF SCIENTIFIC INSTRUMENTS 78 (9): Art. No. 094702 SEP 2007
124. Datta, A; Marx, CA; Uiberacker, C; Jakubetz, W
Dipole mediated tunnelling: Robust single-pulse population transfer across dipolar double-well systems
CHEMICAL PHYSICS 338 (2-3): 237-251 SEP 25 2007
123. Chang, BY; Sola, IR
Raman excitation of rovibrational coherent and incoherent states via adiabatic passage assisted by dynamic Stark effect
CHEMICAL PHYSICS 338 (2-3): 228-236 SEP 25 2007
122. Zheng Shi-Biao
Quantum phase gates for trapped ions via adiabatic passage
COMMUNICATIONS IN THEORETICAL PHYSICS 48 (4): 626-628 OCT 15 2007
121. Daems, D; Guerin, S.
Adiabatic quantum search scheme with atoms in a cavity driven by lasers
PHYSICAL REVIEW LETTERS 99 (17): Art. No. 170503 OCT 26 2007
120. Graefe, S.; Kiefer, W.; Engel, V.
On the limitations of adiabatic population transfer between molecular electronic states induced by intense femtosecond laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (13): Art. No. 134306 OCT 7 2007
119. Yang, Rong-Can; Li, Hong-Cai; Lin, Xiu; Huang, Zhi-Ping; Xie, Hong; Lin, Han-Feng; Huang, Gui-Ru
Simple scheme for preparing W states and cloning via adiabatic passage in ion-trap systems
OPTICS COMMUNICATIONS 279 (2): 399-402 NOV 15 2007
118. Ye Sai-Yun
Generation and concentration of atomic entangled state via adiabatic evolution
CHINESE PHYSICS 16 (10): 2968-2972 OCT 2007
117. Fainberg BD, Gorbunov VA
Adiabatic passage in a three-state system with non-markovian relaxation: The role of excited-state absorption and two-exciton processes
JOURNAL OF PHYSICAL CHEMISTRY A 111 (38): 9560-9569 SEP 27 2007
116. Sarkar C, Bhattacharya R, Bhattacharyya SS, et al.
Population transfer to excited vibrational levels of H-2 molecule by stimulated hyper-Raman passage with chirped laser pulses
JOURNAL OF CHEMICAL PHYSICS 127 (10): Art. No. 104304 SEP 14 2007
115. Demeter G, Dzsotjan D, Djotyan GP
Propagation of frequency-chirped laser pulses in a medium of atoms with a Lambda-level scheme
PHYSICAL REVIEW A 76 (2): Art. No. 023827 AUG 2007
114. Bateman J, Freearge T
Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry
PHYSICAL REVIEW A 76 (1): Art. No. 013416 JUL 2007
113. Holder BP, Reichl LE
Stimulated-Raman-adiabatic-passage-like transitions in a harmonically modulated optical lattice
PHYSICAL REVIEW A 76 (1): Art. No. 013420 JUL 2007
112. Oberst M, Vewinger F, Lvovsky AI
Time-resolved probing of the ground state coherence in rubidium
OPTICS LETTERS 32 (12): 1755-1757 JUN 15 2007
111. Sugny, D., Ndong, M., Lauvergnat, D., Justum, Y., Desouter-Lecomte, M.
Laser control in open molecular systems: STIRAP and Optimal Control
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 190 (2-3): 359-371 AUG 15 2007
110. Grafe, S., Akimov, D.A., Bohm, B., Zheltikov, A.M., Scully, M.O., Kiefer, W., Engel, V., Siebert, T.
Strong-field dressing of vibrational manifolds within ultrafast coherent Raman excitation
JOURNAL OF RAMAN SPECTROSCOPY 38 (8): 998-1005 AUG 2007
109. Strasfeld, D.B., Shim, S.-H., Zanni, M.T.
Controlling vibrational excitation with shaped mid-IR pulses
PHYSICAL REVIEW LETTERS 99 (3): doi:10.1103/PhysRevLett.99.038102 JUL 20 2007
108. Tchitchekova DS, Chelkowski S, Bandrauk AD
Adiabatic climbing of vibrational ladders using Raman transitions with chirped pump lasers: effect of higher electronic surfaces and control of the shapes of vibrational wave packets
JOURNAL OF RAMAN SPECTROSCOPY 38 (7): 927-935 JUL 2007
107. Bakos, J.S., Djotyan, G.P., Ignacz, P.N., Kedves, M.A., Serenyi, M., Sorlei, Zs., Szigeti, J., Toth, Z.
Acceleration of cold Rb atoms by frequency modulated light pulses
EUROPEAN PHYSICAL JOURNAL D 44 (1): 141-149 JUL 2007
106. Longhi, S.
Photonic transport via chirped adiabatic passage in optical waveguides
2007 Journal of Physics B: Atomic, Molecular and Optical Physics 40 (12), art. no. F01, pp. F189-F195
105. Chang BY, Choi HH, Shin S, et al.
Quantum-state-selective two-photon excitation of multilevel systems assisted by the Stark shift
PHYSICAL REVIEW A 75 (6): Art. No. 063405 JUN 2007
104. Xue Y, Wang G, Wu JH, et al.
Optical gain properties in a coherently prepared four-level cold atomic system
PHYSICAL REVIEW A 75 (6): Art. No. 063832 JUN 2007
103. Wu HZ, Yang ZB, Zheng SB
Robust generation of four-mode entangled states through adiabatic passages
CHINESE PHYSICS LETTERS 24 (7): 1795-1798 JUL 2007
102. Nuernberger P, Vogt G, Brixner T, et al.
Femtosecond quantum control of molecular dynamics in the condensed phase
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 9 (20): 2470-2497 2007
101. Han YC, Wang SM, Yuan KJ, et al.
Population transfer of the Na-2 molecule via continuum state
CHEMICAL PHYSICS 333 (2-3): 119-127 MAR 30 2007
100. Song KH, Xiang SH, Liu Q, et al.
Quantum computation and W-state generation using superconducting flux qubits coupled to a cavity without geometric and dynamical manipulation
PHYSICAL REVIEW A 75 (3): Art. No. 032347 MAR 2007
99. Zheng SB
Nongeometric phase gates via adiabatic passage of dark states in cavity QED
PHYSICS LETTERS A 362 (2-3): 125-127 FEB 26 2007
98. Cheng TW, Darmawan H, Brown A
Stimulated Raman adiabatic passage in molecules: The effects of background states
PHYSICAL REVIEW A 75 (1): Art. No. 013411 JAN 2007
97. Schirmer SG
Quantum choreography: making molecules dance to technology's tune
PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES 364 (1849): 3423-3438 DEC 15 2006
96. Grum-Grzhimailo AN, Kondorskiy AD, Bartschat K
Controlling the angular distribution of atomic photoelectrons in the region of laser-induced continuum structure in the femtosecond time domain
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (22): 4659-4671 NOV 28 2006
95. Nagaya K, Lin SH, Nakamura H
Control of nonadiabatic dissociation dynamics with the use of laser-induced wave packet interferences
JOURNAL OF CHEMICAL PHYSICS 125 (21): Art. No. 214311 DEC 7 2006
94. Sugny D, Kontz C, Jauslin HR
Target states and control of molecular alignment in a dissipative medium

93. Zheng SB
Tunable nongeometric phase gates for two hot ions via adiabatic evolution of dark states
CHINESE PHYSICS LETTERS 23 (12): 3155-3157 DEC 2006
92. Demirplak M, Rice SA
Adiabatic transfer of population in a dense fluid: The role of dephasing statistics
JOURNAL OF CHEMICAL PHYSICS 125 (19): Art. No. 194517 NOV 21 2006
91. Harkonen K, Karki O, Suominen KA
Tailoring of motional states in double-well potentials by time-dependent processes
PHYSICAL REVIEW A 74 (4): Art. No. 043404 OCT 2006
90. Sugny D, Kontz C, Ndong M, et al.
Laser control in a bifurcating region
PHYSICAL REVIEW A 74 (4): Art. No. 043419 OCT 2006
89. Hohenester U, Fabian J, Troiani F
Adiabatic passage schemes in coupled semiconductor nanostructures
OPTICS COMMUNICATIONS 264 (2): 426-434 AUG 15 2006
88. McCulloch MT, Duxbury G, Langford N
Observation of saturation and rapid passage signals in the 10.25 micron spectrum of ethylene using a frequency chirped quantum cascade laser
MOLECULAR PHYSICS 104 (16-17): 2767-2779 AUG-SEP 2006
87. Hollenberg LCL, Greentree AD, Fowler AG, et al.
Two-dimensional architectures for donor-based quantum computing
PHYSICAL REVIEW B 74 (4): Art. No. 045311 JUL 2006
86. Pack MV, Camacho RM, Howell JC
Transients of the electromagnetically-induced-transparency-enhanced refractive Kerr nonlinearity: Theory
PHYSICAL REVIEW A 74 (1): Art. No. 013812 JUL 2006
85. Marquetand P, Engel V
Complete local control of molecular excited state photo-fragmentation
CHEMICAL PHYSICS LETTERS 426 (4-6): 263-267 AUG 4 2006
84. Tamura H, Nanbu S, Ishida T, et al.
Laser control of reactions of photoswitching functional molecules
JOURNAL OF CHEMICAL PHYSICS 125 (3): Art. No. 034307 JUL 21 2006
83. Zhang XZ, Ma QZ, Li XH
Coherent population transfer in Rydberg potassium atom by a single frequency-chirped laser pulse
CHINESE PHYSICS 15 (7): 1497-1501 JUL 2006
82. Wollenhaupt M, Baumert T
Ultrafast strong field quantum control on K-2 dimers
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 180 (3): 248-255 JUN 25 2006
81. Greentree AD, Devitt SJ, Hollenberg LCL
Quantum-information transport to multiple receivers
PHYSICAL REVIEW A 73 (3): Art. No. 032319 MAR 2006
80. Remacle F, Levine RD
All-optical digital logic: Full addition or subtraction on a three-state system
PHYSICAL REVIEW A 73 (3): Art. No. 033820 MAR 2006
79. Etinski M, Uiberacker C, Jakubetz W
Counteradiabatic suppression of background state population in resonance leaking by controlling intermediate branching
JOURNAL OF CHEMICAL PHYSICS 124 (12): Art. No. 124110 MAR 28 2006
78. Maeda H, Gurian JH, Norum DVL, et al.
Coherent population transfer in an atom by multiphoton adiabatic rapid passage
PHYSICAL REVIEW LETTERS 96 (7): Art. No. 073002 FEB 24 2006
77. Anderlini M, Arimondo E
Control scheme for two photon ionization of condensate atoms
OPTICS COMMUNICATIONS 259 (2): 676-682 MAR 15 2006
76. Wollenhaupt A, Liese D, Prakelt A, et al.
Quantum control by ultrafast dressed states tailoring
CHEMICAL PHYSICS LETTERS 419 (1-3): 184-190 FEB 15 2006
75. Chang BY, Lee S, Sola IR, et al.
Adiabatic and diabatic transformations as physical resources for wave packet squeezing
PHYSICAL REVIEW A 73 (1): Art. No. 013404 JAN 2006
74. Graefe EM, Korsch HJ, Witthaut D
Mean-field dynamics of a Bose-Einstein condensate in a time-dependent triple-well trap: Nonlinear eigenstates, Landau-Zener models, and stimulated Raman adiabatic passage
PHYSICAL REVIEW A 73 (1): Art. No. 013617 JAN 2006
73. Yan X, He QY, LaRocca GC, et al.
Dynamic control of four-wave-mixing enhancement in coherently driven four-level atoms
PHYSICAL REVIEW A 73 (1): Art. No. 013816 JAN 2006
72. Gonzalez-Vazquez J, Sola IR, Santamaria J
Adiabatic passage by light-induced potentials in polyatomic molecules
JOURNAL OF PHYSICAL CHEMISTRY A 110 (4): 1586-1593 FEB 2 2006
71. Marquetand P, Grafe S, Scheidel D, et al.
Local control of the quantum dynamics in multiple potential wells
JOURNAL OF CHEMICAL PHYSICS 124 (5): Art. No. 054325 FEB 7 2006
70. Heesel E, Garraway BM, Marangos JP
Analysis of adiabatic passage by light-induced potentials with chirped laser pulses in three- and four-level diatomic systems
JOURNAL OF CHEMICAL PHYSICS 124 (2): Art. No. 024320 JAN 14 2006
69. Wollenhaupt M, Prakelt A, Sarpe-Tudoran C, et al.
Quantum control by selective population of dressed states using intense chirped femtosecond laser pulses
APPLIED PHYSICS B-LASERS AND OPTICS 82 (2): 183-188 FEB 2006
68. Fainberg BD, Levinsky B, Gorbunov VA
Chirped-pulse control of carriers in semiconductors: the role of many-body effects
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 22 (12): 2715-2727 DEC 2005
67. Sugawara M
Quantum dynamics driven by continuous laser fields under measurements: Towards measurement-assisted quantum dynamics control
JOURNAL OF CHEMICAL PHYSICS 123 (20): Art. No. 204115 NOV 22 2005
66. Wollenhaupt M, Prakelt A, Sarpe-Tudoran C, et al.
Strong field quantum control by selective population of dressed states
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 7 (10): S270-S276 Sp. Iss. SI OCT 2005
65. Wu YZ, Zhang WM, Soo C
Quantum computation based on electron spin qubits without spin-spin interaction
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION 3: 155-162 Suppl. S NOV 2005
64. Carley RE, Heesel E, Fielding HH
Femtosecond lasers in gas phase chemistry
CHEMICAL SOCIETY REVIEWS 34 (11): 949-969 NOV 2005
63. Fleischer A, Moiseyev N
Adiabatic theorem for non-Hermitian time-dependent open systems
PHYSICAL REVIEW A 72 (3): Art. No. 032103 SEP 2005
62. Sugny D, Keller A, Atabek O, et al.
Control of mixed-state quantum systems by a train of short pulses
PHYSICAL REVIEW A 72 (3): Art. No. 032704 SEP 2005
61. Woo SJ, Choi S, Bigelow NP
Controlling quasiparticle excitations in a trapped Bose-Einstein condensate
PHYSICAL REVIEW A 72 (2): Art. No. 021605 AUG 2005
60. Zheng SB
Nongeometric conditional phase shift via adiabatic evolution of dark eigenstates: A new approach to quantum computation
PHYSICAL REVIEW LETTERS 95 (8): Art. No. 080502 AUG 19 2005
59. Wollenhaupt M, Engel V, Baumert T
Femtosecond laser photoelectron spectroscopy on atoms and small molecules:

- Prototype studies in quantum control
ANNUAL REVIEW OF PHYSICAL CHEMISTRY 56: 25-56 2005
58. Wu YZ, Zhang WM
Implementing controlled-NOT gate based on free spin qubits with semiconductor quantum-dot array
EUROPHYSICS LETTERS 71 (4): 524-529 AUG 2005
57. Grafe S, Erdmann M, Engel V
Population transfer in the multiphoton excitation of molecules
PHYSICAL REVIEW A 72 (1): Art. No. 013404 Part A-B JUL 2005
56. Jirari H, Potz W
Optimal coherent control of dissipative N-level systems
PHYSICAL REVIEW A 72 (1): Art. No. 013409 Part A-B JUL 2005
55. Greentree, A.D., Cole, J.H., Hamilton, A.R., Hollenberg, L.C.L.
Scaling of coherent tunneling adiabatic passage in solid-state coherent quantum systems
2005 Proceedings of SPIE - The International Society for Optical Engineering 5650, pp. 72-80
54. Sugny D, Keller A, Atabek O, et al.
Laser control for the optimal evolution of pure quantum states
PHYSICAL REVIEW A 71 (6): Art. No. 063402 JUN 2005
53. Karpati, A., Kis, Z., Adam, P.
Robust state preparation in a degenerate four-state system
2005 Acta Physica Hungarica, Series B: Quantum Electronics 23 (1-2), pp. 41-47
52. Zheng SB
Multi-atom, entanglement engineering and phase-covariant cloning via adiabatic passage
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 7 (5): 139-141 MAY 2005
51. Camp HA, Shah MH, Trachy ML, et al.
Numerical exploration of coherent excitation in three-level systems
PHYSICAL REVIEW A 71 (5): Art. No. 053401 MAY 2005
50. Mohring B, Bienert M, Haug F, et al.
Extracting atoms on demand with lasers
PHYSICAL REVIEW A 71 (5): Art. No. 053601 MAY 2005
49. Grafe S, Meier C, Engel V
Instantaneous dynamics and quantum control fields: Principle and numerical applications
JOURNAL OF CHEMICAL PHYSICS 122 (18): Art. No. 184103 MAY 8 2005
48. Potz W
Double-slit versus single-slit behavior in the intersubband absorption of semiconductor heterostructures
PHYSICAL REVIEW B 71 (12): Art. No. 125331 MAR 2005
47. Greentree AD, Hamilton AR, Hollenberg LCL, et al.
Electrical readout of a spin qubit without double occupancy
PHYSICAL REVIEW B 71 (11): Art. No. 113310 MAR 2005
46. Cole JH, Greentree AD, Wellard CJ, et al.
Quantum-dot cellular automata using buried dopants
PHYSICAL REVIEW B 71 (11): Art. No. 115302 MAR 2005
45. Khudaverdyan M, Alt W, Dotsenko I, et al.
Adiabatic quantum state manipulation of single trapped atoms
PHYSICAL REVIEW A 71 (3): Art. No. 031404 Part A MAR 2005
44. Demirplak M, Rice SA
Assisted adiabatic passage revisited
JOURNAL OF PHYSICAL CHEMISTRY B 109 (14): 6838-6844 APR 14 2005
43. Amniet-Talab M, Guerin S, Sangouard N, et al.
Atom-photon, atom-atom, and photon-photon entanglement preparation by fractional adiabatic passage
PHYSICAL REVIEW A 71 (2): Art. No. 023805 FEB 2005
42. Zou SY, Kondorskiy A, Mil'nikov G, et al.
Laser control of electronic transitions of wave packet by using quadratically chirped pulses
JOURNAL OF CHEMICAL PHYSICS 122 (8): Art. No. 084112 FEB 22 2005
41. Zhou YW, Ye CY
Population transfer and coherence in the adiabatic limit by counterintuitive and intuitive pulse sequences
CHINESE PHYSICS 14 (2): 433-438 FEB 2005
40. Djotyan GP, Bakos JS, Sorlei Z, et al.
Coherent control of atomic quantum states by single frequency-chirped laser pulses
PHYSICAL REVIEW A 70 (6): Art. No. 063406 DEC 2004
39. Djotyan, G.P., Bakos, J.S., Demeter, G., Ignacz, P.N., Kedves, M.A., Sorlei, Z., Szigeti, J., Toth, Z.L.
Coherent interaction of frequency-modulated laser pulses with Rb atoms
2004 Acta Physica Hungarica, Series B: Quantum Electronics 20 (3-4), pp. 167-176
38. Greentree AD, Cole JH, Hamilton AR, et al.
Coherent electronic transfer in quantum dot systems using adiabatic passage
PHYSICAL REVIEW B 70 (23): Art. No. 235317 DEC 2004
37. Ye CY, Sautenkov VA, Rostovtsev TV, et al.
Control of population and atomic coherence by adiabatic rapid passage and optimization of coherent anti-Stokes Raman scattering signal by maximal coherence
JOURNAL OF MODERN OPTICS 51 (16-18): 2555-2569 Sp. Iss. SI NOV-DEC 2004
36. Chatel B, Degert J, Girard B
Role of quadratic and cubic spectral phases in ladder climbing with ultrashort pulses
PHYSICAL REVIEW A 70 (5): Art. No. 053414 NOV 2004
35. Chang BY, Lee S, Sola IR
Stationary molecular wave packets at nonequilibrium nuclear configurations
JOURNAL OF CHEMICAL PHYSICS 121 (22): 11118-11128 DEC 8 2004
34. Fainberg, B.D., Gorbunov, V.A., Lin, S.H.
Coherent control of non-radiative transitions: Long-range electron transfer
2004 Springer Series in Chemical Physics 79, pp. 502-504
33. Karpati A, Kis Z, Adam P
Engineering mixed states in a degenerate four-state system
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 193003 NOV 5 2004
32. Fainberg BD, Gorbunov VA
Coherent population transfer in molecules coupled with a dissipative environment by intense ultrashort chirped pulse. II. A simple model
JOURNAL OF CHEMICAL PHYSICS 121 (18): 8748-8754 NOV 8 2004
31. Vijay A, Kouri DJ, Hoffman DK
Scattering and bound states: A Lorentzian function-based spectral filter approach
JOURNAL OF PHYSICAL CHEMISTRY A 108 (41): 8987-9003 OCT 14 2004
30. Ticozzi F, Ferrante A, Pavon M
Robust steering of n-level quantum systems
IEEE TRANSACTIONS ON AUTOMATIC CONTROL 49 (10): 1742-1745 OCT 2004
29. Kis Z, Paspalakis E
Controlled creation of entangled states of excitons in coupled quantum dots
JOURNAL OF APPLIED PHYSICS 96 (6): 3435-3439 SEP 15 2004
28. Sun H, Guo H, Deng DM, et al.
Coherent population transfer in a three-level Lambda system driven by unmatched Gaussian pulses
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 45 (2): 375-379 AUG 2004
27. Amniet-Talab M, Lagrange S, Guerin S, et al.
Generation of multiphoton Fock states by bichromatic adiabatic passage: Topological analysis
PHYSICAL REVIEW A 70 (1): Art. No. 013807 JUL 2004
26. Greentree AD, Hamilton AR, Green F
Charge shelving and bias spectroscopy for the readout of a charge qubit on the basis of superposition states
PHYSICAL REVIEW B 70 (4): Art. No. 041305 JUL 2004
25. Band YB, Kallush S, Baer R
Rotational aspects of short-pulse population transfer in diatomic molecules
CHEMICAL PHYSICS LETTERS 392 (1-3): 23-27 JUL 1 2004
24. Witte T, Yeston JS, Motzkus M, et al.
Femtosecond infrared coherent excitation of liquid phase vibrational population

distributions ($\nu > 5$)

CHEMICAL PHYSICS LETTERS 392 (1-3): 156-161 JUL 1 2004

23. Pachos JK, Beige A

Decoherence-free dynamical and geometrical entangling phase gates
PHYSICAL REVIEW A 69 (3): Art. No. 033817 MAR 2004

22. Chen PC, Piermarocchi C, Sham LJ, et al.

Theory of quantum optical control of a single spin in a quantum dot
PHYSICAL REVIEW B 69 (7): Art. No. 075320 FEB 2004

21. Kis Z, Paspalakis E

Arbitrary rotation and entanglement of flux SQUID qubits
PHYSICAL REVIEW B 69 (2): Art. No. 024510 JAN 2004

20. Djotyan GP, Bakos JS, Demeter G, et al.

Coherent population transfer in Rb atoms by frequency-chirped laser pulses
PHYSICAL REVIEW A 68 (5): Art. No. 053409 NOV 2003

19. Demirplak M, Rice SA

Adiabatic population transfer with control fields
JOURNAL OF PHYSICAL CHEMISTRY A 107 (46): 9937-9945 NOV 20 2003

18. Malinovsky VS, Santamaria J, Sola IR

Controlling non-Franck-Condon transitions: Counterintuitive schemes of population transfer in the adiabatic and strong adiabatic regimes
JOURNAL OF PHYSICAL CHEMISTRY A 107 (40): 8259-8270 OCT 9 2003

17. de Seze E, Lavielle V, Lorgere I, et al.

Chirped pulse generation of a narrow absorption line in a TM3+: YAG crystal
OPTICS COMMUNICATIONS 223 (4-6): 321-330 AUG 1 2003

16. Sola IR, Malinovsky VS

Collapse of the stimulated Raman adiabatic passage due to geometrical factors and how to overcome it
PHYSICAL REVIEW A 68 (1): Art. No. 013412 JUL 2003

15. Hu ZF, Du CG, Li SQ

Nonadiabatic effects on population transfer of two Bose-Einstein condensates induced by atomic interaction
CHINESE PHYSICS 12 (7): 708-713 JUL 2003

14. Mitra A, Sola IR, Rabitz H

Revealing quantum-control mechanisms through Hamiltonian encoding in different representations
PHYSICAL REVIEW A 67 (4): Art. No. 043409 APR 2003

13. Alnis J, Blushs K, Auzinsh M, et al.

The Hanle effect and level crossing spectroscopy in Rb vapour under strong laser excitation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (6): 1161-1173 MAR 28 2003

12. Karpati A, Kis Z

Adiabatic creation of coherent superposition states via multiple intermediate states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003

11. Garraway BM, Suominen KA

Robustness of coherent control with light induced potentials
FORTSCHRITTE DER PHYSIK-PROGRESS OF PHYSICS 51 (2-3): 128-134 2003

10. Nagaya K, Teranishi Y, Nakamura H

Control of molecular processes by a sequence of linearly chirped pulses
JOURNAL OF CHEMICAL PHYSICS 117 (21): 9588-9604 DEC 1 2002

9. Thanopoulos I, Shapiro M

Slowing down of light by laser induced barrier hopping
JOURNAL OF CHEMICAL PHYSICS 117 (18): 8404-8411 NOV 8 2002

8. Schirmer SG, Greentree AD, Ramakrishna V, et al.

Constructive control of quantum systems using factorization of unitary operators
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 35 (39): 8315-8339 OCT 4 2002

7. Hu ZF, Du CG, Li DJ, et al.

Stimulated Raman adiabatic population transfer of two Bose-Einstein condensates
CHINESE PHYSICS LETTERS 19 (9): 1234-1237 SEP 2002

6. Greentree AD, Smith TB, de Echaniz SR, et al.

Resonant and off-resonant transients in electromagnetically induced transparency: Turn-on and turn-off dynamics
PHYSICAL REVIEW A 65 (5): Art. No. 053802 Part B MAY 2002

5. Boscain U, Charlot G, Gauthier JP, et al.

Optimal control in laser-induced population transfer for two- and three-level quantum systems
JOURNAL OF MATHEMATICAL PHYSICS 43 (5): 2107-2132 MAY 2002

4. Netz R, Feuerer T, Roberts G, et al.

Coherent population dynamics of a three-level atom in spacetime
PHYSICAL REVIEW A 65 (4): Art. No. 043406 Part B APR 2002

3. Kis Z, Renzoni F

Qubit rotation by stimulated Raman adiabatic passage
PHYSICAL REVIEW A 65 (3): Art. No. 032318 Part A MAR 2002

2. Kis Z, Stenholm S

Nonadiabatic dynamics in the dark subspace of a multilevel stimulated Raman adiabatic passage process
PHYSICAL REVIEW A 64 (6): Art. No. 063406 DEC 2001

1. Nicolaescu R, Fry ES, Walther T

Generation of near-Fourier-transform-limited high-energy pulses in a chain of fiber-bulk amplifiers
OPTICS LETTERS 26 (1): 13-15 JAN 1 2001

=====

39. Vitanov NV, Fleischhauer M, Shore BW, Bergmann K
Coherent manipulation of atoms and molecules by sequential laser pulses
ADVANCES IN ATOMIC MOLECULAR AND OPTICAL PHYSICS 46: 55-190 2001

301. Chen, Jian; Deng, Li; Niu, Yueping; Gong, Shangqing

Double rapid adiabatic passage in three optical waveguides with longitudinally varying detunings
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053705
Published: MAY 11 2021

300. Shirkhaghah, N.; Saadati-Niari, M.; Nedaee-Shakarab, B.

Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

299. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaee-Shakarab, B.

Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

298. Cano, Daniel

Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021

297. Saadati-Niari, M.; Kiazand, M.

Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020

296. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Guo, Chu; Xiong, Xianming; Zhang, Wentao

Long-distance adiabatic wireless energy transfer via multiple coils coupling
RESULTS IN PHYSICS Volume: 19 Article Number: 103478 Published: DEC 2020

295. Qiu, Ming-Yang; Jin, Wei; Qu, Shi-Xian; Li, Chun; Lefkidis, Georgios; Huebner, Wolfgang

Optically- and thermally-induced electronic transitions in a three-level system
PHYSICA SCRIPTA Volume: 95 Issue: 10 Article Number: 105808 Published: OCT 2020

294. Gullans, M. J.; Petta, J. R.

Coherent transport of spin by adiabatic passage in quantum dot arrays
PHYSICAL REVIEW B Volume: 102 Issue: 15 Article Number: 155404
Published: OCT 6 2020

293. Tang Kai; Hu Zhengfeng; Liu Chengpu; Chen Xi
Beam Splitting via Non-Hermitian Stimulated Raman Shortcut to Adiabatic Passage
CHINESE JOURNAL OF LASERS-ZHONGGUO JIGUANG Volume: 47 Issue: 9
Article Number: 0912001 Published: SEP 2020
292. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020
291. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published:
MAR 2020
290. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article
Number: 064006 Published: JUN 15 2020
289. Shirkhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda
systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published:
MAY-JUN 2020
288. Wan, Lin; Moser, Joel; Yan, Ying
Nonadiabatic robust pulses for creating superposition states in a resonant three-
level system
Conference: Annual Conference of Chinese-Society-of-Optical-Engineering (CSOE)
- Quantum Information Technology (AOPC) Location: Beijing, PEOPLES R CHINA
Date: JUL 07-09, 2019
Sponsor(s): SPIE; Chinese Soc Opt Engn; Chinese Soc Astronaut, Photoelectron
Technol Comm; Sci & Technol Low Light Level Night Vis Lab; Sci & Technol Electro
Opt Informat Secur Control Lab; Acad Opto Elect Technol China; Infrared &
Laser Engn; Opt Soc Korea; Opt & Photon Soc Singapore; European Opt Soc; Opt
Soc Japan
QUANTUM INFORMATION TECHNOLOGY (AOPC 2019) Book Series: Proceedings
of SPIE Volume: 11339 Article Number: UNSP 113390D Published: 2019
287. Al-Mahmoud, Mouhamad; Rangelov, Andon A.; Coda, Virginie;
Montemezzani, Germano
Segmented Composite Optical Parametric Amplification
APPLIED SCIENCES-BASEL Volume: 10 Issue: 4 Article Number: 1220
Published: FEB 2020
286. Shirkhanghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-
shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number:
128 Published: MAR 5 2020
285. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020
284. Alrifai, Rim; Coda, Virginie; Rangelov, Andon A.; Montemezzani, Germano
Broadband integrated polarization beam splitting based on anisotropic adiabatic
transfer of light
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063841
Published: DEC 23 2019
283. Hu, M. -G.; Liu, Y.; Grimes, D. D.; Lin, Y. -W.; Gheorghe, A. H.; Vexiau, R.;
Bouloufa-Maafa, N.; Dulieu, O.; Rosenband, T.; Ni, K. -K.
Direct observation of bimolecular reactions of ultracold KRb molecules
SCIENCE Volume: 366 Issue: 6469 Pages: 1111-+ Published: NOV 29 2019
282. Su, Xue Mei; Zhang, Rui; Zhuo, Zhong Chang
All-optical temporal differentiation in hot standing-wave-dressed atoms
OPTICAL AND QUANTUM ELECTRONICS Volume: 51 Issue: 12 Article
Number: 384 Published: DEC 2019
281. Price, Phillip; Yelin, S. F.
Optimal population transfer in combined Feshbach resonances and stimulated-
Raman-adiabatic-passage processes
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.033421 SEP 30 2019
280. Kim, Sanggon; Yu, Ning; Ma, Xuezhi; Zhu, Yangzhi; Liu, Qiushi; Liu, Ming; Yan,
Ruoxue
High external-efficiency nanofocusing for lens-free near-field optical nanoscopy
NATURE PHOTONICS, 13 (9):636-643; 10.1038/s41566-019-0456-9 SEP 2019
279. Singh, Pooja; Patnaik, Anil K.; Roy, Sukesh; Gord, James R.; Rostovtsev, Yuri, V
Influence of coherent population trapping on Raman scattering
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023808 AUG 8 2019
278. Perreault, William E.; Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage examined through the preparation of D-2
($v=2, j=0$) and D-2 ($v=2, j=2, m=0$)
JOURNAL OF CHEMICAL PHYSICS, 150 (23):10.1063/1.5109261 JUN 21 2019
277. Falci, G; Ridolfo, A; Di Stefano, PG; Paladino, E
Ultrastrong coupling probed by Coherent Population Transfer
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-45187-y JUN 25 2019
276. Longhi, Stefano
Topological pumping of edge states via adiabatic passage
PHYSICAL REVIEW B, 99 (15):10.1103/PhysRevB.99.155150 APR 26 2019
275. Segovia, Marc E.; Ventura, Oscar N.
Diffusion and reptation quantum Monte Carlo study of the NaK molecule
MOLECULAR PHYSICS, 117 (6):813-822; 10.1080/00268976.2018.1543900 MAR
19 2019
274. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019
273. Guerrero, Ruben D.; Castellanos, Maria A.; Arango, Carlos A.
Heuristic optimization of analytic laser pulses for vibrational stabilization of
ultracold KRb
JOURNAL OF CHEMICAL PHYSICS, 149 (24):10.1063/1.5052 DEC 28 2018
272. Deng, Li; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in two-level systems with
permanent dipole moments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063830 DEC 20 2018
271. Unanyan, Razmik G.
Excitation of strongly interacting moving Rydberg atoms by photon recoil
momentum
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 228
Published: DEC 21 2018
270. Dimova, E; Steplekova, V; Karatodorov, S; Kyoseva, E
Experimental demonstration of efficient and robust second harmonic generation
using the adiabatic temperature gradient method
Journal of Physics Conference Series, 20th International Summer School on
Vacuum, Electron and Ion Technologies, SEP 25-29, 2017, 992 10.1088/1742-
6596/992/1/012007 2018
269. Shirkhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic
passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG
2018
268. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
267. Raczynski, Andrzej; Zaremba, Jaroslaw; Zielinska-Raczynska, Sylwia
Berry phase in controlled light propagation and storage
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.043861 APR 27 2018
266. Deng, Li; Lin, Gongwei; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in dense two-level
systems
JOURNAL OF MODERN OPTICS, 65 (9):1121-1126;
10.1080/09500340.2018.1426797 2018
265. Zhang, Wei; Liu, Xiaosong; Wu, Honglin; Song, Yunfei; Liu, Weilong; Yang,
Yanqiang
Tracking coherent population transfer and thermal population relaxation in
condensed system by broad-band transient grating spectroscopy
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51
(7):10.1088/1361-6455/aab1aa APR 14 2018

264. Li, Wei; Cen, Li-Xiang
Coherent population transfer in multi-level Allen-Eberly models
QUANTUM INFORMATION PROCESSING, 17 (4):10.1007/s11128-018-1869-y APR 2018
263. Rvachov, Timur M.; Son, Hyungmok; Park, Juliana J.; Ebadi, Sepehr; Zwierlein, Martin W.; Ketterle, Wolfgang; Jamison, Alan O.
Two-photon spectroscopy of the NaLi triplet ground state
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 20 (7):4739-4745; 10.1039/c7cp08481a FEB 21 2018
262. Oukraou, Hassan; Coda, Virginie; Rangelov, Andon A.; Montemezzani, Germano
Broadband photonic transport between waveguides by adiabatic elimination
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.023811 FEB 6 2018
261. Zhang, Qi; Chen, Xi; Guery-Odelin, D.
Reverse engineering protocols for controlling spin dynamics
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017
260. Nedaei-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017
259. Han, Yong-Chang
Steering population transfer between electronic states of the Na-2 molecule beyond the rotating wave approximation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (22):10.1088/1361-6455/aa90d9 NOV 28 2017
258. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS Volume: 64 Issue: 21 Pages: 2376-2384 Published: 2017
257. Liu, Yong-Chun; Li, Bei-Bei; Xiao, Yun-Feng
Electromagnetically induced transparency in optical microcavities
NANOPHOTONICS, 6 (5):789-811; 10.1515/nanoph-2016-0168 SEP 2017
256. Falci, G; Di Stefano, PG; Ridolfo, A; D'Arrigo, A; Paraoanu, GS; Paladino, E
Advances in quantum control of three-level superconducting circuit architectures
FORTSCHRITTE DER PHYSIK-PROGRESS OF PHYSICS, 65 (6-8):SI 10.1002/prop.201600077 JUN 2017
255. Longhi, Stefano
Nonadiabatic robust excitation transfer assisted by an imaginary gauge field
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.062122 JUN 27 2017
254. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited quantum states of molecular hydrogen
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (14):10.1088/1361-6455/aa786f JUL 28 2017
253. Falci, G; Di Stefano, PG; Ridolfo, A; D'Arrigo, A; Paraoanu, GS; Paladino, E
Advances in quantum control of three-level superconducting circuit architectures
FORTSCHRITTE DER PHYSIK-PROGRESS OF PHYSICS, 65 (6-8):SI 10.1002/prop.201600077 JUN 2017
252. Naskar, Somnath; Saha, Subrata; Dey, Tarak Nath; Deb, Bimalendu
Electromagnetically induced transparency in two-colour ultracold photoassociation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (12):10.1088/1361-6455/aa6b43 JUN 28 2017
251. Pletyukhov, Mikhail; Mueller, Niclas; Gritsev, Vladimir
Photonic Kondo-like model
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.043829 APR 20 2017
250. Silveri, MP; Tuorila, JA; Thuneberg, EV; Paraoanu, GS
Quantum systems under frequency modulation
REPORTS ON PROGRESS IN PHYSICS, 80 (5):10.1088/1361-6633/aa5170 MAY 2017
249. Gevorgyan, Mariam; Guerin, Stephane; Leroy, Claude; Ishkhanyan, Artur; Jauslin, Hans-Rudolf
Adiabatic tracking for photo- and magneto-association of Bose-Einstein condensates with Kerr nonlinearities
EUROPEAN PHYSICAL JOURNAL D, 70 (12):10.1140/epjd/e2016-70396-9 DEC 1 2016
248. Gazazyan, EA
Transfer of Populations in the Multi-Level System by Partly Overlapping of the Laser Pulses
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 52 (1):5-9; 10.3103/S1068337217010029 JAN 2017
247. Vepsalainen, Antti; Danilin, Sergey; Paladino, Elisabetta; Falci, Giuseppe; Paraoanu, Gheorghe Sorin
Quantum Control in Qutrit Systems Using Hybrid Rabi-STIRAP Pulses
PHOTONICS, 3 (4):10.3390/photonics3040062 DEC 2016
246. Tian, Si-Cong; Xing, En-Bo; Wan, Ren-Gang; Wang, Chun-Liang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Control of coherence transfer via tunneling in quadruple and multiple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125205 DEC 2016
245. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016
244. Wu, Qi-Cheng; Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan; Zheng, Shi-Biao
Improving the stimulated Raman adiabatic passage via dissipative quantum dynamics
OPTICS EXPRESS, 24 (20):22847-22864; 10.1364/OE.24.022847 OCT 3 2016
243. Tian, Si-Cong; Wan, Ren-Gang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Tunneling-assisted coherent population transfer and creation of coherent superposition states in triple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125203 DEC 2016
242. Nedaei-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
241. Tikhova, OS
Adiabatic transfer of population in five-level system in the absence of four-photon resonance
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 51 (3):250-255; 10.3103/S1068337216030075 JUL 2016
240. Baumgart, I; Cai, JM; Retzker, A; Plenio, MB; Wunderlich, C
Ultrasensitive Magnetometer using a Single Atom
PHYSICAL REVIEW LETTERS, 116 (24):10.1103/PhysRevLett.116.240801 JUN 17 2016
239. Kuhn, Axel
Cavity Induced Interfacing of Atoms and Light
ENGINEERING THE ATOM-PHOTON INTERACTION: CONTROLLING FUNDAMENTAL PROCESSES WITH PHOTONS, ATOMS AND SOLIDS, 3-38; 10.1007/978-3-319-19231-4_1 2015
Book Series: Nano-Optics and Nanophotonics, Edited by: Predojevic A; Mitchell MW
238. Rahelia, A; Sahraib, M; Namdarc, A; Sadighi-Bonabid, R
Coherent control of Kerr nonlinearity via double dark resonances
JETP LETTERS, 103 (6):369-379; 10.1134/S0021364016060096 MAR 2016
237. Di Stefano, PG; Paladino, E; Pope, TJ; Falci, G
Coherent manipulation of noise-protected superconducting artificial atoms in the Lambda scheme
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.051801 MAY 23 2016
236. Tian, Si-Cong; Wan, Ren-Gang; Wang, Chun-Liang; Shu, Shi-Li; Wang, Li-Jie; Tong, Chun-Zhu
Creation and Transfer of Coherence via Technique of Stimulated Raman Adiabatic Passage in Triple Quantum Dots
NANOSCALE RESEARCH LETTERS, 11 10.1186/s11671-016-1433-6 APR 23 2016
235. Zhang, Zhenhua; Tian, Jin; Du, Juan
Selective population transfer and creation of an arbitrary superposition between quantum states in a Lambda-type four-level system by a single linearly chirped pulse
LASER PHYSICS LETTERS, 13 (5):10.1088/1612-2011/13/5/055201 MAY 2016

234. Yang, Rong-Can; Lin, Xiu; Ye, Li-Xiang; Chen, Xiang; He, Juan; Liu, Hong-Yu
Generation of singlet states with Rydberg blockade mechanism and driven by
adiabatic passage
QUANTUM INFORMATION PROCESSING, 15 (2):731-740; 10.1007/s11128-015-
1188-5 FEB 2016
233. Borsalino, D; Vexiau, R; Aymar, M; Luc-Koenig, E; Dulieu, O; Bouloufa-Maafa, N
Prospects for the formation of ultracold polar ground state KCs molecules via an
optical process
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 49
(5):10.1088/0953-4075/49/5/055301 MAR 14 2016
232. Rousseaux, B; Dzsotjan, D; des Francs, GC; Jauslin, HR; Couteau, C; Guerin, S
Adiabatic passage mediated by plasmons: A route towards a decoherence-free
quantum plasmonic platform
PHYSICAL REVIEW B, 93 (4):10.1103/PhysRevB.93.045422 JAN 22 2016
231. Yudin, VI; Taichenachev, AV; Basalae, MY
Dynamic steady state of periodically driven quantum systems
PHYSICAL REVIEW A, 93 (1):10.1103/PhysRevA.93.013820 JAN 13 2016
230. Izadyari, M; Saadati-Niari, M; Khadem-Hosseini, R; Amniat-Talab, M
Creation of N-atom GHZ state in atom-cavity-fiber system by multi-state adiabatic
passage
OPTICAL AND QUANTUM ELECTRONICS, 48 (1):10.1007/s11082-015-0356-2 JAN
2016
229. Chen, Zhen; Chen, Ye-Hong; Xia, Yan
Deterministic generation of singlet state of N atoms in coupled cavities via
adiabatic passage of a dark state
JOURNAL OF MODERN OPTICS, 63 (2):92-102; 10.1080/09500340.2015.1066460
2016
228. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17
2015
227. Chough, Young-Tak
A Numerical Analysis of a Light Slowing and Storage
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN, 84 (12):10.7566/JPSJ.84.124401
DEC 15 2015
226. Yang, Rong-Can; Ye, Li-Xiang; Lin, Xiu; Chen, Xiang; Liu, Hong-Yu
Generation of three-qutrit singlet states with trapped ions via adiabatic passage
QUANTUM INFORMATION PROCESSING, 14 (12):4449-4459; 10.1007/s11128-
015-1130-x DEC 2015
225. Zhang, Zhenhua; Tian, Jin; Du, Juan
Manipulation of population transfer and the creation of an arbitrary
superposition of atomic states using a series of pulse pairs
LASER PHYSICS, 25 (9):10.1088/1054-660X/25/9/095201 SEP 2015
224. Cohen-Tannoudji, Claude
Dark resonances from optical pumping to cold atoms and molecules
PHYSICA SCRIPTA, 90 (8):10.1088/0031-8949/90/8/088013 AUG 2015
223. Orban, A; Vexiau, R; Kriegelsteiner, O; Nagerl, HC; Dulieu, O; Crubellier, A;
Bouloufa-Maafa, N
Model for the hyperfine structure of electronically excited KCs molecules
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.032510 SEP 21 2015
222. Yang, Xihua; Xiao, Min
Electromagnetically Induced Entanglement
SCIENTIFIC REPORTS, 5 10.1038/srep13609 AUG 28 2015
221. Gazazyan, EA; Grigoryan, GG; Chaltykyan, VO
Excitation of Rydberg states of atoms by adiabatic transfer of populations
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 50
(3):233-239; 10.3103/S1068337215030032 JUL 2015
220. Di Stefano, PG; Paladino, E; D'Arrigo, A; Spagnolo, B; Falci, G
DESIGN OF A LAMBDA CONFIGURATION IN ARTIFICIAL COHERENT
NANOSTRUCTURES
ROMANIAN JOURNAL OF PHYSICS, 60 (5-6):676-685; 2015
219. Schuelein, Florian J. R.; Zallo, Eugenio; Atkinson, Paola; Schmidt, Oliver G.;
Trotta, Rinaldo; Rastelli, Armando; Wixforth, Achim; Krenner, Hubert J.
Fourier synthesis of radiofrequency nanomechanical pulses with different shapes
NATURE NANOTECHNOLOGY, 10 (6):512-516; 10.1038/NNANO.2015.72 JUN 2015
218. Di Stefano, PG; Paladino, E; D'Arrigo, A; Falci, G
Population transfer in a Lambda system induced by detunings
PHYSICAL REVIEW B, 91 (22):10.1103/PhysRevB.91.224506 JUN 10 2015
217. Le Kien, Fam; Rauschenbeutel, A.
Electromagnetically induced transparency for guided light in an atomic array
outside an optical nanofiber
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053847 MAY 22 2015
216. Gazazyan, E; Chaltykyan, V
Coherent interactions in nonlinear multilevel media
Journal of Physics Conference Series
3rd International Conference on Mathematical Modeling in Physical Sciences (IC-
MSQUARE), 574 10.1088/1742-6596/574/1/012042 2015
Edited by: Vagenas EC; Vlachos DS; Bastos C; Hofer T; Kominis Y; Kosmas O; LeLay
G; DePadova P; Rode B; Surau E; Varga K
215. Chruscinski, Dariusz; Messina, Antonino; Militello, Benedetto; Napoli, Anna
Interaction-free evolution in the presence of time-dependent Hamiltonians
PHYSICAL REVIEW A, 91 (4):10.1103/PhysRevA.91.042123 APR 20 2015
214. Goldman, N; Juzeliunas, G; Ohberg, P; Spielman, IB
Light-induced gauge fields for ultracold atoms
REPORTS ON PROGRESS IN PHYSICS, 77 (12):10.1088/0034-4885/77/12/126401
DEC 2014
213. Lopez-Duran, David; Aguirre, Nestor; Delgado-Barrio, Gerardo; Villarreal,
Pablo; Gianturco, Franco; de Lara-Castells, Maria
Potential Energy Surface and Bound States of the (X-4 Sigma)KRb-K Complex
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, 115 (1):19-27;
10.1002/qua.24759 JAN 5 2015
212. Huang, Wei; Rangelov, Andon A.; Kyoseva, Elica
Complete achromatic optical switching between two waveguides with a sign flip
of the phase mismatch
PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.053837 NOV 19 2014
211. Saha, Subrata; Rakshit, Arpita; Chakraborty, Debashree; Pal, Arpita; Deb,
Bimalendu
Optical Feshbach resonances through a molecular dark state: Efficient
manipulation of p-wave resonances in fermionic Yb-171 atoms
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.012701 JUL 1 2014
210. Bielas, A; Maska, MM
Fermions and Bosons in a Double-Well Potential
ACTA PHYSICA POLONICA A, 126 (4A):A118-A122; SEP 2014
209. Saab, Mohamad; Doriol, Loic Joubert; Lasorne, Benjamin; Guerin, Stephane;
Gatti, Fabien
A quantum dynamics study of the benzopyran ring opening guided by laser
pulses
CHEMICAL PHYSICS, 442 93-102; 10.1016/j.chemphys.2014.01.016 OCT 17 2014
208. Krois, Guenter; Lackner, Florian; Pototschnig, Johann V.; Buchsteiner,
Thomas; Ernst, Wolfgang E.
Characterization of RbSr molecules: spectral analysis on helium droplets
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 16 (40):22373-22381;
10.1039/c4cp03135k OCT 28 2014
207. Sun, Yuan; Metcalf, Harold
Nonadiabaticity in stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033408 SEP 10 2014
206. Borsalino, D; Londono-Florez, B; Vexiau, R; Dulieu, O; Bouloufa-Maafa, N;
Luc-Koenig, E
Efficient optical schemes to create ultracold KRb molecules in their rovibronic
ground state
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033413 SEP 15 2014
205. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of
coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499;
10.1080/09500340.2014.942404 2014
204. Torosov, Boyan T.; Della Valle, Giuseppe; Longhi, Stefano
Non-Hermitian shortcut to stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (6):10.1103/PhysRevA.89.063412 JUN 12 2014

203. Kiely, A; Ruschhaupt, A
Inhibiting unwanted transitions in population transfer in two- and three-level quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (11):10.1088/0953-4075/47/11/115501 JUN 14 2014
202. Deng, Li; Nakajima, Takashi
Detuning-induced stimulated Raman adiabatic passage in atoms with hyperfine structure
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023406 FEB 7 2014
201. Grigoryan, G; Gazazyan, E; Chaltykyan, V; Tikhova, O
LASER PHYSICS, 24 (3):10.1088/1054-660X/24/3/035301 MAR 2014
Adiabatic control of atomic population and distortion-free propagation of short laser pulses in multilevel media
200. Mukherjee, Nandini; Dong, Wenrui; Zare, Richard N.
Coherent superposition of M-states in a single rovibrational level of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 140 (7):10.1063/1.4865131 FEB 21 2014
199. Carreno, F.; Anton, M. A.; Melle, Sonia; Calderon, Oscar G.; Cabrera-Granado, E.; Cox, Joel; Singh
Plasmon-enhanced terahertz emission in self-assembled quantum dots by femtosecond pulses, Mahi R.; Egatz-Gomez, A.
JOURNAL OF APPLIED PHYSICS, 115 (6):10.1063/1.4863781 FEB 14 2014
198. Yang, Liu; Yan, Dong; Wang, Xiao-Chang; Yang, Hong; Wu, Jin-Hui
Accurate accumulation of arbitrary Berry phases via fractional stimulated Raman adiabatic passage
OPTICS COMMUNICATIONS, 313 345-349; 10.1016/j.optcom.2013.10.059 FEB 15 2014
197. Dynamical Resonances Accessible Only by Reagent Vibrational Excitation in the F plus HD -> HF plus D Reaction
Wang, Tao; Chen, Jun; Yang, Tiangang; Xiao, Chunlei; Sun, Zhigang; Huang, Long; Dai, Dongxu; Yang, Xueming; Zhang, Dong H.
SCIENCE, 342 (6165):1499-1502; 10.1126/science.1246546 DEC 20 2013
196. Guerin, S; Gevorgyan, M; Leroy, C; Jauslin, HR; Ishkhanyan, A
Efficient adiabatic tracking of driven quantum nonlinear systems
PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.063622 DEC 11 2013
195. Daems, D; Ruschhaupt, A; Sugny, D; Guerin, S
Robust Quantum Control by a Single-Shot Shaped Pulse
PHYSICAL REVIEW LETTERS, 111 (5):10.1103/PhysRevLett.111.050404 JUL 31 2013
194. Ciret, Charles; Alonzo, Massimo; Coda, Virginie; Rangelov, Andon A.; Montemezzani, Germano
Analog to electromagnetically induced transparency and Autler-Townes effect demonstrated with photoinduced coupled waveguides
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013840 JUL 25 2013
193. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013
192. Issouffa, YH; Messikh, A; Wahiddin, MR; Umarov, B; Gharib, MS
Generalized Quantum Rotation Gates Using STIRAP
2013 5TH INTERNATIONAL CONFERENCE ON INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE MUSLIM WORLD (ICT4M), 2013
191. Falci, G; La Cognata, A; Berritta, M; D'Arrigo, A; Paladino, E; Spagnolo, B
Design of a Lambda system for population transfer in superconducting nanocircuits
PHYSICAL REVIEW B, 87 (21):10.1103/PhysRevB.87.214515 JUN 20 2013
190. Wu Xi; Chen Zhi-Hua; Ye Ming-Yong; Chen Yue-Hua; Lin Xiu-Min
Generation of multiparticle three-dimensional entanglement state via adiabatic passage
CHINESE PHYSICS B, 22 (4):10.1088/1674-1056/22/4/040309 APR 2013
189. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Population transfer and generation of arbitrary superpositions of quantum states in a four-level system using a single-chirped laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30 (4):1017-1021; APR 2013
188. Mukherjee, Nandini; Dong, Wenrui; Harrison, John A.; Zare, Richard N.
Communication: Transfer of more than half the population to a selected rovibrational state of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 138 (5):10.1063/1.4790402 FEB 7 2013
187. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.; Montemezzani, Germano
Broadband adiabatic light transfer in optically induced waveguide arrays
PHYSICAL REVIEW A, 87 (1):10.1103/PhysRevA.87.013806 JAN 7 2013
186. Jakubetz, Werner
Limitations of STIRAP-like population transfer in extended systems: The three-level system embedded in a web of background states
JOURNAL OF CHEMICAL PHYSICS, 137 (22):10.1063/1.4770053 DEC 14 2012
185. Wang, Ping; Chen, Mei-Feng
Preparation of four-dimensional entangled states in separate cavities via adiabatic passage
PHYSICA SCRIPTA, 86 (6):10.1088/0031-8949/86/06/065002 DEC 2012
184. Falci, G; Berritta, M; Russo, A; D'Arrigo, A; Paladino, E
Effects of low-frequency noise in driven coherent nanodevices
PHYSICA SCRIPTA, T151 10.1088/0031-8949/2012/T151/014020 NOV 2012
183. Ahmed, Ergin H. ; Huennekens, John ; Kirova, Teodora ; et al.
The Autler-Townes Effect in Molecules: Observations, Theory, and Applications
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 61 Book Series: Advances In Atomic Molecular and Optical Physics Volume: 61 Pages: 467-514 DOI: 10.1016/B978-0-12-396482-3.00009-0 Published: 2012
182. Anton, M. A.; Carreno, F.; Melle, Sonia; Calderon, Oscar G.; Cabrera-Granado, E.; Cox, Joel; Singh, Mahi R.
Plasmonic effects in excitonic population transfer in a driven semiconductor-metal nanoparticle hybrid system
PHYSICAL REVIEW B, 86 (15):10.1103/PhysRevB.86.155305 OCT 5 2012
181. Li, Zhou; Hu, Xiangming
Optomechanical quantum-state transfer beyond one-to-one interaction
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (18):10.1088/0953-4075/45/18/185503 SEP 28 2012
180. Gazazyan, EA; Grigoryan, GG; Chaltykyan, VO; Schraft, D
Implementation of all-optical Toffoli gate in Lambda-systems
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 47 (5):216-221; 10.3103/S1068337212050040 SEP 2012
179. Ciret, Charles; Coda, Virginie; Rangelov, Andon A.; Neshev, Dragomir N.; Montemezzani, Germano
Planar achromatic multiple beam splitter by adiabatic light transfer
OPTICS LETTERS, 37 (18):3789-3791; SEP 15 2012
178. Ulmanis, Juris; Deiglmayr, Johannes; Repp, Marc; Wester, Roland; Weidemüller, Matthias
Ultracold Molecules Formed by Photoassociation: Heteronuclear Dimers, Inelastic Collisions, and Interactions with Ultrashort Laser Pulses
CHEMICAL REVIEWS, 112 (9):4890-4927; SI 10.1021/cr300215h SEP 2012
177. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012
176. Fialko, Oleksandr; Delattre, Marie-Coralie; Brand, Joachim; Kolovsky, Andrey R.
Nucleation in Finite Topological Systems During Continuous Metastable Quantum Phase Transitions
PHYSICAL REVIEW LETTERS, 108 (25):10.1103/PhysRevLett.108.250402 JUN 20 2012
175. Chaltykyan, V; Gazazyan, E; Grigoryan, G; Hovhannisyan, A; Tikhova, O
Alternative techniques of population transfer in multilevel systems
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011), 350 10.1088/1742-6596/350/1/012004 2012
Editors: Bhattacharjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series
174. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Selective and efficient control of population transfer in the presence of an equally

- populated initial doublet
 JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29
 (6):1551-1556; JUN 1 2012
173. Chaltykyan, V; Grigoryan, G; Leroy, C; Pashayan-Leroy, Y; Guerin, S; Jauslin, HR
 Superluminal pulse propagation in a non-linear Lambda-type atomic medium
 PHOTONICS AND MICRO- AND NANO-STRUCTURED MATERIALS 2011, 8414
 10.1117/12.923332 2012
 Editor: Drampyan RRR, Proceedings of SPIE, Conference on Photonics and Micro
 and Nano-structured Materials, JUN 28-30, 2011, Yerevan, ARMENIA
172. Kumar, Parvendra; Sarma, Amarendra K.
 Gaussian and sinc-shaped few-cycle-pulse-driven ultrafast coherent population
 transfer in Lambda-like atomic systems
 PHYSICAL REVIEW A, 85 (4):10.1103/PhysRevA.85.043417 APR 20 2012
171. Yang, Xihua; Huang, Yihua; Zhang, Zhenhua; Yan, Xiaona
 Enhancement of coherent population transfer in a double Lambda-type four-level
 system via a train of pulse pairs
 OPTICS COMMUNICATIONS, 285 (8):2101-2105; 10.1016/j.optcom.2011.12.076
 APR 15 2012
170. Hafezi, M; Kim, Z; Rolston, SL; Orozco, LA; Lev, BL; Taylor, JM
 Atomic interface between microwave and optical photons
 PHYSICAL REVIEW A, 85 (2):10.1103/PhysRevA.85.020302 FEB 22 2012
169. Eleuch, H; Guerin, S; Jauslin, HR
 Effects of an environment on a cavity-quantum-electrodynamics system
 controlled by bichromatic adiabatic passage
 PHYSICAL REVIEW A, 85 (1):10.1103/PhysRevA.85.013830 JAN 23 2012
168. Zhang Yan-Feng; Li Gang; Zhang Yu-Chi; Zhang Peng-Fei; Wang Jun-Min;
 Zhang Tian-Cai
 Generation of Raman light source with an anti-reflection-coated edge-emitting
 laser diode in an external cavity
 ACTA PHYSICA SINICA, 60 (10):2011
167. Dalibard, Jean; Gerbier, Fabrice; Juzeliunas, Gediminas; Oehberg, Patrik
 Colloquium: Artificial gauge potentials for neutral atoms
 REVIEWS OF MODERN PHYSICS, 83 (4):10.1103/RevModPhys.83.1523 NOV 30
 2011
166. Miladinovic, N; Hasan, F; Chisholm, N; Linnington, IE; Hinds, EA; O'Dell, DHJ
 Adiabatic transfer of light in a double cavity and the optical Landau-Zener
 problem
 PHYSICAL REVIEW A 84 (4): 10.1103/PhysRevA.84.043822 OCT 13 2011
165. Urbaszek, B; Simon, CM; Belhadj, T; Chatel, B; Amand, T; Dalgarno, P; Krebs,
 O; Warburton, RJ; Lemaitre, A; Marie, X; Renucci, P
 Robust quantum dot exciton preparation via adiabatic passage with frequency-
 swept Laser pulses
 ULTRAFAST PHENOMENA IN SEMICONDUCTORS AND NANOSTRUCTURE
 MATERIALS XV 7937 10.1117/12.877291 2011
164. Timoney, N; Baumgart, I; Johanning, M; Varon, AF; Plenio, MB; Retzker, A;
 Wunderlich, C
 Quantum gates and memory using microwave-dressed states
 NATURE 476 (7359): 185-U83 10.1038/nature10319 AUG 11 2011
163. Mukherjee, Nandini; Zare, Richard N.
 Stark-induced adiabatic Raman passage for preparing polarized molecules
 JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011
162. Rangelov, Andon A.
 Achromatic polarization retarder realized with slowly varying linear and circular
 birefringence
 OPTICS LETTERS 36 (14): 2716-2718 JUL 15 2011
161. Han, Alex C.; Shapiro, Evgeny A.; Shapiro, Moshe
 Pulsed adiabatic photoassociation via scattering resonances
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 44 (15):
 10.1088/0953-4075/44/15/154018 AUG 14 2011
160. Song Pei-Jun; Lue Xin-You; Si Liu-Gang; Yang Xiao-Xue
 Deterministic generation of Greenberger-Horne-Zeilinger and W states for three
 distant atoms via adiabatic passage
 CHINESE PHYSICS B 20 (5): Art. No. 050308 MAY 2011
159. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
 Coherence generation and population transfer in a three-level ladder system
 CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
158. Cui, Ni; Niu, Yueping; Gong, Shangqing
 Tunneling-induced coherent electron population transfer in an asymmetric
 quantum well
 OPTICS COMMUNICATIONS 284 (12): 3134-3139 JUN 1 2011
157. Simon, CM; Belhadj, T; Chatel, B; Amand, T; Renucci, P; Lemaitre, A; Krebs,
 O; Dalgarno, PA; Warburton, RJ; Marie, X; Urbaszek, B
 Robust Quantum Dot Exciton Generation via Adiabatic Passage with Frequency-
 Swept Optical Pulses
 PHYSICAL REVIEW LETTERS 106 (16): Art. No. 166801 APR 18 2011
156. Aikawa, K; Akamatsu, D; Hayashi, M; Kobayashi, J; Ueda, M; Inouye, S
 Predicting and verifying transition strengths from weakly bound molecules
 PHYSICAL REVIEW A 83 (4): Art. No. 042706 APR 11 2011
155. Blekos, Konstantinos; Simserides, Constantinos; Terzis, Andreas F.;
 Paspalakis, Emmanuel
 Effects of Detuning on Control of Intersubband Quantum Well Transitions with
 Chirped Electromagnetic Pulses
 EMERGING TRENDS AND NOVEL MATERIALS IN PHOTONICS 1288: 137-141 2010
154. Zaremba, Jaroslaw
 Propagation and storing of light in optically modified atomic media
 SYMMETRY AND STRUCTURAL PROPERTIES OF CONDENSED MATTER 213: Art.
 No. 012025 2010
153. Thanopoulos, Ioannis; Shapiro, Moshe
 Coherence Effects in Laser-Induced Continuum Structure
 ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE
 CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS
 60: 105-161 2010
152. Lazarou, Constantinos; Keller, Matthias; Garraway, Barry M.
 Adiabatic passage methods in cooling trapped molecular ions
 QUANTUM OPTICS 7727: Art. No. 772708 2010
151. O'Sullivan, B; Morrissey, P; Morgan, T; Busch, T
 Using adiabatic coupling techniques in atom-chip waveguide structures
 PHYSICA SCRIPTA T140: Art. No. 014029 SEP 2010
150. Yang, Wanli; Xu, Zhenyu; Feng, Mang; Du, Jiangfeng
 Entanglement of separate nitrogen-vacancy centers coupled to a whispering-
 gallery mode cavity
 NEW JOURNAL OF PHYSICS 12: Art. No. 113039 NOV 19 2010
149. Aikawa K, Akamatsu D, Hayashi M, et al.
 Coherent Transfer of Photoassociated Molecules into the Rovibrational Ground
 State
 PHYSICAL REVIEW LETTERS Volume: 105 Issue: 20 Article Number: 203001
 Published: NOV 10 2010
148. Aikawa, K; Akamatsu, D; Hayashi, M; Oasa, K; Kobayashi, J; Naidon, P;
 Kishimoto, T; Ueda, M; Inouye, S
 Coherent Transfer of Photoassociated Molecules into the Rovibrational Ground
 State
 PHYSICAL REVIEW LETTERS 105 (20): Art. No. 203001 NOV 10 2010
147. Issoufa, Youssouf Hamidou; Messikh, Azeddine
 Effect of dephasing on single-qubit rotation gates
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art.
 No. 215506 NOV 14 2010
146. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona; Li, Chunfang
 Enhanced selectivity and efficiency of coherent population transfer via a train of
 pulse pairs
 PHYSICAL REVIEW A 82 (3): Art. No. 033831 SEP 27 2010
145. Mukherjee, Nandini; Zare, Richard N.
 Polarization of molecular targets using infrared stimulated Raman adiabatic
 passage
 JOURNAL OF CHEMICAL PHYSICS 133 (9): Art. No. 094301 SEP 7 2010
144. Nesterenko, VO; Novikov, AN; Suraud, E
 Adiabatic Transport of Bose-Einstein Condensates in a Double-Well Trap: Case of
 Weak Nonlinearity
 LASER PHYSICS 20 (5): 1149-1155 MAY 2010

143. Byrd, Jason N.; Montgomery, John A., Jr.; Cote, Robin
Structure and thermochemistry of K₂Rb, KRb₂, and K₂Rb₂
PHYSICAL REVIEW A 82 (1): Art. No. 010502 JUL 30 2010
142. Chen Ju-Mei; Liang Lin-Mei; Li Cheng-Zu; Deng Zhi-Jiao
Three-Dimensional Quantum State Transferring Between Two Remote Atoms by Adiabatic Passage under Dissipation
COMMUNICATIONS IN THEORETICAL PHYSICS 54 (1): 107-111 JUL 15 2010
141. Merkl, M; Juzeliunas, G; Ohberg, P
The non-Abelian bosonic quantum ring
EUROPEAN PHYSICAL JOURNAL D 59 (2): 257-267 AUG 2010
140. Perez-Hernandez, Guillermo; Pelzer, Adam; Gonzalez, Leticia; Seideman, Tamar
Biologically inspired molecular machines driven by light. Optimal control of a unidirectional rotor
NEW JOURNAL OF PHYSICS 12: Art. No. 075007 JUL 8 2010
139. Kuhn A, Ljunggren D
Cavity-based single-photon sources
CONTEMPORARY PHYSICS Volume: 51 Issue: 4 Pages: 289-313 Published: 2010
138. Vasilev, Genko S.; Ljunggren, Daniel; Kuhn, Axel
Single photons made-to-measure
NEW JOURNAL OF PHYSICS 12: Art. No. 063024 JUN 14 2010
137. Zhou, Xiang-Fa; Zhang, Yong-Sheng; Zhou, Zheng-Wei; Guo, Guang-Can
Adiabatic evolution in nonlinear systems with degeneracy
PHYSICAL REVIEW A 81 (4): Art. No. 043614 APR 2010
136. Mukherjee, Nandini; Zare, Richard N.
Preparation of polarized molecules using coherent infrared multicolor ladder excitation
JOURNAL OF CHEMICAL PHYSICS 132 (15): Art. No. 154302 APR 21 2010
135. Yang, XH; Zhang, ZH; Wang, Z; Yan, XN
Ultrafast coherent population transfer driven by two few-cycle laser pulses
EUROPEAN PHYSICAL JOURNAL D 57 (2): 253-258 APR 2010
134. He, Jun; Zhang, Yong-Sheng; Guo, Guang-Can
Time reversible evolution via nonadiabatic coupling in adiabatic dark subspace
OPTICS COMMUNICATIONS 283 (10): 2174-2177 MAY 15 2010
133. Paspalakis, Emmanuel; Simserides, Constantinos; Terzis, Andreas F.
Control of intersubband quantum well transitions with chirped electromagnetic pulses
JOURNAL OF APPLIED PHYSICS 107 (6): Art. No. 064306 MAR 15 2010
132. Leduc, Michele; Tannoudji, Claude Cohen
Ultracold Metastable Helium: from Atoms to Exotic Molecules
LASER PHYSICS 20 (1): 13-22 JAN 2010
131. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona; Li, Chunfang
Selective and efficient control of coherent population transfer with time-separated chirped pulses
PHYSICAL REVIEW A 81 (3): Art. No. 035801 MAR 2010
130. Lazarou, C; Keller, M; Garraway, BM
Molecular heat pump for rotational states
PHYSICAL REVIEW A 81 (1): Art. No. 013418 JAN 2010
129. Yang, Xihua; Wang, Zhen; Zhang, Zhenhua; Yan, Xiaona
Ultrafast control of coherent population transfer with a train of femtosecond pulse pairs
OPTICS COMMUNICATIONS 283 (2): 270-275 JAN 15 2010
128. Nesterenko, VO; Novikov, AN; Cherny, AY; Cruz, FFD; Suraud, E
An adiabatic transport of Bose-Einstein condensates in double-well traps
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (23): Art. No. 235303 DEC 14 2009
127. Muradyan, Gevorg; Muradyan, Atom Zh.
Train of high-power femtosecond pulses: Probe wave in a gas of prepared atoms
PHYSICAL REVIEW A 80 (3): Art. No. 035801 SEP 2009
126. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona
Ultrafast coherent population transfer with a train of weak femtosecond pulse pairs
JOURNAL OF MODERN OPTICS 56 (14): 1582-1587 2009
125. Chen, Ju-Mei; Liang, Lin-Mei; Li, Cheng-Zu; Deng, Zhi-Jiao
Arbitrary state controlled-unitary gate between two remote atomic qubits via adiabatic passage
OPTICS COMMUNICATIONS 282 (19): 4020-4024 OCT 1 2009
124. Ma Song-She; Chen Mei-Feng
Transferring an N-atom state between two distant cavities via an optical fiber
CHINESE PHYSICS B 18 (8): 3247-3250 AUG 2009
123. Yu, Rong; Li, Jiahua; Huang, Pei; Zheng, Anshou; Yang, Xiaoxue
Dynamic control of light propagation and optical switching through an RF-driven cascade-type atomic medium
PHYSICS LETTERS A 373 (33): 2992-3000 AUG 10 2009
122. Chen, Ju-Mei; Liang, Lin-Mei; Li, Cheng-Zu; Chen, Ping-Xing; Dai, Hong-Yi
Distributed quantum computing in decoherence-free subspace via adiabatic passage
OPTICS COMMUNICATIONS 282 (15): 3181-3184 AUG 1 2009
121. Yang Xi-Hua; Zhang Jun; Zhang Hui-Fang; Yan Xiao-Na
Collision-Induced Coherence Effect on Coherent Population Transfer
CHINESE PHYSICS LETTERS 26 (7): Art. No. 073202 JUL 2009
120. Le Kien, Fam; Hakuta, K.
Slowing down of a guided light field along a nanofiber in a cold atomic gas
PHYSICAL REVIEW A 79 (1): Art. No. 013818 Part B JAN 2009
119. Guerin, S; Jauslin, HR
CONTROL OF QUANTUM DYNAMICS BY LASER PULSES: ADIABATIC FLOQUET THEORY
ADVANCES IN CHEMICAL PHYSICS, VOL 125 125: 147-267 2009
118. Kuznetsova, Elena; Gacesa, Marko; Pellegrini, Philippe; Yelin, Susanne F.; Cote, Robin
Efficient formation of ground-state ultracold molecules via STIRAP from the continuum at a Feshbach resonance
NEW JOURNAL OF PHYSICS 11: Art. No. 055028 MAY 14 2009
117. Fam Le Kien; Hakuta, K.
Intracavity electromagnetically induced transparency in atoms around a nanofiber with a pair of Bragg grating mirrors
PHYSICAL REVIEW A 79 (4): Art. No. 043813 Part B APR 2009
116. Thanopoulos, I; Kral, P; Shapiro, M; Paspalakis, E
Optical control of molecular switches
JOURNAL OF MODERN OPTICS 56 (6): 686-703 2009
115. Nesterenko, VO; Novikov, AN; Cruz, FFD; Lapolli, EL
STIRAP transport of Bose-Einstein condensate in triple-well trap
LASER PHYSICS 19 (4): 616-624 APR 2009
114. Shapiro, Evgeny A.; Milner, Valery; Shapiro, Moshe
Complete transfer of populations from a single state to a preselected superposition of states using piecewise adiabatic passage: Theory
PHYSICAL REVIEW A 79 (2): Art. No. 023422 FEB 2009
113. Scheel, Stefan
Single-photon sources-an introduction
JOURNAL OF MODERN OPTICS 56 (2-3): 141-160 2009
112. Kozlov, Victor V.; Kozlova, Ekaterina B.
Adiabatic and nonadiabatic preparation of a ground-state coherence in an optically thick lambda medium
OPTICS COMMUNICATIONS 282 (5): 892-895 MAR 1 2009
111. Liu Wen-Wu; Li Hong-Cai; Yang Rong-Can
Implementation of quantum search scheme by adiabatic passage in a cavity-laser-atom system
CHINESE PHYSICS B 18 (1): 23-29 JAN 2009
110. Thanopoulos, I; Kral, P; Shapiro, M; Paspalakis, E
Optical control of molecular switches
JOURNAL OF MODERN OPTICS 56 (1): 1-18 2009
109. Tang Yao-Xiang; Lin Xiu-Min; Lin Gong-Wei; Chen Li-Bo; Huang Xiu-Hua
Direct implementation of a scalable non-local multi-qubit controlled phase gate via optical fibres and adiabatic passage
CHINESE PHYSICS B 17 (12): 4388-4395 DEC 2008

108. Cong Shuang; Lou Yuesheng
Design of control sequence of pulses for the population transfer of high dimensional spin 1/2 quantum systems
JOURNAL OF SYSTEMS ENGINEERING AND ELECTRONICS 19 (6): 1226-1234 DEC 2008
107. Pelzer, A; Ramakrishna, S; Seideman, T
Optimal control of rotational motions in dissipative media
JOURNAL OF CHEMICAL PHYSICS 129 (13): Art. No. 134301 OCT 7 2008
106. Thanopoulos, I; Paspalakis, E; Yannopoulos, V
Optical switching of electric charge transfer pathways in porphyrin: a light-controlled nanoscale current router
NANOTECHNOLOGY 19 (44): Art. No. 445202 NOV 5 2008
105. Lacour, X; Guerin, S; Jauslin, HR
Optimized adiabatic passage with dephasing
PHYSICAL REVIEW A 78 (3): Art. No. 033417 SEP 2008
104. Ni, KK; Ospelkaus, S; de Miranda, MHG; Pe'er, A; Neyenhuis, B; Zirbel, JJ; Kotochigova, S; Julienne, PS; Jin, DS; Ye, J
A high phase-space-density gas of polar molecules
SCIENCE 322 (5899): 231-235 OCT 10 2008
103. Chandrashekar, C. M.; Laflamme, Raymond
Quantum phase transition using quantum walks in an optical lattice
PHYSICAL REVIEW A 78 (2): Art. No. 022314 Part A AUG 2008
102. Kuznetsova, Elena; Pellegrini, Philippe; Cote, Robin; Lukin, M. D.; Yelin, S. F.
Formation of deeply bound molecules via chainwise adiabatic passage
PHYSICAL REVIEW A 78 (2): Art. No. 021402 Part A AUG 2008
101. Zhang, Qun; Hepburn, John W.
In situ accurate determination of the zero time delay between two independent ultrashort laser pulses by observing the oscillation of an atomic excited wave packet
OPTICS LETTERS 33 (16): 1893-1895 AUG 15 2008
100. Yang, Xihua; Zhu, Shiyao
Collision-assisted electromagnetically induced control of coherent population transfer
PHYSICAL REVIEW A 78 (2): Art. No. 023818 Part B AUG 2008
99. Fan Xi-Jun; Li Ai-Yun; Tong Dian-Min; Liu Cheng-Pu
Population transfer by femtosecond laser pulses in a ladder-type atomic system
CHINESE PHYSICS B 17 (7): 2522-2526 JUL 2008
98. Shapiro, Evgeny A.; Pe'er, Avi; Ye, Jun; Shapiro, Moshe
Piecewise adiabatic population transfer in a molecule via a wave packet
PHYSICAL REVIEW LETTERS 101 (2): Art. No. 023601 JUL 11 2008
97. Yang, Xihua; Zhu, Shiyao
Control of coherent population transfer via spontaneous decay-induced coherence
PHYSICAL REVIEW A 77 (6): Art. No. 063822 JUN 2008
96. Mangano, G; Siewert, J; Falci, G
Sensitivity to parameters of STIRAP in a Cooper pair box
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 259-268 JUL 2008
95. Ivanov, IA; Kheifets, AS
High harmonics generation from excited states of atomic lithium
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (11): Art. No. 115603 JUN 14 2008
94. Deb, B; Kurizki, G; Mazets, IE
Geometry-dependent interplay of long- and short-range interactions in ultracold fermionic gases: models for condensed matter and astrophysics
NEW JOURNAL OF PHYSICS 10: Art. No. 045013 APR 30 2008
93. Itin, AP; Watanabe, S; Konotop, VV
Nonlinear dynamical instabilities of a condensate system in an atom-molecule dark state
PHYSICAL REVIEW A 77 (4): Art. No. 043610 APR 2008
92. Zhdanovich, S; Shapiro, EA; Shapiro, M; Hepburn, JW; Milner, V
Population transfer between two quantum states by piecewise chirping of femtosecond pulses: Theory and experiment
PHYSICAL REVIEW LETTERS 100 (10): Art. No. 103004 MAR 14 2008
91. Goto, Hayato; Ichimura, Kouichi
Stimulated Raman adiabatic passage with small two-photon detunings and its geometrical description
PHYSICS LETTERS A 372 (9): 1535-1540 FEB 25 2008
90. Ye, Sai-Yun; Zhong, Zhi-Rong; Zheng, Shi-Biao
Deterministic generation of three-dimensional entanglement for two atoms separately trapped in two optical cavities
PHYSICAL REVIEW A 77 (1): Art. No. 014303 JAN 2008
89. Ye, Sai-Yun; Zheng, Shi-Biao
Scheme for reliable realization of quantum logic gates for two atoms separately trapped in two distant cavities via optical fibers
OPTICS COMMUNICATIONS 281 (5): 1306-1311 MAR 1 2008
88. Stowe, MC; Thorpe, MJ; Pe'er, A; Ye, J; Stalnaker, JE; Gerginoo, V; Diddams, SA
Direct frequency comb spectroscopy
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 55 55: 1-60 2008
87. Shapiro, Moshe
Resonance theory of electromagnetically induced transparency: The effect of structured multi-continua
ISRAEL JOURNAL OF CHEMISTRY 47 (2): 233-241 2007
86. Delagnes, JC; Bouchene, MA
Coherent control of light shifts in an atomic medium driven by two orthogonally polarized pulses: Effect of the pulse overlap
PHYSICAL REVIEW A 76 (5): Art. No. 053809 NOV 2007
85. Itin, AP; Watanabe, S
Integrability, stability, and adiabaticity in nonlinear stimulated Raman adiabatic passage
PHYSICAL REVIEW LETTERS 99 (22): Art. No. 223903 NOV 30 2007
84. Shapiro EA, Milner V, Menzel-Jones C, et al.
Piecewise adiabatic passage with a series of femtosecond pulses
PHYSICAL REVIEW LETTERS 99 (3): Art. No. 033002 JUL 20 2007
83. Gearba MA, Camp HA, Trachy ML, et al.
Measurement of population dynamics in stimulated Raman adiabatic passage
PHYSICAL REVIEW A 76 (1): Art. No. 013406 JUL 2007
82. Xue Y, Wang G, Wu JH, et al.
Optical gain properties in a coherently prepared four-level cold atomic system
PHYSICAL REVIEW A 75 (6): Art. No. 063832 JUN 2007
81. Kalugin NG, Rostovtsev Y, Kuznetsova E, et al.
Generation of strong short coherent Terahertz pulses in gases and solids using quantum coherence
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS 2 (1): 36-50 APR 2007
80. Menzel-Jones C, Shapiro M
Robust operation of a universal set of logic gates for quantum computation using adiabatic population transfer between molecular levels
PHYSICAL REVIEW A 75 (5): Art. No. 052308 MAY 2007
79. Boozer AD, Boca A, Miller R, et al.
Reversible state transfer between light and a single trapped atom
PHYSICAL REVIEW LETTERS 98 (19): Art. No. 193601 MAY 11 2007
78. Pe'er A, Shapiro EA, Stowe MC, et al.
Precise control of molecular dynamics with a femtosecond frequency comb
PHYSICAL REVIEW LETTERS 98 (11): Art. No. 113004 MAR 16 2007
77. Delagnes JC, Bouchene MA
Coherent control of light shifts in an atomic system: Modulation of the medium gain
PHYSICAL REVIEW LETTERS 98 (5): Art. No. 053602 FEB 2 2007
76. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007
75. Montgomery MA, Damrauer NH
Elucidation of control mechanisms discovered during adaptive manipulation of [Ru(dpb)(3)](PF6)(2) emission in the solution phase
JOURNAL OF PHYSICAL CHEMISTRY A 111 (8): 1426-1433 MAR 1 2007

74. Shapiro EA, Shapiro M, Pe'er A, et al.
Photoassociation adiabatic passage of ultracold Rb atoms to form ultracold Rb-2 molecules
PHYSICAL REVIEW A 75 (1): Art. No. 013405 JAN 2007
73. Shapiro M
Electromagnetically induced transparency with structured multicontinua
PHYSICAL REVIEW A 75 (1): Art. No. 013424 JAN 2007
72. Demirplak M, Rice SA
Adiabatic transfer of population in a dense fluid: The role of dephasing statistics
JOURNAL OF CHEMICAL PHYSICS 125 (19): Art. No. 194517 NOV 21 2006
71. Ma HM, Gong SQ, Sun ZR, et al.
Effects of spontaneously induced coherence on absorption of a ladder-type atom
CHINESE PHYSICS 15 (11): 2588-2592 NOV 2006
70. Nesterenko V, Reinhard PG, Halfmann T, et al.
Exploration of electronic quadrupole states in atomic clusters by two-photon processes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (18): 3905-3917 SEP 28 2006
69. Raczynski A, Rzepecka M, Zaremba J, et al.
Electromagnetically induced transparency and light slowdown for Lambda-like systems with a structured continuum
OPTICS COMMUNICATIONS 266 (2): 552-557 OCT 15 2006
68. Thanopoulos I, Shapiro M
Coherently controlled adiabatic passage to multiple continuum channels
PHYSICAL REVIEW A 74 (3): Art. No. 031401 SEP 2006
67. Thanopoulos I, Shapiro M
Enhanced selectivity and yield in multichannel photodissociation reactions: Application to CH3I
JOURNAL OF CHEMICAL PHYSICS 125 (13): Art. No. 133314 OCT 7 2006
66. Arango CA, Shapiro M, Brumer P
Coherent control of collision processes: Penning versus associative ionization
JOURNAL OF CHEMICAL PHYSICS 125 (9): Art. No. 094315 SEP 7 2006
65. Siewert J, Brandes T, Falcì G
Adiabatic passage with superconducting nanocircuits
OPTICS COMMUNICATIONS 264 (2): 435-440 AUG 15 2006
64. Arkhipkin VG, Timofeev IV
Induction of the maximum Raman coherence in an extended medium through fractional adiabatic passage
OPTICS AND SPECTROSCOPY 100 (3): 433-436 MAY 2006
63. Meschede D, Rauschenbeutel A
Manipulating single atoms
ADVANCES IN ATOMIC MOLECULAR AND OPTICAL PHYSICS 53: 75-104 2006
62. Wollenhaupt M, Prakeit A, Sarpe-Tudoran C, et al.
Femtosecond strong-field quantum control with sinusoidally phase-modulated pulses
PHYSICAL REVIEW A 73 (6): Art. No. 063409 JUN 2006
61. Hou JM, Tian LJ, Jin S
Dark states and coherent control of spin states in molecular magnets
PHYSICAL REVIEW B 73 (13): Art. No. 134425 APR 2006
60. Lacour X, Sangouard N, Guerin S, et al.
Arbitrary state controlled-unitary gate by adiabatic passage
PHYSICAL REVIEW A 73 (4): Art. No. 042321 APR 2006
59. Molella LS, Rinkleff RH, Danzmann K
Spectral measurement of the caesium D-2 line with a tunable heterodyne interferometer
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY 63 (5): 987-993 Sp. Iss. SI APR 2006
58. Remacle F, Levine RD
All-optical digital logic: Full addition or subtraction on a three-state system
PHYSICAL REVIEW A 73 (3): Art. No. 033820 MAR 2006
57. Raczynski A, Rzepecka M, Zaremba J, et al.
Polariton picture of light propagation and storing in a tripod system
OPTICS COMMUNICATIONS 260 (1): 73-80 APR 1 2006
56. Sangouard N, Lacour X, Guerin S, et al.
CNOT gate by adiabatic passage with an optical cavity
EUROPEAN PHYSICAL JOURNAL D 37 (3): 451-456 MAR 2006
55. Nesterenko VO, Reinhard PG, Halfmann T, et al.
Two-photon excitation of low-lying electronic quadrupole states in atomic clusters
PHYSICAL REVIEW A 73 (2): Art. No. 021201 FEB 2006
54. Sangouard N
Decoherence-free manipulation of photonic memories for quantum computation
PHYSICAL REVIEW A 73 (2): Art. No. 022304 FEB 2006
53. Shapiro M, Brumer P
Quantum control of bound and continuum state dynamics
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 425 (4): 195-264 MAR 2006
52. Maeda H, Gurian JH, Norum DVL, et al.
Coherent population transfer in an atom by multiphoton adiabatic rapid passage
PHYSICAL REVIEW LETTERS 96 (7): Art. No. 073002 FEB 24 2006
51. Yan X, He QY, LaRocca GC, et al.
Dynamic control of four-wave-mixing enhancement in coherently driven four-level atoms
PHYSICAL REVIEW A 73 (1): Art. No. 013816 JAN 2006
50. Paspalakis E
Adiabatic three-waveguide directional coupler
OPTICS COMMUNICATIONS 258 (1): 30-34 FEB 1 2006
49. Niu YP, Gong SQ, Li RX, et al.
Giant Kerr nonlinearity induced by interacting dark resonances
OPTICS LETTERS 30 (24): 3371-3373 DEC 15 2005
48. Gibson GN
Adiabatic passage on high-order multiphoton transitions
PHYSICAL REVIEW A 72 (4): Art. No. 041404 OCT 2005
47. Sariyanni ZE, Rostovtsev Y, Zubairy MS, et al.
Using quantum erasure to exorcize Maxwell's demon: III. implementation
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES 29 (1-2): 47-52 OCT 2005
46. Thanopoulos I, Shapiro M
Detection and automatic repair of nucleotide base-pair mutations by coherent light
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 127 (41): 14434-14438 OCT 19 2005
45. Jirari H, Potz W
Optimal coherent control of dissipative N-level systems
PHYSICAL REVIEW A 72 (1): Art. No. 013409 Part A-B JUL 2005
44. Guillot-Noel O, Goldner P, Antic-Fidancev E, et al.
Analysis of magnetic interactions in rare-earth-doped crystals for quantum manipulation
PHYSICAL REVIEW B 71 (17): Art. No. 174409 MAY 2005
43. Lounis B, Orrit M
Single-photon sources
REPORTS ON PROGRESS IN PHYSICS 68 (5): 1129-1179 MAY 2005
42. Arkhipkin VG, Timofeev IV
Electromagnetically induced transparency and controlling the time shape of laser pulses
DOKLADY PHYSICS 50 (4): 165-168 APR 2005
41. Potz W
Double-slit versus single-slit behavior in the intersubband absorption of semiconductor heterostructures
PHYSICAL REVIEW B 71 (12): Art. No. 125331 MAR 2005
40. Khudaverdyan M, Alt W, Dotsenko I, et al.
Adiabatic quantum state manipulation of single trapped atoms
PHYSICAL REVIEW A 71 (3): Art. No. 031404 Part A MAR 2005
39. Rangan C, Bloch AM
Control of finite-dimensional quantum systems: Application to a spin-1/2 particle

- coupled with a finite quantum harmonic oscillator
JOURNAL OF MATHEMATICAL PHYSICS 46 (3): Art. No. 032106 MAR 2005
38. Zhou YW, Ye CY
Population transfer and coherence in the adiabatic limit by counterintuitive and intuitive pulse sequences
CHINESE PHYSICS 14 (2): 433-438 FEB 2005
37. Moiseev SA, Noskov MI
The possibilities of the quantum memory realization for short pulses of light in the photon echo technique
LASER PHYSICS LETTERS 1 (6): 303-310 JUN 2004
36. Moiseev SA, Ham BS
Photon-echo quantum memory with efficient multipulse readings
PHYSICAL REVIEW A 70 (6): Art. No. 063809 DEC 2004
35. Karpati A, Kis Z, Adam P
Engineering mixed states in a degenerate four-state system
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 193003 NOV 5 2004
34. Sautenkov VA, Ye CY, Rostovtsev YV, et al.
Enhancement of field generation via maximal atomic coherence prepared by fast adiabatic passage in Rb vapor
PHYSICAL REVIEW A 70 (3): Art. No. 033406 SEP 2004
33. Zhang XY, Sun ZR, Chen GL, et al.
Optimal control of population transfer in three-level lambda system with genetic algorithms
CHINESE PHYSICS LETTERS 21 (10): 1930-1933 OCT 2004
32. Bouloufa N, Cabaret L, Luc P, et al.
An optical-optical double resonance experiment in LiH molecules: Lifetime measurements in the C state
JOURNAL OF CHEMICAL PHYSICS 121 (15): 7237-7242 OCT 15 2004
31. Niu YP, Gong SQ, Li RX, et al.
Creation of atomic coherent superposition states via the technique of stimulated Raman adiabatic passage using a Lambda-type system with a manifold of levels
PHYSICAL REVIEW A 70 (2): Art. No. 023805 AUG 2004
30. Kis Z, Paspalakis E
Controlled creation of entangled states of excitons in coupled quantum dots
JOURNAL OF APPLIED PHYSICS 96 (6): 3435-3439 SEP 15 2004
29. Niu YP, Gong SQ
Manipulation of population transfer to atomic superposition states: An extension of stimulated Raman adiabatic passage to a four-level ladder system
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 73 (8): 2131-2134 AUG 2004
28. Hennrich M, Legero T, Kuhn A, et al.
Photon statistics of a non-stationary periodically driven single-photon source
NEW JOURNAL OF PHYSICS 6: Art. No. 86 JUL 29 2004
27. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004
26. Paspalakis E, Kis Z, Voutsinas E, et al.
Controlled rotation in a double quantum dot structure
PHYSICAL REVIEW B 69 (15): Art. No. 155316 APR 2004
25. Dantus M, Lozovoy VV
Experimental coherent laser control of physicochemical processes
CHEMICAL REVIEWS 104 (4): 1813-1859 APR 2004
24. Bicchi P, Barsanti S, Favilla E
Laser assisted collisional population of GaI autoionizing levels
LASER PHYSICS 14 (2): 144-149 FEB 2004
23. Jin SQ, Gong SQ, Li RX, et al.
Coherent population transfer and superposition of atomic states via stimulated Raman adiabatic passage using an excited-doublet four-level atom
PHYSICAL REVIEW A 69 (2): Art. No. 023408 FEB 2004
22. Kis Z, Paspalakis E
Arbitrary rotation and entanglement of flux SQUID qubits
PHYSICAL REVIEW B 69 (2): Art. No. 024510 JAN 2004
21. Hotop H, Ruf MW, Allan M, et al.
Resonance and threshold phenomena in low-energy electron collisions with molecules and clusters
ADVANCES IN ATOMIC MOLECULAR AND OPTICAL PHYSICS 49: 85-216 2003
20. Kis Z, Paspalakis E
Enhancing nonlinear frequency conversion using spatially dependent coherence
PHYSICAL REVIEW A 68 (4): Art. No. 043817 Part B OCT 2003
19. Arkhipkin VG, Myslivets SA, Timofeev IV
Stark-chirped rapid adiabatic passage: Propagation of laser pulses and spacetime evolution of populations and of two-photon coherence
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97 (4): 711-721 2003
18. Popov AK, Kimberg VV, George TF
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
PHYSICAL REVIEW A 68 (3): Art. No. 033407 SEP 2003
17. McGuire JH, Shakov KK, Rakhimov KY
Analytic description of population transfer in a degenerate n-level atom
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (14): 3145-3154 JUL 28 2003
16. Zhang J, Peng K, Braunstein SL
Quantum-state transfer from light to macroscopic oscillators
PHYSICAL REVIEW A 68 (1): Art. No. 013808 JUL 2003
15. Chaltykyan V, Grigoryan G, Nikogosyan G
Dark-state evolution and self-phase modulation in a Lambda medium
PHYSICAL REVIEW A 68 (1): Art. No. 013819 JUL 2003
14. Wollenhaupt M, Assion A, Bazhan O, et al.
Control of interferences in an Autler-Townes doublet: Symmetry of control parameters
PHYSICAL REVIEW A 68 (1): Art. No. 015401 JUL 2003
13. Hennrich M, Legero T, Kuhn A, et al.
Counter-intuitive vacuum-stimulated Raman scattering
JOURNAL OF MODERN OPTICS 50 (6-7): 935-942 APR-MAY 2003
12. Alnis J, Blushs K, Auzinsh M, et al.
The Hanle effect and level crossing spectroscopy in Rb vapour under strong laser excitation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (6): 1161-1173 MAR 28 2003
11. Karpati A, Kis Z
Adiabatic creation of coherent superposition states via multiple intermediate states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 36 (5): 905-919 MAR 14 2003
10. Gong SQ, Feng XL, Xu ZZ
Generation of Fock state and quantum entanglement in a coupled ladder atom-cavity system
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 5 (1): 52-55 FEB 2003
9. Paspalakis E, Kis Z
Enhanced nonlinear generation in a three-level medium with spatially dependent coherence
OPTICS LETTERS 27 (20): 1836-1838 OCT 15 2002
8. Guerin S, Unanyan RG, Yatsenko LP, et al.
Adiabatic creation of entangled states by a bichromatic field designed from the topology of the dressed eigenenergies
PHYSICAL REVIEW A 66 (3): Art. No. 032311 SEP 2002
7. Rostovtsev Y, Sariyanni Z, Scully MO
Photon echo pulse shape storage
LASER PHYSICS 12 (8): 1148-1154 AUG 2002
6. Kral P, Amitay Z, Shapiro M
Analytic solution for the nondegenerate quantum control problem
PHYSICAL REVIEW LETTERS 89 (6): Art. No. 063002 AUG 5 2002
5. Kuhn A, Hennrich M, Rempe G
Deterministic single-photon source for distributed quantum networking
PHYSICAL REVIEW LETTERS 89 (6): Art. No. 067901 AUG 5 2002

4. Kral P, Shapiro M
Complete adiabatic passage to arbitrarily sculpted superposition states
PHYSICAL REVIEW A 65 (4): Art. No. 043413 Part B APR 2002
3. Kis Z, Renzoni F
Qubit rotation by stimulated Raman adiabatic passage
PHYSICAL REVIEW A 65 (3): Art. No. 032318 Part A MAR 2002
2. Kis Z, Stenholm S
Nonadiabatic dynamics in the dark subspace of a multilevel stimulated Raman adiabatic passage process
PHYSICAL REVIEW A 64 (6): Art. No. 063406 DEC 2001
1. Kis Z, Stenholm S
Measuring the density matrix by local addressing
PHYSICAL REVIEW A 64 (6): Art. No. 065401 DEC 2001
- =====
- 40. Unanyan RG, Vitanov NV, Bergmann K**
Preparation of entangled states by adiabatic passage
PHYSICAL REVIEW LETTERS 87 (13): Art. No. 137902 SEP 24 2001
72. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Guo, Chu; Xiong, Xianming; Zhang, Wentao
Long-distance adiabatic wireless energy transfer via multiple coils coupling
RESULTS IN PHYSICS Volume: 19 Article Number: 103478 Published: DEC 2020
71. Santos, Alan C.; Saguia, Andreia; Sarandy, Marcelo S.
Stable and charge-switchable quantum batteries
PHYSICAL REVIEW E Volume: 101 Issue: 6 Article Number: 062114
Published: JUN 8 2020
70. Sun, Hui; Xu, Ning; Fan, Shuangli; Liu, Mingwei
Speeding up the creation of coherent superposition states by shortcut-to-adiabaticity means
ANNALS OF PHYSICS Volume: 418 Article Number: 168200 Published: JUL 2020
69. Kang, Yi-Hao; Xia, Yan
Entanglement Creations and Quantum Gate Implementations of Spin Qubits With Lyapunov Control
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 26 Issue: 3 Published: MAY-JUN 2020
68. Stefanatos, Dionisis; Iliopoulos, Nikos; Karanikolas, Vasilios; Paspalakis, Emmanuel
Quantum control of entanglement in coupled spins using shortcuts to adiabaticity and optimal control
QUANTUM OPTICS AND PHOTON COUNTING Book Series: Proceedings of SPIE Volume: 11027 Article Number: UNSP 1102700 Published: 2019
67. Niyosomeh, I. F.; Diffo, J. T.; Ateuafack, M. E.; Fai, L. C.
Landau-Zener transitions in coupled qubits: Effects of coloured noise
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 116 Article Number: 113744 Published: FEB 2020
66. Zhang, DW; Wang, W
Generation of W states via Lyapunov control by combination of quantum Zeno dynamics
MODERN PHYSICS LETTERS A, 34 (28):10.1142/S0217732319502274 SEP 14 2019
65. Guo, Yu; Luo, Xiaobing; Ma, Shan; Shu, Chuan-Cun
All-optical generation of quantum entangled states with strictly constrained ultrafast laser pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023409 AUG 12 2019
64. Wu, Jin-Lei; Su, Shi-Lei
Auxiliary-qubit-driving-induced entanglement and logic gate
EPL, 126 (3):10.1209/0295-5075/126/30001 MAY 2019
63. Impens, Francois; Guery-Odelin, David
Fast quantum control in dissipative systems using dissipationless solutions
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-39731-z MAR 11 2019
62. Stefanatos, Dionisis; Paspalakis, Emmanuel
Efficient generation of the triplet Bell state between coupled spins using transitionless quantum driving and optimal control
PHYSICAL REVIEW A, 99 (2):10.1103/PhysRevA.99.022327 FEB 25 2019
61. Zhou, Yuan; Li, Bo; Li, Xiao-Xiao; Li, Fu-Li; Li, Peng-Bo
Preparing multiparticle entangled states of nitrogen-vacancy centers via adiabatic ground-state transitions
PHYSICAL REVIEW A, 98 (5):10.1103/PhysRevA.98.052346 NOV 27 2018
60. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018
59. Jian, Shu
Entanglement Properties of the Kerr-Down Conversion System
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (5):1553-1558; 10.1007/s10773-018-3680-z MAY 2018
58. Jia, Wei; Hu, Fang-Qi; Wu, Ning; Zhao, Qing
Effect of electron spin-spin interaction on level crossings and spin flips in a spin-triplet system
PHYSICAL REVIEW A, 96 (6):10.1103/PhysRevA.96.062507 DEC 15 2017
57. Zhang, Qi; Chen, Xi; Guery-Odelin, D.
Reverse engineering protocols for controlling spin dynamics
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017
56. Setiawan, Iwan; Gunara, Bobby Eka; Masuda, Shumpei; Nakamura, Katsuhiko
Fast forward of the adiabatic spin dynamics of entangled states
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.052106 NOV 8 2017
55. Shi, ZC; Wang, LC; Yi, XX
Preparing entangled states by Lyapunov control
QUANTUM INFORMATION PROCESSING, 15 (12):4939-4953; 10.1007/s11128-016-1441-6 DEC 2016
54. Paul, Koushik; Sarma, Amarendra K.
High-fidelity entangled Bell states via shortcuts to adiabaticity
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052303 NOV 2 2016
53. Chen, Jingwei; Wei, L. F.
Deterministic implementations of quantum gates with circuit QEDs via Stark-chirped rapid adiabatic passages
PHYSICS LETTERS A, 379 (40-41):2549-2555; 10.1016/j.physleta.2015.05.035 OCT 23 2015
52. Entezar, S. Roshan
Permanently disentangled states of atom-field system via spontaneously generated coherence
JOURNAL OF MODERN OPTICS, 60 (16):1364-1369; 10.1080/09500340.2013.839343 SEP 20 2013
51. Eastham, PR; Spracklen, AO; Keeling, J
Lindblad theory of dynamical decoherence of quantum-dot excitons
PHYSICAL REVIEW B, 87 (19):10.1103/PhysRevB.87.195306 MAY 15 2013
50. Amniate-Talab, M; Jahromi, HR; Golkar, S
Berry Phases and Entanglement of a Two Spin-1/2 Model with Dzyaloshinski-Moriya Interaction in Magnetic Fields
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 52 (1):163-177; 10.1007/s10773-012-1315-3 JAN 2013
49. Wang, Ping; Chen, Mei-Feng
Preparation of four-dimensional entangled states in separate cavities via adiabatic passage
PHYSICA SCRIPTA, 86 (6):10.1088/0031-8949/86/06/065002 DEC 2012
48. Creatore, C; Brierley, RT; Phillips, RT; Littlewood, PB; Eastham, PR
Creation of entangled states in coupled quantum dots via adiabatic rapid passage
PHYSICAL REVIEW B, 86 (15):10.1103/PhysRevB.86.155442 OCT 22 2012
47. Amniate-Talab, M; Jahromi, HR
Relation between Berry phases and entanglement besides convergence of levels for two entangled spin-1/2 particles in magnetic fields
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30085-5 AUG 2012
46. Brierley, RT; Creatore, C; Littlewood, PB; Eastham, PR
Adiabatic State Preparation of Interacting Two-Level Systems
PHYSICAL REVIEW LETTERS, 109 (4):10.1103/PhysRevLett.109.043002 JUL 23 2012
45. Chen, Li-Bo; Shi, Peng; Zheng, Chun-Hong; Gu, Yong-Jian
Generation of three-dimensional entangled state between a single atom and a

- Bose-Einstein condensate via adiabatic passage
OPTICS EXPRESS, 20 (13):14547-14555; JUN 18 2012
44. Mishima, K; Yamashita, K
Alternative approach of generating entanglement in quantum dots by spatial phase
MOLECULAR PHYSICS, 110 (9-10):735-742; SI 10.1080/00268976.2012.668966 2012
43. Song Pei-Jun; Lue Xin-You; Si Liu-Gang; Yang Xiao-Xue
Deterministic generation of Greenberger-Horne-Zeilinger and W states for three distant atoms via adiabatic passage
CHINESE PHYSICS B 20 (5): Art. No. 050308 MAY 2011
42. Jiang, Li; Du, Shan; Wan, Ren-Gang; Kou, Jun; Zhang, Han; Zhang, Han-Zhuang
The atom-photon entanglement of a two-level system embedded in double-band photonic band edge
OPTICS COMMUNICATIONS 284 (10-11): 2509-2514 MAY 15 2011
41. Chen, Xi; Lizuain, I.; Ruschhaupt, A.; Guery-Odelin, D.; Muga, J. G.
Shortcut to Adiabatic Passage in Two- and Three-Level Atoms
PHYSICAL REVIEW LETTERS 105 (12): Art. No. 123003 SEP 16 2010
40. Entezar, S. Roshan
Controllable atom-photon entanglement near a 3D anisotropic photonic band edge
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (8): Art. No. 085503 APR 28 2010
39. Cong, S.
Manipulation technology and system control theory in quantum molecular dynamics
Kongzhi Lilun Yu Yingyong/Control Theory and Applications 27(1), pp. 1-12 (2010)
38. Tang Yao-Xiang, Lin Xiu-Min, Lin Gong-Wei, Chen Li-Bo, Huang Xiu-Hua
Direct implementation of a scalable non-local multi-qubit controlled phase gate via optical fibres and adiabatic passage
Chinese Physics B 17 4388 (2008)
37. Shuang, C., Yuesheng, L.
Design of control sequence of pulses for the population transfer of high dimensional spin 1/2 quantum systems
Journal of Systems Engineering and Electronics 19(6), pp. 1226-1234 (2008)
36. Entezar, S. Roshan
Entanglement of a two-level atom and its spontaneous emission near the edge of a photonic band gap
PHYSICS LETTERS A 373 (38): 3413-3418 SEP 14 2009
35. Guerin, S; Jauslin, HR
Control of quantum dynamics by laser pulses: Adiabatic floquet theory
ADVANCES IN CHEMICAL PHYSICS, VOL 125 125: 147-267 2009
34. Murgida, GE; Wisniacki, DA; Tamborenea, PI
Landau-Zener transitions in a semiconductor quantum dot
JOURNAL OF MODERN OPTICS 56 (6): 799-804 2009
33. Cong Shuang; Lou Yuesheng
Design of control sequence of pulses for the population transfer of high dimensional spin 1/2 quantum systems
JOURNAL OF SYSTEMS ENGINEERING AND ELECTRONICS 19 (6): 1226-1234 DEC 2008
32. Huang, XL; Wang, LC; Yi, XX
Effect of quantum subsystem-subsystem coupling in hybrid systems
JOURNAL OF MODERN OPTICS 55 (12): 1937-1945 2008
31. Murgida, G.E., Wisniacki, D.A., Tamborenea, P.I.
Coherent control of interacting electrons in quantum dots via navigation in the energy spectrum
2007 Physical Review Letters 99 (3), art. no. 036806
30. Hu YH, Fang MF, Wu Q
Atomic coherence control on the entanglement of two atoms in two-photon processes
CHINESE PHYSICS 16 (8): 2407-2414 AUG 2007
29. Bhattacharya, M., Raman, C.
Detecting level crossings without solving the Hamiltonian. I. Mathematical background
2007 Physical Review A - Atomic, Molecular, and Optical Physics 75 (3), art. no. 033405
28. Bhattacharya, M., Raman, C.
Detecting level crossings without solving the Hamiltonian. II. Applications to atoms and molecules
2007 Physical Review A - Atomic, Molecular, and Optical Physics 75 (3), art. no. 033406
27. Kral, P., Thanopoulos, I., Shapiro, M.
Colloquium: Coherently controlled adiabatic passage
2007 Reviews of Modern Physics 79 (1), pp. 53-77
26. Gu SJ, Lin HQ
Entanglement evolution and distillation under a local magnetic pulse
PHYSICS LETTERS A 361 (1-2): 39-42 JAN 22 2007
25. Bhattacharya M, Raman C
Detecting level crossings without looking at the spectrum
PHYSICAL REVIEW LETTERS 97 (14): Art. No. 140405 OCT 6 2006
24. Hohenester U, Fabian J, Troiani F
Adiabatic passage schemes in coupled semiconductor nanostructures
OPTICS COMMUNICATIONS 264 (2): 426-434 AUG 15 2006
23. Franco R, Penna V
Discrete Wigner distribution for two qubits: a characterization of entanglement properties
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39 (20): 5907-5919 MAY 19 2006
22. Li Y, Hang C, Ma L, et al.
Controllable entanglement of lights in a five-level system
PHYSICS LETTERS A 354 (1-2): 1-7 MAY 22 2006
21. Fainberg, B.D., Levinsky, B., Gorbunov, V.A.
Chirped-pulse control of carriers in semiconductors: The role of many-body effects
2005 Journal of the Optical Society of America B: Optical Physics 22 (12), pp. 2715-2727
20. Kral P, Thanopoulos I, Shapiro M
Quantum-field coherent control: Preparation of broken-symmetry entangled states
PHYSICAL REVIEW A 72 (2): Art. No. 020303 AUG 2005
19. Malinovsky VS, Sola IR
Quantum control for entanglement preparation
QUANTUM INFORMATION & COMPUTATION 5 (4-5): 364-379 JUL 2005
18. Khudaverdyan M, Alt W, Dotsenko I, et al.
Adiabatic quantum state manipulation of single trapped atoms
PHYSICAL REVIEW A 71 (3): Art. No. 031404 Part A MAR 2005
17. Fu LB, Chen SG
Topology hidden behind the breakdown of adiabaticity
PHYSICAL REVIEW E 71 (1): Art. No. 016607 Part 2 JAN 2005
16. Peng XH, Du JF, Suter D
Quantum phase transition of ground-state entanglement in a Heisenberg spin chain simulated in an NMR quantum computer
PHYSICAL REVIEW A 71 (1): Art. No. 012307 JAN 2005
15. Aharonov Y, Anandan J, Maclay GJ, et al.
Model for entangled states with spin-spin interaction
PHYSICAL REVIEW A 70 (5): Art. No. 052114 NOV 2004
14. Yi XX, Sjoqvist E
Effect of intersubsystem coupling on the geometric phase in a bipartite system
PHYSICAL REVIEW A 70 (4): Art. No. 042104 OCT 2004
13. Malinovsky VS, Sola IR
Quantum control of entanglement by phase manipulation of time-delayed pulse sequences. II
PHYSICAL REVIEW A 70 (4): Art. No. 042305 OCT 2004
12. Malinovsky VS, Sola IR
Quantum phase control of entanglement
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 190502 NOV 5 2004

11. Kis Z, Paspalakis E
Controlled creation of entangled states of excitons in coupled quantum dots
JOURNAL OF APPLIED PHYSICS 96 (6): 3435-3439 SEP 15 2004
10. Yi XX, Chang JL
Off-diagonal geometric phase in composite systems
PHYSICAL REVIEW A 70 (1): Art. No. 012108 JUL 2004
9. Biswas A, Agarwal GS
Quantum logic gates using Stark-shifted Raman transitions in a cavity
PHYSICAL REVIEW A 69 (6): Art. No. 062306 JUN 2004
8. Hama A, Zanardi P
Quantum entangling power of adiabatically connected Hamiltonians
PHYSICAL REVIEW A 69 (6): Art. No. 062319 JUN 2004
7. Biswas A, Agarwal GS
Preparation of W, GHZ, and two-qutrit states using bimodal cavities
JOURNAL OF MODERN OPTICS 51 (11): 1627-1636 JUL 20 2004
6. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004
5. Marr C, Beige A, Rempe G
Entangled-state preparation via dissipation-assisted adiabatic passages
PHYSICAL REVIEW A 68 (3): Art. No. 033817 SEP 2003
4. Jin S, Xue K, Xie BH
A realization of Yangian and its applications to the bi-spin system in an external magnetic field
COMMUNICATIONS IN THEORETICAL PHYSICS 39 (1): 1-5 JAN 15 2003
3. Samoson A, Tuherm T, Past J
Rotation sweep NMR
CHEMICAL PHYSICS LETTERS 365 (3-4): 292-299 NOV 5 2002
2. Fainberg, B.D., Gorbunov, V.A.
Coherent population transfer in molecules coupled with a dissipative environment by an intense ultrashort chirped pulse
2002 Journal of Chemical Physics 117 (15), pp. 7222-7232
1. Guo, J.-Y.
Preparation of entangled states of three particles by adiabatic passage
2002 Chinese Physics Letters 19 (8), pp. 1041-1043
- =====
- 41. Vitanov NV, Shore BW, Yatsenko L, Bohmer K, Halfmann T, Rickes T, Bergmann K**
Power broadening revisited: theory and experiment
OPTICS COMMUNICATIONS 199 (1-4): 117-126 NOV 15 2001
42. Mouloudakis, George; Lambropoulos, Peter
Squeezed Coherent States in Double Optical Resonance
PHOTONICS Volume: 8 Issue: 3 Article Number: 72 Published: MAR 2021
41. Su, D. D.; Li, Y. T.; Su, Q.; Grobe, R.
Laser-induced level shifts and splittings in multiphoton pair creation
PHYSICAL REVIEW D Volume: 103 Issue: 7 Article Number: 074513
Published: APR 30 2021
40. Wang, Sandan; Yuan, Jinpeng; Wang, Lirong; Xiao, Liantuan; Jia, Suotang
Measurement of the Kerr nonlinear refractive index of the Rb vapor based on an optical frequency comb using the z-scan method
OPTICS EXPRESS Volume: 28 Issue: 25 Pages: 38334-38342 Published: DEC 7 2020
39. Conde, A. Peralta; Montero, R.; Longarte, A.
Influence of coherent adiabatic excitation on femtosecond transient signals
PHYSICA SCRIPTA Volume: 96 Issue: 3 Article Number: 035401 Published: MAR 2021
38. Kron, T.; Beerwerth, R.; Raeder, S.; Fritzsche, S.; Heinke, R.; Schoenberg, P.; Truemper, M.; Wendt, K.
Hyperfine structure study of Tc-97, Tc-98, Tc-99 in a new laser ion source for high-resolution laser spectroscopy
PHYSICAL REVIEW C Volume: 102 Issue: 3 Article Number: 034307
Published: SEP 3 2020
37. Mouloudakis, G.; Lambropoulos, P.
Pairing superbunching with compounded nonlinearity in a resonant transition
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 023713
Published: AUG 20 2020
36. Barnum, T. J.; Herburger, H.; Grimes, D. D.; Jiang, J.; Field, R. W.
Preparation of high orbital angular momentum Rydberg states by optical-millimeter-wave STIRAP
JOURNAL OF CHEMICAL PHYSICS Volume: 153 Issue: 8 Article Number: 084301 Published: AUG 28 2020
35. Dunkelberger, Adam D.; Grafton, Andrea B.; Vurgaftman, Igor; Soykal, Oney O.; Reinecke, Thomas L.; Davidson, Roderick B.; Simpkins, Blake S.; Owrutsky, Jeffrey C.
Saturable Absorption in Solution-Phase and Cavity-Coupled Tungsten Hexacarbonyl
ACS PHOTONICS Volume: 6 Issue: 11 Pages: 2719-2725 Published: NOV 2019
34. Lamas, Iker; Longarte, Asier; Conde, Alvaro Peralta; Muga, Gonzalo; Townsend, Dave; Montero, Raul
Dynamics of Pyrroles Excited to the 3s/pi sigma* State
JOURNAL OF PHYSICAL CHEMISTRY A Volume: 123 Issue: 42 Pages: 8982-8993
Published: OCT 24 2019
33. Koszorus, A; Yang, XF; Billowes, J; Binnersley, CL; Bissell, ML; Cocolios, TE; Farooq-Smith, GJ; de Groote, RP; Flanagan, KT; Franchoo, S; Ruiz, RFG; Geldhof, S; Gins, W; Kanellakopoulos, A; Lynch, KM; Neyens, G; Stroke, HH; Vernon, AR; Wendt, KDA; Wilkins, SG
Precision measurements of the charge radii of potassium isotopes
PHYSICAL REVIEW C, 100 (3):10.1103/PhysRevC.100.034304 SEP 9 2019
32. Quan, Wei; Shen, Kesheng; Zhai, Yueyang; Wang, Xulin; Jiang, Liwei; Fan, Wenfeng; Liu, Feng; Qin, Jie; Wan, Shuangai
Precision measurements of optically thick alkali metal number density within a hybrid alkali metal cell
APPLIED OPTICS, 57 (20):5714-5719; 10.1364/AO.57.005714 JUL 10 2018
31. Harilal, SS; Brumfield, BE; LaHaye, NL; Hartig, KC; Phillips, MC
Optical spectroscopy of laser-produced plasmas for standoff isotopic analysis
APPLIED PHYSICS REVIEWS, 5 (2):10.1063/1.5016053 JUN 2018
30. Zhang, Wei; Liu, Xiaosong; Wu, Honglin; Song, Yunfei; Liu, Weilong; Yang, Yanqiang
Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (7):10.1088/1361-6455/aab1aa APR 14 2018
29. de Groote, RP; Verlinde, M; Sonnenschein, V; Flanagan, KT; Moore, I; Neyens, G
Efficient, high-resolution resonance laser ionization spectroscopy using weak transitions to long-lived excited states
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.032502 MAR 7 2017
28. Boyero Garcia, R.; Carpentier, A. V.; Gomez-Cadenas, J. J.; Peralta Conde, A.
A novel technique to achieve atomic macro-coherence as a tool to determine the nature of neutrinos
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6532-7 OCT 2016
27. Kudryavtsev, Y; Creemers, P; Ferrer, R; Granados, C; Gaffney, LP; Huyse, M; Mogilevskiy, E; Raeder, S; Sels, S; Van den Bergh, P; Van Duppen, P; Zadvornaya, A
A new in-gas-laser ionization and spectroscopy laboratory for off-line studies at KU Leuven
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, 376 345-352; 10.1016/j.nimb.2016.02.040 JUN 1 2016
26. Ihlenborg, Marvin; Raupers, Bjoern; Gunzer, Frank; Grottemeyer, Juergen
A comparative study of APLI and APCI in IMS at atmospheric pressure to reveal and explain peak broadening effects by the use of APLI
ANALYST, 140 (22):7565-7571; 10.1039/c5an01532d 2015
25. de Groote, RP; Budincevic, I; Billowes, J; Bissell, ML; Cocolios, TE; Farooq-Smith, GJ; Fedosseev, VN; Flanagan, KT; Franchoo, S; Ruiz, RFG; Heylen, H; Li, R; Lynch, KM; Marsh, BA; Neyens, G; Rossel, RE; Rothe, S; Stroke, HH; Wendt, KDA; Wilkins, SG; Yang, X
Use of a Continuous Wave Laser and Pockels Cell for Sensitive High-Resolution Collinear Resonance Ionization Spectroscopy

PHYSICAL REVIEW LETTERS, 115 (13):10.1103/PhysRevLett.115.132501 SEP 24 2015

24. Wolters, J.
Integrated Quantum Hybrid Systems (Elsevier, 2015)

23. Zhang, Xiaohang; Zhou, Min; Chen, Ning; Gao, Qi; Han, Chengyin; Yao, Yuan; Xu, Peng; Li, Shangyan; Xu, Yilin; Jiang, Yanyi; Bi, Zhiyi; Ma, Longsheng; Xu, Xinye
Study on the clock-transition spectrum of cold Yb-171 ytterbium atoms
LASER PHYSICS LETTERS, 12 (2):10.1088/1612-2011/12/2/025501 FEB 2015

22. Ecker, T., Brooks, D.R., Todd Lowe, K., Ng, W.
Spectral analysis of over-expanded cold jets via 3-component point Doppler velocimetry
52nd AIAA Aerospace Sciences Meeting - AIAA Science and Technology Forum and Exposition, SciTech 2014

21. Bernhardt, Birgitta; Beck, Annelise R.; Li, Xuan; Warrick, Erika R.; Bell, M. Justine; Haxton, Daniel J.; McCurdy, C. William; Neumark, Daniel M.; Leone, Stephen R.
High-spectral-resolution attosecond absorption spectroscopy of autoionization in xenon
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023408 FEB 10 2014

20. Ibanez, S; Muga, JG
Adiabaticity condition for non-Hermitian Hamiltonians
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033403 MAR 4 2014

19. Bokhan, PA; Fateev, NV; Kim, VA; Zakrevsky, DE
Isotope-selective laser excitation and field ionization of the $nF(5/2)$ Rydberg states in a thallium beam
LASER PHYSICS, 23 (5):10.1088/1054-660X/23/5/055702 MAY 2013

18. Campbell, HM; Boardman, BM; DeVore, TC; Havey, DK
Experimental determination of the Boltzmann constant: An undergraduate laboratory exercise for molecular physics or physical chemistry
AMERICAN JOURNAL OF PHYSICS, 80 (12):1045-1050; 10.1119/1.4764490 DEC 2012

17. Montero, Raul; Peralta Conde, Alvaro; Ovejas, Virginia; Fernandez-Fernandez, Marta; Castano, Fernando; Longarte, Asier
Ultrafast Evolution of Imidazole after Electronic Excitation
JOURNAL OF PHYSICAL CHEMISTRY A, 116 (44):10752-10758; 10.1021/jp3078198 NOV 8 2012

16. Montero, Raul; Peralta Conde, Alvaro; Ovejas, Virginia; Fernandez-Fernandez, Marta; Castano, Fernando; Vazquez de Aldana, Javier R.; Longarte, Asier
Femtosecond evolution of the pyrrole molecule excited in the near part of its UV spectrum
JOURNAL OF CHEMICAL PHYSICS, 137 (6):10.1063/1.4742344 AUG 14 2012

15. Levine, Jonathan
A simplified calculation of power-broadened linewidths, with application to resonance ionization mass spectrometry
SPECTROCHIMICA ACTA PART B-ATOMIC SPECTROSCOPY, 69 61-66; 10.1016/j.sab.2012.02.001 MAR 2012

14. Mukherjee, Nandini; Zare, Richard N.
Can stimulated Raman pumping cause large population transfers in isolated molecules?
JOURNAL OF CHEMICAL PHYSICS, 135 (18):10.1063/1.3657832 NOV 14 2011

13. Dreau, A; Lesik, M; Rondin, L; Spinicelli, P; Arcizet, O; Roch, JF; Jacques, V
Avoiding power broadening in optically detected magnetic resonance of single NV defects for enhanced dc magnetic field sensitivity
PHYSICAL REVIEW B, 84 (19):10.1103/PhysRevB.84.195204 NOV 23 2011

12. Montero, Raul; Peralta Conde, Alvaro; Ovejas, Virginia; Martinez, Roberto; Castano, Fernando; Longarte, Asier
Ultrafast dynamics of aniline in the 294-234 nm excitation range: The role of the π σ^* state
JOURNAL OF CHEMICAL PHYSICS 135 (5): 10.1063/1.3615544 AUG 7 2011

11. Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage for preparing polarized molecules
JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011

10. Peralta Conde, A.; Montero, R.; Longarte, A.; Castano, F.
Coherent excitation phenomena in time-resolved experiments
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 12 (47): 15501-15504

10.1039/c0cp00805b DEC 2010

9. Montero, Raul; Peralta Conde, Alvaro; Longarte, Asier; Castano, Fernando
Coherent Excitation and Relaxation of the Coupled S-1/S-2 Electronic States of Naphthalene
CHEMPHYSCHEM 11 (16): 3420-3423 NOV 15 2010

8. Conde, AP; Montero, R; Longarte, A; Castano, F
Coherent excitation phenomena in time-resolved experiments
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 12 (47): 15501-15504 DEC 2010

7. Bokhan, PA; Zakrevsky, DE; Kim, VA; Fateev, NV
Selective Excitation of the $6(2)D(3/2)$ State of the Atomic Thallium Beam
LASER PHYSICS 19 (10): 2050-2057 OCT 2009

6. Skolnik, Gordana; Vujicic, Natasa; Ban, Ticijana
Optical pumping of the Zeeman components in the rubidium vapor
OPTICS COMMUNICATIONS 282 (7): 1326-1334 APR 1 2009

5. Conde, A. Peralta; Tzallas, P.; Charalambidis, D.
On the population dynamics induced by an attosecond train interacting coherently with an atomic system within the electric dipole approximation
EUROPEAN PHYSICAL JOURNAL D 51 (2): 289-294 FEB 2009

4. Gunaratne, TC; Zhu, X; Lozovoy, VV; Dantus, M
Symmetry of nonlinear optical response to time inversion of shaped femtosecond pulses as a clock of ultrafast dynamics
CHEMICAL PHYSICS 338 (2-3): 259-267 SEP 25 2007

3. Anderlini M, Arimondo E
Control scheme for two photon ionization of condensate atoms
OPTICS COMMUNICATIONS 259 (2): 676-682 MAR 15 2006

2. Fateev NV
Isotopic selectivity of pulsed excitation of zinc atoms upon the $4s(2) (1) S-0 \rightarrow 4p P-3(1)0$ transition
OPTICS AND SPECTROSCOPY 98 (6): 791-795 JUN 2005

1. Bokhan PA, Zakrevskii DE, Fateev NV
Broadening of a two-photon resonance in a zinc atom in collisions with CO₂, CO, and NO molecules
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 98 (1): 24-30 2004

=====
42. Yatsenko LP, Vitanov NV, Shore BW, Ricketts T, Bergmann K
Creation of coherent superpositions using Stark-chirped rapid adiabatic passage
OPTICS COMMUNICATIONS 204 (1-6): 413-423 APR 1 2002

41. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

40. Wan, Ting; Wang, Tengfei; Zhou, Wenhui; Chen, Changshui
Coupling modulation for efficient wavelength conversion with the Stark-chirped rapid adiabatic passage
RESULTS IN PHYSICS Volume: 19 Article Number: 103387 Published: DEC 2020

39. Beterov, I. I.; Tretyakov, D. B.; Entin, V. M.; Yakshina, E. A.; Ryabtsev, I. I.; Saffman, M.; Bergamini, S.
Application of adiabatic passage in Rydberg atomic ensembles for quantum information processing
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 18 Article Number: 182001 Published: SEP 28 2020

38. Shirkhaghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020

37. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, 533 10.1016/j.physa.2019.121932 NOV 1 2019

36. Wang, Tengfei; Wan, Ting; Zhou, Wenhui; Chen, Changshui
Three-process cascaded frequency conversion based on Stark-chirped rapid

- adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 36 (7):1958-1963; 10.1364/JOSAB.36.001958 JUL 1 2019
35. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
34. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19; 10.1007/s10773-017-3535-z JAN 2018
33. Han, Yong-Chang
Steering population transfer between electronic states of the Na-2 molecule beyond the rotating wave approximation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (22):10.1088/1361-6455/aa90d9 NOV 28 2017
32. Beterov, I. I.; Saffman, M.; Yakshina, E. A.; Tret'yakov, D. B.; Entin, V. M.; Bergamini, S.; Kuznetsova, E. A.; Ryabtsev, I. I.
Two-qubit gates using adiabatic passage of the Stark-tuned Forster resonances in Rydberg atoms
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.062307 DEC 6 2016
31. Tian, Si-Cong; Xing, En-Bo; Wan, Ren-Gang; Wang, Chun-Liang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Control of coherence transfer via tunneling in quadruple and multiple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125205 DEC 2016
30. Shi Xuan; Wei LianFu; Oh, Choo Hiap
Quantum computation with surface-state electrons by rapid population passages
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 57 (9):1718-1724; 10.1007/s11433-014-5547-5 SEP 2014
29. Mukherjee, Nandini; Dong, Wenrui; Zare, Richard N.
Coherent superposition of M-states in a single rovibrational level of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 140 (7):10.1063/1.4865131 FEB 21 2014
28. Shi Xuan; Oh, C. H.; Wei Lian-Fu
Stark-Chirped Rapid Adiabatic Passage in Presence of Dissipation for Quantum Computation
COMMUNICATIONS IN THEORETICAL PHYSICS, 61 (2):235-240; FEB 2014
27. Sharaby, YA; Joshi, A; Hassan, SS
COHERENT POPULATION TRANSFER IN V-TYPE ATOMIC SYSTEM
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (4):10.1142/S0218863513500446 DEC 2013
26. Yan, Xiang-an; Wang, Li-qiang
Study of the maximum conversion efficiency of the four-wave mixing process based on the Hamiltonian approach
OPTIK, 123 (11):964-970; 10.1016/j.ijleo.2011.06.061 2012
25. Mukherjee, Nandini; Zare, Richard N.
Can stimulated Raman pumping cause large population transfers in isolated molecules?
JOURNAL OF CHEMICAL PHYSICS, 135 (18):10.1063/1.3657832 NOV 14 2011
24. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11): 2785-2796 NOV 2011
23. Mukherjee, Nandini; Zare, Richard N.
Stark-induced adiabatic Raman passage for preparing polarized molecules
JOURNAL OF CHEMICAL PHYSICS 135 (2): 10.1063/1.3599711 JUL 14 2011
22. Lapert, M; Guerin, S; Sugny, D
Field-free quantum cogwheel by shaping of rotational wave packets
PHYSICAL REVIEW A 83 (1): Art. No. 013403 JAN 18 2011
21. Djotyan, G.P., Bakos, J.S., Sorlei, Z.S., (...), IgnAcz, P.N., Szigeti, J.
Frequency chirped laser pulses in atomic physics: Coherent control of inner and translational quantum states
Modern Optics and Photonics: Atoms and Structured Media pp. 77-91 (World Scientific, 2010)
20. Ren Liqing; Li Yongfang; Li Baihong; Wang Lei; Wang Zhaohua
Adiabatic and diabatic process of sum frequency conversion
OPTICS EXPRESS 18 (19): 20428-20438 SEP 13 2010
19. Gogyan, A; Guerin, S; Malakyan, Y
Shaping coherent excitation of atoms and molecules by a train of ultrashort laser pulses
PHYSICAL REVIEW A 81 (3): Art. No. 033401 MAR 2010
18. Divakaran, Uma; Dutta, Amit; Sen, Diptiman
Landau-Zener problem with waiting at the minimum gap and related quench dynamics of a many-body system
PHYSICAL REVIEW B 81 (5): Art. No. 054306 FEB 2010
17. Deng Li; Niu Yueping; Xiang Yang; Jin Shiqi; Gong Shangqing
Creation of an arbitrary coherent superposition state with chirped delayed pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (3): Art. No. 035401 FEB 14 2010
16. Xia, Keyu; Macovei, Mihai; Evers, Joerg; Keitel, Christoph H.
Robust coherent preparation of entangled states of two coupled flux qubits via dynamic control of the transition frequencies
PHYSICAL REVIEW B 79 (2): Art. No. 024519 JAN 2009
15. Wei, LF; Johansson, JR; Cen, LX; Ashhab, S; Nori, F
Controllable coherent population transfers in superconducting qubits for quantum computing
PHYSICAL REVIEW LETTERS 100 (11): Art. No. 113601 MAR 21 2008
14. Choi, Hyeonho; Son, Won-Joon; Shin, Seokmin; Chang, Bo Y.; Sola, Ignacio R.
Selective photodissociation in diatomic molecules by dynamical Stark-shift control
JOURNAL OF CHEMICAL PHYSICS 128 (10): Art. No. 104315 MAR 14 2008
13. Shu, Chuan-Cun; Yuan, Kai-Jun; Han, Yong-Chang; Hu, Wen-Hui; Cong, Shu-Lin
Steering population transfer of a five-level polar NaK molecule by Stark shifts
CHEMICAL PHYSICS 344 (1-2): 121-127 FEB 22 2008
12. Djotyan, GP; Bakos, JS; Demeter, G; Sorlei, Z; Szigeti, J; Dzsotjan, D
Creation of a coherent superposition of quantum states by a single frequency-chirped short laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 25 (2): 166-174 FEB 2008
11. Guerin, S.
Control of atomic and molecular processes by designed external fields: From adiabatic to ultrashort pulse strategies
AIP Conference Proceedings 963(2), pp. 772-776 (2007)
10. Bateman J, Freearge T
Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry
PHYSICAL REVIEW A 76 (1): Art. No. 013416 JUL 2007
9. Amnat-Talab M, Khoda-Bakhsh R, Guerin S
Quantum state engineering in a cavity by Stark chirped rapid adiabatic passage
PHYSICS LETTERS A 359 (5): 366-372 DEC 4 2006
8. Arkhipkin, V.G., Timofeev, I.V., Timofeev, V.P.
Preparation of maximal atomic coherence in space by fractional stimulated Raman adiabatic passage
2006 Proceedings of SPIE - The International Society for Optical Engineering 6259, art. no. 62590G
7. Arkhipkin, V.G., Timofeev, I.V.
Induction of the maximum Raman coherence in an extended medium through fractional adiabatic passage
2006 Optics and Spectroscopy (English translation of Optika i Spektroskopiya) 100 (3), pp. 433-436
6. Gong S, Niu Y
Creation of arbitrary coherent superposition states in four-level systems
OPTICS AND SPECTROSCOPY 99 (2): 270-273 AUG 2005 (Optika i Spektroskopiya 99 (2), pp. 286-289)
5. Gilb S, Nestorov V, Leone SR, et al.
Kr (n=5-10,s,d,g) electronic wave packets: Electron time-of-flight resolution and the ac-Stark shift during wave-packet preparation

4. Arkhipkin, V.G., Myslivets, S.A., Timofeev, I.V.
Stark-chirped rapid adiabatic passage: Propagation of laser pulses and spacetime evolution of populations and of two-photon coherence
2003 Journal of Experimental and Theoretical Physics 97 (4), pp. 711-721

3. Popov AK, Kimberg VV, George TF
Adiabatic passage and dissociation controlled by interference of two laser-induced continuum structures
PHYSICAL REVIEW A 68 (3): Art. No. 033407 SEP 2003

2. Guerin, S; Jauslin, HR
Control of Quantum Dynamics by Laser Pulses: Adiabatic Floquet Theory
Advances in Chemical Physics, VOL 125: 147-267 2003

1. Korsunsky EA, Fleischhauer M
Resonant nonlinear optics in coherently prepared media: Full analytic solutions
PHYSICAL REVIEW A 66 (3): Art. No. 033808 SEP 2002

=====
43. Unanyan RG, Fleischhauer M, Vitanov NV, Bergmann K
Entanglement generation by adiabatic navigation in the space of symmetric multiparticle states
PHYSICAL REVIEW A 66 (4): Art. No. 042101 OCT 2002

23. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021

22. Niyosomeh, I. F.; Diffo, J. T.; Ateuafack, M. E.; Fai, L. C.
Landau-Zener transitions in coupled qubits: Effects of coloured noise
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 116 Article Number: 113744 Published: FEB 2020

21. Paul, Koushik; Sarma, Amarendra K.
High-fidelity entangled Bell states via shortcuts to adiabaticity
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052303 NOV 2 2016

20. Wang, P., Chen, M.-F.
Preparation of four-dimensional entangled states in separate cavities via adiabatic passage
Physica Scripta 86(6),065002 (2012)

19. Creatore, C; Brierley, RT; Phillips, RT; Littlewood, PB; Eastham, PR
Creation of entangled states in coupled quantum dots via adiabatic rapid passage
PHYSICAL REVIEW B, 86 (15):10.1103/PhysRevB.86.155442 OCT 22 2012

18. Brierley, RT; Creatore, C; Littlewood, PB; Eastham, PR
Adiabatic State Preparation of Interacting Two-Level Systems
PHYSICAL REVIEW LETTERS, 109 (4):10.1103/PhysRevLett.109.043002 JUL 23 2012

17. Chen, Li-Bo; Shi, Peng; Zheng, Chun-Hong; Gu, Yong-Jian
Generation of three-dimensional entangled state between a single atom and a Bose-Einstein condensate via adiabatic passage
OPTICS EXPRESS, 20 (13):14547-14555; JUN 18 2012

16. Sjoqvist, Erik; Rahaman, Ramij; Basu, Urna; Basu, B.
Berry phase and fidelity susceptibility of the three-qubit Lipkin-Meshkov-Glick ground state
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43 (35): Art. No. 354026 SEP 3 2010

15. Tamaryan, Levon; Ohanyan, Zaruhi; Tamaryan, Sayatnova
Universal behavior of the geometric entanglement measure of many-qubit W states
PHYSICAL REVIEW A 82 (2): Art. No. 022309 AUG 10 2010

14. Tamaryan, Sayatnova; Sudbery, Anthony; Tamaryan, Levon
Duality and the geometric measure of entanglement of general multiqubit W states
PHYSICAL REVIEW A 81 (5): Art. No. 052319 MAY 2010

13. Murgida, GE; Wisniacki, DA; Tamborenea, PI
Landau-Zener transitions in a semiconductor quantum dot
JOURNAL OF MODERN OPTICS 56 (6): 799-804 2009

12. Morrison, S; Parkins, AS
Collective spin systems in dispersive optical cavity QED: Quantum phase transitions and entanglement
PHYSICAL REVIEW A 77 (4): Art. No. 043810 APR 2008

11. Bayer, Tim; Wollenhaupt, Matthias; Baumert, Thomas
Strong-field control landscapes of coherent electronic excitation
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074007 APR 14 2008

10. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007

9. Karthik J, Sharma A, Lakshminarayan A
Entanglement, avoided crossings, and quantum chaos in an Ising model with a tilted magnetic field
PHYSICAL REVIEW A 75 (2): Art. No. 022304 FEB 2007

8. Mandilara A, Akulin VM, Kolar M, et al.
Control of multiatom entanglement in a cavity
PHYSICAL REVIEW A 75 (2): Art. No. 022327 FEB 2007

7. Chen, Q., Cheng, J., Wang, K.-L., Du, J.
Optimal quantum cloning via spin networks
2006 Physical Review A - Atomic, Molecular, and Optical Physics 74 (3), art. no. 034303

6. Malinovsky VS, Sola IR
Quantum control of entanglement by phase manipulation of time-delayed pulse sequences. II
PHYSICAL REVIEW A 70 (4): Art. No. 042305 OCT 2004

5. Malinovsky VS, Sola IR
Quantum phase control of entanglement
PHYSICAL REVIEW LETTERS 93 (19): Art. No. 190502 NOV 5 2004

4. Stockton JK, van Handel R, Mabuchi H
Deterministic Dicke-state preparation with continuous measurement and control
PHYSICAL REVIEW A 70 (2): Art. No. 022106 AUG 2004

3. Kis Z, Paspalakis E
Controlled creation of entangled states of excitons in coupled quantum dots
JOURNAL OF APPLIED PHYSICS 96 (6): 3435-3439 SEP 15 2004

2. Hama A, Zanardi P
Quantum entangling power of adiabatically connected Hamiltonians
PHYSICAL REVIEW A 69 (6): Art. No. 062319 JUN 2004

1. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004

=====
44. Halfmann T, Rickes T, Vitanov NV, Bergmann K
Lineshapes in coherent two-photon excitation
OPTICS COMMUNICATIONS 220 (4-6): 353-359 MAY 15 2003

13. Zhang, Wei; Liu, Xiaosong; Wu, Honglin; Song, Yunfei; Liu, Weilong; Yang, Yanqiang
Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (7):10.1088/1361-6455/aab1aa APR 14 2018

12. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

11. Panda, CD; O'Leary, BR; West, AD; Baron, J; Hess, PW; Hoffman, C; Kirilov, E; Overstreet, CB; West, EP; DeMille, D; Doyle, JM; Gabrielse, G
Stimulated Raman adiabatic passage preparation of a coherent superposition of ThO H-3 Delta(1) states for an improved electron electric-dipole-moment measurement
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052110 MAY 16 2016

10. de Groote, RP; Budincevic, I; Billowes, J; Bissell, ML; Cocolios, TE; Farooq-

Smith, GJ; Fedosseev, VN; Flanagan, KT; Franchoo, S; Ruiz, RFG; Heylen, H; Li, R; Lynch, KM; Marsh, BA; Neyens, G; Rossel, RE; Rothe, S; Stroke, HH; Wendt, KDA; Wilkins, SG; Yang, X

Use of a Continuous Wave Laser and Pockels Cell for Sensitive High-Resolution Collinear Resonance Ionization Spectroscopy
PHYSICAL REVIEW LETTERS, 115 (13):10.1103/PhysRevLett.115.132501 SEP 24 2015

9. Shore, Bruce W.

Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

8. Shore, Bruce W.

Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

7. Sankari, M

Isotope selective near-resonant two-photon ionization of Ca-41 isotope via the $4s11s(1)S(0)$ intermediate state
APPLIED OPTICS 47 (18): 3289-3298 JUN 20 2008

6. Oberst M, Vewinger F, Lvovsky AI

Time-resolved probing of the ground state coherence in rubidium
OPTICS LETTERS 32 (12): 1755-1757 JUN 15 2007

5. Kumar PVK, Sankari M, Suryanarayana MV

Isotope selective near-resonant two-photon ionization of calcium isotopes
JOURNAL OF PHYSICS D-APPLIED PHYSICS 40 (1): 288-293 JAN 7 2007

4. Kumar PVK, Sankari M, Acharyulu GVSG, et al.

Isotope-selective excitation of Ca-41 isotope in Doppler-free two-photon continuous-wave excitation: a case study
APPLIED OPTICS 45 (35): 8979-8989 DEC 10 2006

3. Sankari M, Kumar PVK, Suryanarayana MV

Wavelength dependent Stark compensation in isotope selective Doppler-free two photon ionization
OPTICS COMMUNICATIONS 259 (2): 612-619 MAR 15 2006
Times Cited: 0

2. Anderlini M, Arimondo E

Control scheme for two photon ionization of condensate atoms
OPTICS COMMUNICATIONS 259 (2): 676-682 MAR 15 2006

1. Fateev NV

Isotopic selectivity of pulsed excitation of zinc atoms upon the $4s(2) (1) S-0 \rightarrow 4p P-3(1)0$ transition
OPTICS AND SPECTROSCOPY 98 (6): 791-795 JUN 2005

=====

45. Marienfeld S, Pashayan Y, Vitanov NV, Shore BW, Hotop H, Bergmann K
Influence of laser bandwidth and transit time on the excitation probability of a rovibrational two-level system
JOURNAL OF CHEMICAL PHYSICS 119 (10): 5069-5077 SEP 8 2003

4. Dupre, Patrick

Sub-Doppler noise-immune cavity-enhanced optical heterodyne molecular spectrometry modeling: from Doppler broadening to cross-sideband resonances
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 32 (5):838-860; 10.1364/JOSAB.32.000838 MAY 2015

3. Yu, Dingshan; Chen, Yujie; Li, Baojun; Zhao, Fuli; Ding, Cairong; Chen, Xudong

Optical emission from disordered multi-branched ZnO nanorods formed by catalyst-free growth
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 103 (2): 329-334 MAY 2011

2. McCulloch MT, Duxbury G, Langford N

Observation of saturation and rapid passage signals in the 10.25 micron spectrum of ethylene using a frequency chirped quantum cascade laser
MOLECULAR PHYSICS 104 (16-17): 2767-2779 AUG-SEP 2006

1. Zhang CF, Dong ZW, You GJ, et al.

Femtosecond pulse excited two-photon photoluminescence and second harmonic generation in ZnO nanowires
APPLIED PHYSICS LETTERS 89 (4): Art. No. 042117 JUL 24 2006

=====

46. Vitanov NV, Yatsenko LP, Bergmann K
Population transfer by an amplitude-modulated pulse
PHYSICAL REVIEW A 68 (4): Art. No. 043401 Part B OCT 2003

16. Mostafavi, Fatemeh; Yuan, Luqi; Ramezani, Hamidreza

Eigenstates Transition without Undergoing an Adiabatic Process
PHYSICAL REVIEW LETTERS, 122 (5):10.1103/PhysRevLett.122.050404 FEB 8 2019

15. Shore, Bruce W.

Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

14. Shang, Y., Wang, H.-T., Sui, Y., Cong, S.

Two control methods for the maximum entangled states preparations of a double quantum system
Kongzhi Lilun Yu Yingyong/Control Theory and Applications 34(7), pp. 965-973 (2017)

13. Lee, Han-gyeol; Song, Yunheung; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook

Quantum dynamics of a two-state system induced by a chirped zero-area pulse
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023423 FEB 23 2016

12. Derouault, S; Bouchene, MA

Non-adiabatic effects in the detuned micro-maser: From the hot to the intermediate regime
OPTICS COMMUNICATIONS, 355 200-208; 10.1016/j.optcom.2015.06.044 NOV 15 2015

11. Shore, Bruce W.

PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

10. Shu, Xiaoqin; Deng, Chi; Kuang, Ye; Yang, Jianhui; Liu, Yiding

Population Transfer in Multilevel System via Modified Stimulated Raman adiabatic passage
Applied Mechanics and Materials, Applied Decisions in Area of Mechanical Engineering and Industrial Manufacturing, 577 112-115;
10.4028/www.scientific.net/AMM.577.112 2014 Edited by: Fan KC
3rd International Conference on Mechanical, Control, and Electronic Information (ICMCEI), JUN 27-29, 2014, Taipei, TAIWAN

9. Shu, X.Q., Deng, C., Kuang, Y., Yang, J.H., Liu, Y.D. Creation of coherent

superposition state by stimulated raman adiabatic passage in serial multi-lambda-type system
Applied Mechanics and Materials 575, pp. 598-601 (2014)

8. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong

Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

7. Hu Jing-Yu ; Mao Teng-Fei ; Dou Fu-Quan ; et al.

Application of the composite adiabatic passage technique in the Landau-Zener model with harmonic interaction modulation
ACTA PHYSICA SINICA Volume: 62 Issue: 17 Article Number: 170303 DOI: 10.7498/aps.62.170303 Published: 2013

6. Zhang, Jingfu; Shim, Jeong Hyun; Niemeyer, Ingo; Taniguchi, T.; Teraji, T.; Abe, H.; Onoda, S.; Yamamoto, T.; Ohshima, T.; Isoya, J.; Suter, Dieter

Experimental Implementation of Assisted Quantum Adiabatic Passage in a Single Spin
PHYSICAL REVIEW LETTERS, 110 (24):10.1103/PhysRevLett.110.240501 JUN 11 2013

5. Wang, Zhendong; Jia, Kening; Liang, Ying; Tong, Dianmin; Fan, Xijun

Achieving efficient and stable coherent population transfer by ultrashort double pulses
QUANTUM AND NONLINEAR OPTICS 7846: Art. No. 78460M 2010

4. Shevchenko, S. N.; Ashhab, S.; Nori, Franco

Landau-Zener-Stuckelberg interferometry
PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 492 (1): 1-30 JUL 2010

3. Li, Qifang; Kuang, Ye

Preparing of coherent superposition state in serial multi-Lambda-type system by stimulated Raman adiabatic passage

2. Shu, Xiaoqin; Kuang, Ye; Qin, Jiaqian; Li, Qifang
Population transfer in multilevel system through modified stimulated Raman
adiabatic passage
CHINESE OPTICS LETTERS 5 (7): 373-375 JUL 10 2007

1. Qin Jia-Qian; Kuang Ye; Shu Xiao-Qin
Creation of coherent superposition states in multilevel systems
COMMUNICATIONS IN THEORETICAL PHYSICS 48 (5): 908-912 NOV 15 2007

=====
47. Yatsenko LP, Shore BW, Vitanov NV, Bergmann K
Retroreflection-induced bichromatic adiabatic passage
PHYSICAL REVIEW A 68 (4): Art. No. 043405 Part B, OCT 2003

6. Ngoc-Loan Phan; Thanh-Tuynh Nguyen; Mineo, Hirobumi; Van-Hung Hoang
Depletion effect in high-order harmonic generation with coherent superposition
state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37
Issue: 2 Pages: 311-319 Published: FEB 1 2020

5. Chacon, A., Ciappina, M.F., Conde, A.P.
High-order harmonic generation enhanced by coherent population return
European Physical Journal D 69(5),133 (2015)

4. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under
dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31
(11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

3. Demeter, G
Quantum control of multilevel atoms with rotational degeneracy using short laser
pulses
PHYSICAL REVIEW A 82 (4): Art. No. 043404 OCT 5 2010

2. Ghosal, Subhas; Doyle, Richard J.; Koch, Christiane P.; Hutson, Jeremy M.
Stimulating the production of deeply bound RbCs molecules with laser pulses:
the role of spin-orbit coupling in forming ultracold molecules
NEW JOURNAL OF PHYSICS 11: Art. No. 055011 MAY 14 2009

1. Demeter, G. P. Djotyan, Zs. Súrlei, and J. S. Bakos
Mechanical effect of retroreflected frequency-chirped laser pulses on two-level
atoms
PHYSICAL REVIEW A 74 (1): Art. No. 013401 JUL 2006

=====
48. Vewinger F, Heinz M, Fernandez RG, Vitanov NV, Bergmann K
Creation and measurement of a coherent superposition of quantum states
PHYSICAL REVIEW LETTERS 91 (21): Art. No. 213001 NOV 21 2003

78. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published:
MAR-APR 2021

77. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic
Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published:
DEC 2020

76. Ngoc-Loan Phan; Thanh-Tuynh Nguyen; Mineo, Hirobumi; Van-Hung Hoang
Depletion effect in high-order harmonic generation with coherent superposition
state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37
Issue: 2 Pages: 311-319 Published: FEB 1 2020

75. Dareau, A; Meng, Y; Schneeweiss, P; Rauschenbeutel, A
Observation of Ultrastrong Spin-Motion Coupling for Cold Atoms in Optical
Microtraps
PHYSICAL REVIEW LETTERS, 121 (25):10.1103/PhysRevLett.121.253603 DEC 21
2018

74. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman
adiabatic passage

73. Schneeweiss, P; Dareau, A; Sayrin, C
Cold-atom-based implementation of the quantum Rabi model
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.021801 AUG 8 2018

72. Zhang Lu; Yan Lu-Yao; Bao Hui-Han; Chai Xiao-Qian; Ma Dan-Dan; Wu Qian-
Nan; Xia Ling-Chen; Yao Dan; Qian Jing
Theoretical research on an efficient population transfer based on two different
laser pulse sequences
ACTA PHYSICA SINICA, 66 (21):10.7498/aps.66.213301 NOV 5 2017

71. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

70. Tian, Si-Cong; Wan, Ren-Gang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang,
Li-Jun
Tunneling-assisted coherent population transfer and creation of coherent
superposition states in triple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125203 DEC 2016

69. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step
Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016

68. Huang, Wei; Du, Yan-Xiong; Liang, Zhen-Tao; Yan, Hui
Detecting quantumness witness with atoms manipulated by the fractional
stimulated Raman adiabatic passage processes
OPTICS COMMUNICATIONS, 363 42-46; 10.1016/j.optcom.2015.10.053 MAR 15
2016

67. Tikman, Y; Yavuz, I; Ciappina, MF; Chacon, A; Altun, Z; Lewenstein, M
High-order-harmonic generation from Rydberg atoms driven by plasmon-
enhanced laser fields
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023410 FEB 10 2016

66. Juzeliunas, G., Ohberg, P.
Optical Control of Cold Atoms and Artificial Electromagnetism
in Photonics: Scientific Foundations, Technology and Applications 2, pp. 371-399
(Wiley, 2015), editor David L. Andrews

65. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

64. Goldman, N; Juzeliunas, G; Ohberg, P; Spielman, IB
Light-induced gauge fields for ultracold atoms
REPORTS ON PROGRESS IN PHYSICS, 77 (12):10.1088/0034-4885/77/12/126401
DEC 2014

63. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

62. Siddons, Paul
Light propagation through atomic vapours
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47
(9):10.1088/0953-4075/47/9/093001 MAY 15 2014

61. Kumar, Santosh; Laupretre, Thomas; Bretenaker, Fabien; Goldfarb, Fabienne;
Ghosh, Rupamanjari
Polarization-dependent manipulation of optical properties in a tripod system
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023852 AUG 27 2013

60. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Population transfer and generation of arbitrary superpositions of quantum states
in a four-level system using a single-chirped laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30
(4):1017-1021; APR 2013

59. Jiang, Chang; Lu, Jing; Zhou, Lan
Bloch oscillations of quasispin polaritons in a magneto-optically controlled atomic
ensemble

- PHYSICS LETTERS A, 376 (45):2935-2939; 10.1016/j.physleta.2012.08.019 OCT 1 2012
58. Deb, Amita Bikram; Rakonjac, Ana; Kjaergaard, Niels
Versatile laser system for experiments with cold atomic gases
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (11):3109-3113; NOV 2012
57. Lin, Tzung-Yi; Hsiao, Fu-Chen; Jhang, Yao-Wun; et al.
Mode conversion using optical analogy of shortcut to adiabatic passage in engineered multimode waveguides
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 24085-24092 Published: OCT 8 2012
56. Hofmann, Julian; Krug, Michael; Ortegell, Norbert; Gerard, Lea; Weber, Markus; Rosenfeld, Wenjamin; Weinfurter, Harald
Heralded Entanglement Between Widely Separated Atoms
SCIENCE, 337 (6090):72-75; 10.1126/science.1221856 JUL 6 2012
55. Sandor, N; Bakos, JS; Sorlei, Z; Djotyan, GP
Creation of coherent superpositions between metastable atomic states in Doppler-broadened media
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011), 350 10.1088/1742-6596/350/1/012002 2012
Editors: Bhattacharjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series
54. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Selective and efficient control of population transfer in the presence of an equally populated initial doublet
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (6):1551-1556; JUN 1 2012
53. Ivanov, Vladimir S.; Rozhdestvensky, Yuri V.; Suominen, Kalle-Antti
Theory of robust subrecoil cooling by stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033422 MAR 21 2012
52. Jia, Ning; Qian, Jing; Dong, Guangjiong; Zhang, Weiping
Stability, adiabaticity and transfer efficiency in a nonlinear Lambda-system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (1):10.1088/0953-4075/45/1/015301 JAN 14 2012
51. Generation of intense isolated sub-40-as pulses from a coherent superposition state by quantum path control in the multicycle regime
Chen, J.-G., Yang, Y.-J., Zeng, S.-L., Liang, H.-Q.
Physical Review A - Atomic, Molecular, and Optical Physics 83(2), 023401 (2011)
50. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
49. Li, Z., Li, G., Zhang, Y., (...), Wang, J., Zhang, T.
Generation of Raman laser for STIRAP of Cs atom
Guangxue Xuebao/Acta Optica Sinica 31(1), 0102002 (2011)
48. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11): 2785-2796 NOV 2011
47. Kumar, S; Laupretre, T; Proux, C; Bretenaker, F; Ghosh, R; Goldfarb, F
Interacting double dark resonances in a tripod system of room-temperature (4)He
PHOTONICS 2010: TENTH INTERNATIONAL CONFERENCE ON FIBER OPTICS AND PHOTONICS 8173 10.1117/12.897791 2011
Editor(s): Khijwania SK; Gupta BD; Pal BP; Sharma A
46. Kumar, S; Laupretre, T; Ghosh, R; Bretenaker, F; Goldfarb, F
Interacting double dark resonances in a hot atomic vapor of helium
PHYSICAL REVIEW A 84 (2): 10.1103/PhysRevA.84.023811 AUG 9 2011
45. Zhang, Bing; Wu, Jin-Hui; Yan, Xi-Zhang; Wang, Lei; Zhang, Xiao-Jun; Gao, Jin-Yue
Coherence generation and population transfer by stimulated Raman adiabatic passage and pi pulse in a four-level ladder system
OPTICS EXPRESS 19 (13): 12000-12007 JUN 20 2011
44. Aghamalyan, D; Malakyan, Y
Photonic time-bin qubit generation with a tripod atomic system
INTERNATIONAL CONFERENCE ON LASER PHYSICS 2010 7998: Art. No. 799815 2011
43. Ivanov, Vladimir S.; Rozhdestvensky, Yuri V.; Suominen, Kalle-Antti
Efficient two-dimensional subrecoil Raman cooling of atoms in a tripod configuration
PHYSICAL REVIEW A 83 (2): Art. No. 023407 FEB 7 2011
42. Narayanan, Andal; Hazra, Abheera; Sandhya, S. N.
Threshold nonlinear absorption in Zeeman transitions
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215502 NOV 14 2010
41. Ivanov, Vladimir; Rozhdestvensky, Yuri
Two-dimensional atom localization in a four-level tripod system in laser fields
PHYSICAL REVIEW A 81 (3): Art. No. 033809 MAR 2010
40. Yang, Xihua; Zhang, Zhenhua; Yan, Xiaona; Li, Chunfang
Selective and efficient control of coherent population transfer with time-separated chirped pulses
PHYSICAL REVIEW A 81 (3): Art. No. 035801 MAR 2010
39. Djotyan, G.P., Bakos, J.S., Sorlei, Z.S., (...), IgnAcz, P.N., Szigeti, J.
Frequency chirped laser pulses in atomic physics: Coherent control of inner and translational quantum states
Modern Optics and Photonics: Atoms and Structured Media pp. 77-91 (World Scientific, 2010)
38. Laupretre, T.; Ruggiero, J.; Ghosh, R.; Bretenaker, F.; Goldfarb, F.
Observation of Electromagnetically Induced Transparency and Slow Light in the Dark State - Bright State Basis
OPTICS EXPRESS 17 (22): 19444-19450 OCT 26 2009
Electromagnetically induced transparency and slow light
37. Ghosh, Joyee; Ghosh, R.; Goldfarb, F.; Le Gouet, J. -L.; Bretenaker, F.
Analysis of electromagnetically induced transparency and slow light in a hot vapor of atoms undergoing collisions
PHYSICAL REVIEW A 80 (2): Art. No. 023817 AUG 2009
36. Oztop, B; Oktel, MO; Mustecaphoglu, OE; You, L
Quantum entanglement of spin-1 bosons with coupled ground states in optical lattices
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (14): Art. No. 145505 JUL 28 2009
35. Si, Liu-Gang; Yang, Wen-Xing; Yang, Xiaoxue
Ultraslow temporal vector optical solitons in a cold four-level tripod atomic system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 26 (3): 478-486 MAR 2009
34. Missori, RJ; de Oliveira, MC; Furuya, K
Non-Gaussian two-mode squeezing and continuous-variable entanglement of linearly and circularly polarized light beams interacting with cold atoms
PHYSICAL REVIEW A 79 (2): Art. No. 023801 FEB 2009
33. Vaishnav, J. Y.; Ruseckas, Julius; Clark, Charles W.; Juzelunas, Gediminas
Spin Field Effect Transistors with Ultracold Atoms
PHYSICAL REVIEW LETTERS 101 (26): Art. No. 265302 DEC 31 2008
32. Rosenfeld, W; Hocke, F; Henkel, F; Krug, M; Volz, J; Weber, M; Weinfurter, H
Towards Long-Distance Atom-Photon Entanglement
PHYSICAL REVIEW LETTERS 101 (26): Art. No. 260403 DEC 31 2008
31. Anton, MA; Carreno, F; Calderon, OG; Melle, S; Gonzalo, I
Optical switching by controlling the double-dark resonances in a N-tripod five-level atom
OPTICS COMMUNICATIONS 281 (24): 6040-6048 DEC 15 2008
30. Wang, Lei; Song, Xiao-Li; Li, Ai-Jun; Wang, Hai-Hua; Wei, Xiao-Gang; Kang, Zhi-Hui; Jiang, Yun; Gao, Jin-Yue
Coherence transfer between atomic ground states by the technique of stimulated Raman adiabatic passage
OPTICS LETTERS 33 (20): 2380-2382 OCT 15 2008
29. Klein, J; Beil, F; Halfmann, T
Experimental investigations of stimulated Raman adiabatic passage in a doped solid
PHYSICAL REVIEW A 78 (3): Art. No. 033416 SEP 2008

28. Yang, Xihua; Zhu, Shiyao
Collision-assisted electromagnetically induced control of coherent population transfer
PHYSICAL REVIEW A 78 (2): Art. No. 023818 Part B AUG 2008
27. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
26. Guo, Yu; Zhou, Lan; Kuang, Le-Man; Sun, C. P.
Magneto-optical Stern-Gerlach effect in an atomic ensemble
PHYSICAL REVIEW A 78 (1): Art. No. 013833 JUL 2008
25. Li, Qifang; Kuang, Ye
Preparing of coherent superposition state in serial multi-Lambda-type system by stimulated Raman adiabatic passage
CHINESE OPTICS LETTERS 6 (7): 469-471 JUL 10 2008
24. Goldfarb, F; Ghosh, J; David, M; Ruggiero, J; Chaneliere, T; Le Gouet, JL; Gilles, H; Ghosh, R; Bretenaker, F
Observation of ultra-narrow electromagnetically induced transparency and slow light using purely electronic spins in a hot atomic vapor
EPL 82 (5): Art. No. 54002 JUN 2008
23. Goto, Hayato; Ichimura, Kouichi
Stimulated Raman adiabatic passage with small two-photon detunings and its geometrical description
PHYSICS LETTERS A 372 (9): 1535-1540 FEB 25 2008
22. Shore BW
Coherent manipulation of atomic excitation
Bulgarian Journal of Physics 33, 52-70 (2006)
21. Djotyan, GP; Bakos, JS; Demeter, G; Sorlei, Z; Szigeti, J; Dzsotjan, D
Creation of a coherent superposition of quantum states by a single frequency-chirped short laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 25 (2): 166-174 FEB 2008
20. Qin Jia-Qian; Kuang Ye; Shu Xiao-Qin
Creation of coherent superposition states in multilevel systems
COMMUNICATIONS IN THEORETICAL PHYSICS 48 (5): 908-912 NOV 15 2007
19. Gearba, M.A., Camp, H.A., Trachy, M.L., Veshapidze, G., Shah, M.H., Jang, H.U., Depaola, B.D.
Measurement of population dynamics in stimulated Raman adiabatic passage
2007 Physical Review A - Atomic, Molecular, and Optical Physics 76 (1), art. no. 013406
18. Hou BP, Wang SJ, Yu WL, et al.
Local modulation of double electromagnetically induced transparency spectrum
CHINESE PHYSICS LETTERS 24 (9): 2579-2582 SEP 2007
17. Volz, J., Weber, M., Schlenk, D., Rosenfeld, W., Kurtsiefer, C., Weinfurter, H.
An atom and a photon
2007 Laser Physics 17 (7), pp. 1007-1016
16. Wu JH, Cui CL, Ba N, et al.
Dynamical evolution and analytical solutions for multiple degenerate dark states in the tripod-type atomic system
PHYSICAL REVIEW A 75 (4): Art. No. 043819 APR 2007
15. Goto H, Ichimura K
Observation of coherent population transfer in a four-level tripod system with a rare-earth-metal-ion-doped crystal
PHYSICAL REVIEW A 75 (3): Art. No. 033404 MAR 2007
14. Pawlis A, Sanaka K, Gotzinger S, et al.
Investigation of excitons bound to fluorine donors in ZnSe
SEMICONDUCTOR SCIENCE AND TECHNOLOGY 21 (10): 1412-1415 OCT 2006
13. Goto H, Ichimura K
Population transfer via stimulated Raman adiabatic passage in a solid
PHYSICAL REVIEW A 74 (5): Art. No. 053410 NOV 2006
12. Mazets IE
Adiabatic propagation of quantized light pulses in an atomic medium with the tripod level configuration
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 103 (3): 365-369 SEP 2006
11. Anton MA, Calderon OG, Melle S, et al.
All-optical switching and storage in a four-level tripod-type atomic system
OPTICS COMMUNICATIONS 268 (1): 146-154 DEC 1 2006
10. Arango CA, Shapiro M, Brumer P
Coherent control of collision processes: Penning versus associative ionization
JOURNAL OF CHEMICAL PHYSICS 125 (9): Art. No. 094315 SEP 7 2006
9. Hou BP, Wang SJ, Yu WL, et al.
Effects of vacuum-induced coherence on dispersion and absorption properties in a tripod-scheme atomic system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (11): 2335-2347 JUN 14 2006
8. Graefe EM, Korsch HJ, Witthaut D
Mean-field dynamics of a Bose-Einstein condensate in a time-dependent triple-well trap: Nonlinear eigenstates, Landau-Zener models, and stimulated Raman adiabatic passage
PHYSICAL REVIEW A 73 (1): Art. No. 013617 JAN 2006
7. Volz J, Weber M, Schlenk D, et al.
Observation of entanglement of a single photon with a trapped atom
PHYSICAL REVIEW LETTERS 96 (3): Art. No. 030404 JAN 27 2006
6. Gong S, Niu Y
Creation of arbitrary coherent superposition states in four-level systems
OPTICS AND SPECTROSCOPY 99 (2): 270-273 AUG 2005
5. Camp HA, Shah MH, Trachy ML, et al.
Numerical exploration of coherent excitation in three-level systems
PHYSICAL REVIEW A 71 (5): Art. No. 053401 MAY 2005
4. Niu YP, Gong SQ, Li RX, et al.
Creation of atomic coherent superposition states via the technique of stimulated Raman adiabatic passage using a Lambda-type system with a manifold of levels
PHYSICAL REVIEW A 70 (2): Art. No. 023805 AUG 2004
3. Petrosyan D, Malakyan YP
Magneto-optical rotation and cross-phase modulation via coherently driven four-level atoms in a tripod configuration
PHYSICAL REVIEW A 70 (2): Art. No. 023822 AUG 2004
2. Sangouard N, Guerin S, Yatsenko LP, et al.
Preparation of coherent superposition in a three-state system by adiabatic passage
PHYSICAL REVIEW A 70 (1): Art. No. 013415 JUL 2004
1. Gong JB, Rice SA
General method for complete population transfer in degenerate systems
PHYSICAL REVIEW A 69 (6): Art. No. 063410 JUN 2004
- =====
- 49. Vitanov NV, Kis Z, Shore BW**
Coherent excitation of a degenerate two-level system by an elliptically polarized laser pulse
PHYSICAL REVIEW A 68 (6): Art. No. 063414 DEC 2003
4. Le Kien, Fam; Hejazi, S. Sahar S.; Busch, Thomas; Viet Giang Truong; Chormaic, Sile Nic
Channeling of spontaneous emission from an atom into the fundamental and higher-order modes of a vacuum-clad ultrathin optical fiber
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043859 OCT 26 2017
3. Kim, Hyosub; Song, Yungheung; Lee, Han-gyeol; Ahn, Jaewook
Rabi oscillations of Morris-Shore-transformed N-state systems by elliptically polarized ultrafast laser pulses
PHYSICAL REVIEW A, 91 (5):10.1103/PhysRevA.91.053421 MAY 26 2015
2. Le Kien, Fam; Rauschenbeutel, A.
Anisotropy in scattering of light from an atom into the guided modes of a nanofiber
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023805 AUG 6 2014
1. Paspalakis E, Kylstra NJ
Coherent manipulation of superconducting quantum interference devices with adiabatic passage
JOURNAL OF MODERN OPTICS 51 (11): 1679-1689 JUL 20 2004

=====

50. Vitanov NV, Girard B

Adiabatic excitation of rotational ladder by chirped laser pulses
PHYSICAL REVIEW A 69 (3): Art. No. 033409 MAR 2004

20. Korobenko, A

Control of molecular rotation with an optical centrifuge
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51
(20):10.1088/1361-6455/aadd56 OCT 28 2018

19. Armon, Tsafirir; Friedland, Lazar

Quantum versus classical dynamics in the optical centrifuge
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033411 SEP 18 2017

18. Milner, Valery; Hepburn, John W.

LASER CONTROL OF ULTRAFAST MOLECULAR ROTATION
Edited by: Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 395-412; 2016

17. Milner, AA; Korobenko, A; Milner, V

Field-free long-lived alignment of molecules with a two-dimensional optical centrifuge
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.053408 MAY 11 2016

16. Armon, Tsafirir; Friedland, Lazar

Capture into resonance and phase-space dynamics in an optical centrifuge
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043406 APR 7 2016

15. Korobenko, Aleksey; Milner, Alexander A.; Milner, Valery

Direct Observation, Study, and Control of Molecular Superrotors
PHYSICAL REVIEW LETTERS, 112 (11):10.1103/PhysRevLett.112.113004 MAR 19 2014

14. Smith, Ryan P.; Hunter, Andrew E.; Funk, Andrew C.; et al.

Chirp Controls Nonlinear Response of Excitons in Semiconductor Quantum Wells
Conference on Lasers and Electro-Optics (CLEO) Location: Baltimore, MD Date:
MAY 01-06, 2011

13. Bloomquist, C; Zhdanovich, S; Milner, AA; Milner, V

Directional spinning of molecules with sequences of femtosecond pulses
PHYSICAL REVIEW A, 86 (6):10.1103/PhysRevA.86.063413 DEC 19 2012

12. Brierley, RT; Creatore, C; Littlewood, PB; Eastham, PR

Adiabatic State Preparation of Interacting Two-Level Systems
PHYSICAL REVIEW LETTERS, 109 (4):10.1103/PhysRevLett.109.043002 JUL 23 2012

11. Yang, J; Chen, M; Yu, J; Cong, SL

Field-free molecular orientation with chirped laser pulse
EUROPEAN PHYSICAL JOURNAL D, 66 (4):10.1140/epjd/e2012-20766-4 APR 2012

10. Zhdanovich, S; Milner, AA; Bloomquist, C; Floss, J; Averbukh, IS; Hepburn, JW; Milner, V

Control of Molecular Rotation with a Chiral Train of Ultrashort Pulses
PHYSICAL REVIEW LETTERS, 107 (24):10.1103/PhysRevLett.107.243004 DEC 9 2011

9. Lapert, M; Guerin, S; Sugny, D

Field-free quantum cogwheel by shaping of rotational wave packets
PHYSICAL REVIEW A 83 (1): Art. No. 013403 JAN 18 2011

8. Oberst, M; Muench, H; Grigoryan, G; Halfmann, T

Stark-chirped rapid adiabatic passage among a three-state molecular system:
Experimental and numerical investigations
PHYSICAL REVIEW A 78 (3): Art. No. 033409 SEP 2008

7. Li, Qifang; Kuang, Ye

Preparing of coherent superposition state in serial multi-Lambda-type system by
stimulated Raman adiabatic passage
CHINESE OPTICS LETTERS 6 (7): 469-471 JUL 10 2008

6. Lerch, Eliza-Beth W.; Dai, Xingcan; Torres, Elva A.; Ballard, Joshua B.; Stauffer, Hans U.; Leone, Stephen R.

Manipulation of ro-vibronic wave packet composition using chirped ultrafast laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art.
No. 074015 APR 14 2008

5. Ostrovsky VN, Volkov MV

Landau-Zener transitions in a system of interacting spins: Exact results for

demagnetization probability

PHYSICAL REVIEW B 73 (6): Art. No. 060405 FEB 2006

4. Van Leuven P, Persico M

Rotational averaging and optimization of laser-induced population transfer in
molecules
JOURNAL OF CHEMICAL PHYSICS 124 (5): Art. No. 054319 FEB 7 2006

3. Salomon J, Dion CM, Turinici G

Optimal molecular alignment and orientation through rotational ladder climbing
JOURNAL OF CHEMICAL PHYSICS 123 (14): Art. No. 144310 OCT 8 2005

2. Daems D, Guerin S, Hertz E, et al.

Field-free two-direction alignment alternation of linear molecules by elliptic laser
pulses
PHYSICAL REVIEW LETTERS 95 (6): Art. No. 063005 AUG 5 2005

1. Kyungsun Na and L. E. Reichl

Chaos-assisted adiabatic passage of molecular rotation
PHYSICAL REVIEW A 72 (1): Art. No. 013402 Part A-B JUL 2005

=====

51. Kis Z, Karpati A, Shore BW, Vitanov NV

Stimulated Raman adiabatic passage among degenerate-level manifolds
PHYSICAL REVIEW A 70 (5): Art. No. 053405 NOV 2004

25. Barnum, T. J.; Herburger, H.; Grimes, D. D.; Jiang, J.; Field, R. W.

Preparation of high orbital angular momentum Rydberg states by optical-
millimeter-wave STIRAP
JOURNAL OF CHEMICAL PHYSICS Volume: 153 Issue: 8 Article Number:
084301 Published: AUG 28 2020

24. Reshetov, V. A.

Photon emission by an atom with degenerate levels into a micro-cavity with
polarization-degenerate mode
LASER PHYSICS Volume: 30 Issue: 8 Article Number: 086001 Published: AUG
2020

23. Csehi, Andras

Single-pulse-induced total population inversion between indirectly coupled
quantum states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52
Issue: 2 Article Number: 025002 Published: JAN 28 2019

22. Saadati-Niari, Maghsoud

Coherent superpositions of states in coupled Hilbert-space using step by step
Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016

21. Zhang, Z., Yang, X.

Population transfer in a lambda-type five-level system with equally populated
initial and empty final doublet states
Journal of Modern Optics 62(15), pp. 1248-1252 (2015)

20. Chen, Ming-Feng; Shen, Li-Tuo; Chen, Rong-Xin; Yang, Zhen-Biao

Driving to the steady ground-state superposition assisted by spontaneous
emission
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033403 SEP 4 2015

19. Chang, Bo Y.; Shin, Seokmin; Malinovsky, Vladimir; Sola, Ignacio R.

The Hydrogen molecular cation as a molecular antenna
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI
10.1088/0953-4075/48/17/174005 SEP 14 2015

18. Rigolin, Gustavo; Ortiz, Gerardo

Degenerate adiabatic perturbation theory: Foundations and applications
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.022104 AUG 6 2014

17. Siddons, Paul

Light propagation through atomic vapours
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47
(9):10.1088/0953-4075/47/9/093001 MAY 15 2014

16. Bevilacqua, G; Schaller, G; Brandes, T; Renzoni, F

Implementation of stimulated Raman adiabatic passage in degenerate systems by
dimensionality reduction
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013404 JUL 8 2013

15. Reshetov, VA

Polarization properties of the "photon pistol"
OPTICS COMMUNICATIONS, 285 (21-22):4457-4461;
10.1016/j.optcom.2012.07.038 OCT 1 2012

14. Reshetov, VA; Popov, EN
Single-atom quantum memory with degenerate atomic levels
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45
(17):10.1088/0953-4075/45/17/175501 SEP 14 2012

13. Siddons, Paul; Adams, Charles S.; Hughes, Ifan G.
Optical preparation and measurement of atomic coherence at gigahertz
bandwidth
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (12):SI
10.1088/0953-4075/45/12/124009 JUN 28 2012

12. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)

11. Zhang, Zhenhua; Yang, Xihua; Yan, Xiaona
Selective and efficient control of population transfer in the presence of an equally
populated initial doublet
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29
(6):1551-1556; JUN 1 2012

10. Yang, Wanli; Xu, Zhenyu; Feng, Mang; Du, Jiangfeng
Entanglement of separate nitrogen-vacancy centers coupled to a whispering-
gallery mode cavity
NEW JOURNAL OF PHYSICS 12: Art. No. 113039 NOV 19 2010

9. Reshetov, VA; Yevseyev, IV
Single-photon emission via Raman scattering from the levels with partially
resolved hyperfine structure
OPTICS COMMUNICATIONS 283 (12): 2557-2560 JUN 15 2010

8. Sugawara, M
A new quantum control scheme for multilevel systems based on effective
decomposition by intense laser fields
JOURNAL OF CHEMICAL PHYSICS 130 (9): Art. No. 094103 MAR 7 2009

7. Boozer, AD
Stimulated Raman adiabatic passage in a multilevel atom
PHYSICAL REVIEW A 77 (2): Art. No. 023411 FEB 2008

6. Djotyan, GP; Bakos, JS; Demeter, G; Sorlei, Z; Szigeti, J; Dzsotjan, D
Creation of a coherent superposition of quantum states by a single frequency-
chirped short laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 25 (2): 166-
174 FEB 2008

5. A. D. Boozer
Stimulated Raman adiabatic passage in a multilevel atom
Phys. Rev. A 77, 023411 (2008)

4. Sugawara M, Tamaki M, Yabushita S
A new control scheme of multilevel quantum system based on effective
decomposition by intense CW lasers
JOURNAL OF PHYSICAL CHEMISTRY A 111 (38): 9446-9453 SEP 27 2007

3. Kral P, Thanopoulos I, Shapiro M
Colloquium: Coherently controlled adiabatic passage
REVIEWS OF MODERN PHYSICS 79 (1): 53-77 JAN-MAR 2007

2. Thanopoulos I, Shapiro M
Enhanced selectivity and yield in multichannel photodissociation reactions:
Application to CH3I
JOURNAL OF CHEMICAL PHYSICS 125 (13): Art. No. 133314 OCT 7 2006

1. Chalupczak W, Szymaniec K
Role of atomic and light polarization in an adiabatic passage experiment
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 39 (5):
1081-1089 MAR 14 2006

=====
52. Vasilev GS, Vitanov NV
Coherent excitation of a two-state system by a Gaussian field
PHYSICAL REVIEW A 70 (5): Art. No. 053407 NOV 2004

17. Siemss, Jan-Niclas; Fitzek, Florian; Abend, Sven; Rasel, Ernst M.; Gaaloul,
Naceur; Hammerer, Klemens

Analytic theory for Bragg atom interferometry based on the adiabatic theorem
PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 033709
Published: SEP 10 2020

16. Tang, Kai; Hu, Zhengfeng; Chen, Xi; Liu, Chengpu
Hermitian and non-Hermitian shortcuts to adiabaticity for fast creation of
maximum coherence and beam splitting
JOURNAL OF THE EUROPEAN OPTICAL SOCIETY-RAPID PUBLICATIONS Volume:
16 Issue: 1 Article Number: 18 Published: JUL 11 2020

15. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, 533
10.1016/j.physa.2019.12.1932 NOV 1 2019

14. Santana-Bonilla, Alejandro; Sandonas, Leonardo Medrano; Gutierrez, Rafael;
Cuniberti, Gianarelio
Exploring the write-in process in molecular quantum cellular automata: a
combined modeling and first-principle approach
JOURNAL OF PHYSICS-CONDENSED MATTER, 31 (40):10.1088/1361-648X/ab29c1
OCT 9 2019

13. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-
Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-
waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

12. Koepsell, J; Thiele, T; Deiglmayr, J; Wallraff, A; Merkt, F
Measuring the polarization of electromagnetic fields using Rabi-rate
measurements with spatial resolution: Experiment and theory
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.053860 MAY 24 2017

11. Reichert, J; Nalbach, P; Thorwart, M
Dynamics of a quantum two-state system in a linearly driven quantum bath
PHYSICAL REVIEW A, 94 (3):10.1103/PhysRevA.94.032127 SEP 28 2016

10. Kalra, Rachpon; Laucht, Arne; Hill, Charles D.; Morello, Andrea
Robust Two-Qubit Gates for Donors in Silicon Controlled by Hyperfine
Interactions
PHYSICAL REVIEW X, 4 (2):10.1103/PhysRevX.4.021044 JUN 6 2014

9. Oka, Takashi
Nonlinear doublon production in a Mott insulator: Landau-Dykhne method
applied to an integrable model
PHYSICAL REVIEW B, 86 (7):10.1103/PhysRevB.86.075148 AUG 27 2012

8. Dridi, G; Guerin, S
Adiabatic passage for a lossy two-level quantum system by a complex time
method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45
(18):10.1088/1751-8113/45/18/185303 MAY 11 2012

7. Conover, CWS
Effects of pulse shape on strongly driven two-level systems
PHYSICAL REVIEW A, 84 (6):10.1103/PhysRevA.84.063416 DEC 19 2011

6. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011

5. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press,
2011)

4. Bomble, Laetitia; Pellegrini, Philippe; Ghesquiere, Pierre; Desouter-Lecomte,
Michele
Toward scalable information processing with ultracold polar molecules in an
electric field: A numerical investigation
PHYSICAL REVIEW A 82 (6): Art. No. 062323 DEC 22 2010

3. Ma Rui-Qiong; Li Yong-Fang; Shi Jian
Quantum interference effects of coherent instantaneous states and Berry phase
ACTA PHYSICA SINICA 57 (7): 4083-4090 JUL 2008

2. Shapiro, D.A.
Exactly solvable profiles of Bragg gratings
2006 Proceedings of SPIE - The International Society for Optical Engineering
6162, art. no. 61620P

1. Berman PR, Yan L, Chiam K, et al.
Nonadiabatic transitions in a two-level quantum system: Pulse-shape dependence of the transition probability for a two-level atom driven by a pulsed radiation field (vol 57, pg 79, 1998)
PHYSICAL REVIEW A 71 (3): Art. No. 039904 Part B MAR 2005
- =====
- 53. Ivanov PA, Vitanov NV, Bergmann K**
Effect of dephasing on stimulated Raman adiabatic passage
PHYSICAL REVIEW A 70 (6): Art. No. 063409 DEC 2004
58. Blekos, Kostas; Stefanatos, Dionisis; Paspalakis, Emmanuel
Performance of superadiabatic stimulated Raman adiabatic passage in the presence of dissipation and Ornstein-Uhlenbeck dephasing
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 023715
Published: AUG 24 2020
57. Oberg, Lachlan M.; Huang, Eric; Reddy, Prithvi M.; Alkauskas, Audrius; Greentree, Greentree, Andrew D.; Cole, Jared H.; Manson, Neil B.; Meriles, Carlos A.; Doherty, Marcus W.
Spin coherent quantum transport of electrons between defects in diamond
NANOPHOTONICS Volume: 8 Issue: 11 Special Issue: SI Pages: 1975-1984
Published: NOV 2019
56. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019
55. Hiraishi, Masaya; IIspeert, Mark; Tawara, Takehiko; Adachi, Satoru; Kaji, Reina; Omi, Hiroo; Gotoh, Hideki
Optical coherent transients in Er-167(3+) at telecom-band wavelength
OPTICS LETTERS, 44 (20):4933-4936; 10.1364/OL.44.004933 OCT 15 2019
54. Santos, Alan C.; Cakmak, Barn; Campbell, Steve; Zinner, Nikolaj T.
Stable adiabatic quantum batteries
PHYSICAL REVIEW E, 100 (3):10.1103/PhysRevE.100.032107 SEP 4 2019
53. Hamed, Hamid Reza; Paspalakis, Emmanuel; Zlabys, Giedrius; Juzeliunas, Gediminas; Ruseckas, Julius
Complete energy conversion between light beams carrying orbital angular momentum using coherent population trapping for a coherently driven double-Lambda atom-light-coupling scheme
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023811 AUG 9 2019
52. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019
51. Mahmoud, Gharib Subhi; Messikh, Azeddine
The effect of dephasing on superadiabatic single-qubit rotation gates
Journal of Physics Conference Series, Edited by: Rakhimov A; Ural B; Daoud JI; Saburov K; Chowdhury MSH, 4TH INTERNATIONAL CONFERENCE ON MATHEMATICAL APPLICATIONS IN ENGINEERING 2017 (ICMAE'17), 949
10.1088/1742-6596/949/1/012018 2018
50. Mathisen, Thomas; Larson, Jonas
Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018
49. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19;
10.1007/s10773-017-3535-z JAN 2018
48. Wu, Qi-Cheng; Huang, Bi-Hua; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Perfect quantum state engineering by the combination of the counterdiabatic driving and the reverse-engineering technique
ANNALS OF PHYSICS, 385 40-56; 10.1016/j.aop.2017.07.010 OCT 2017
47. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017
46. Ran, Du; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Speeding up adiabatic passage by adding Lyapunov control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033803 SEP 1 2017
45. Wu, Qi-Cheng; Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan; Zheng, Shi-Biao
Improving the stimulated Raman adiabatic passage via dissipative quantum dynamics
OPTICS EXPRESS, 24 (20):22847-22864; 10.1364/OE.24.022847 OCT 3 2016
44. Issoufa, Y.H., Messikh, A.
Superadiabatic STIRAP: Population transfer and quantum rotation gates
Communications in Computer and Information Science 681, pp. 299-313 (2016)
43. Sofikitis, D; Rakitzis, TP
Mesoscopic production of hyperpolarized (N2O)-N-15 and H2O via optical excitation
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.032507 SEP 10 2015
42. Di Stefano, PG; Paladino, E; D'Arrigo, A; Spagnolo, B; Falci, G
Design of a lambda configuration in artificial coherent nanostructures
ROMANIAN JOURNAL OF PHYSICS, 60 (5-6):676-685; 2015
41. Masuda, Shumpei; Rice, Stuart A.
A model study of assisted adiabatic transfer of population in the presence of collisional dephasing
JOURNAL OF CHEMICAL PHYSICS, 142 (24):10.1063/1.4922779 JUN 28 2015
40. Di Stefano, PG; Paladino, E; D'Arrigo, A; Falci, G
Population transfer in a Lambda system induced by detunings
PHYSICAL REVIEW B, 91 (22):10.1103/PhysRevB.91.224506 JUN 10 2015
39. Wang, Qiong; Nie, Jian-Jun; Zeng, Hao-Sheng
Roles of dephasing in the population transfer in stimulated Raman adiabatic process
EUROPEAN PHYSICAL JOURNAL D Volume: 67 Issue: 7 Article Number: 151
Published: JUL 2013
38. Zhao Xiu-Niao; Sun Jian-An; Dou Fu-Quan
Effect of external field shape on the ultracold atom-polymer molecule conversion efficiency
ACTA PHYSICA SINICA, 63 (22):10.7498/aps.63.220302 NOV 20 2014
37. Issoufa, Youssouf Hamidou; Messikh, Azeddine
Effect of dephasing on superadiabatic three-level quantum driving
PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.055402 NOV 19 2014
36. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian
High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013
35. Kirilov, E; Campbell, WC; Doyle, JM; Gabrielse, G; Gurevich, YV; Hess, PW; Hutzler, NR; O'Leary, BR; Petrik, E; Spaun, B; Vutha, AC; DeMille, D
Shot-noise-limited spin measurements in a pulsed molecular beam
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013844 JUL 26 2013
34. Falci, G; La Cognata, A; Berritta, M; D'Arrigo, A; Paladino, E; Spagnolo, B
Design of a Lambda system for population transfer in superconducting nanocircuits
PHYSICAL REVIEW B, 87 (21):10.1103/PhysRevB.87.214515 JUN 20 2013
33. Issouffa, YH; Messikh, A; Wahiddin, MR; Umarov, B; Gharib, MS
Generalized Quantum Rotation Gates Using STIRAP
2013 5TH INTERNATIONAL CONFERENCE ON INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE MUSLIM WORLD (ICT4M), 2013
32. Falci, G; Berritta, M; Russo, A; D'Arrigo, A; Paladino, E
Effects of low-frequency noise in driven coherent nanodevices
PHYSICA SCRIPTA, T151 10.1088/0031-8949/2012/T151/014020 NOV 2012
31. Assemat, E; Sugny, D
Connection between optimal control theory and adiabatic-passage techniques in quantum systems
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023406 AUG 6 2012
30. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012
29. Chen, Bing; Fan, Wei; Xu, Yan; Chen, Zhao-yang; Feng, Xun-li; Oh, C. H.

- Long-range adiabatic quantum state transfer through a tight-binding chain as a quantum data bus
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012302 JUL 5 2012
28. Vogt, Nicolas; Cole, Jared H.; Marthaler, Michael; Schoen, Gerd
Influence of two-level fluctuators on adiabatic passage techniques
PHYSICAL REVIEW B, 85 (17):10.1103/PhysRevB.85.174515 MAY 14 2012
27. Djotyan, GP; Sandor, N; Bakos, JS; Sorlei, Z
Optical Storage in Quantized Media
PHOTONICS AND MICRO- AND NANO-STRUCTURED MATERIALS 2011, 8414
10.1117/12.923473 2012
Editor: Drampyan RRK, Proceedings of SPIE, Conference on Photonics and Micro and Nano-structured Materials, JUN 28-30, 2011, Yerevan, ARMENIA
26. Amniat-Talab, M., Saadati-Niari, M., Sedghi, H.
Effect of spontaneous emission and cavity decay on intracavity stimulated raman adiabatic passage
Iranian Journal of Physics Research 10(4), pp. 329-336 (2011)
25. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11):
2785-2796 NOV 2011
24. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
23. La Cognata, A., Caldara, P., Valenti, D., (...), Paladino, E., Falci, G.
Effect of low-frequency noise on adiabatic passage in a superconducting nanocircuit
International Journal of Quantum Information 9(SUPPL. 1), pp. 1-15 (2011)
22. Issoufa, Youssef Hamidou; Messikh, Azeddine
Effect of dephasing on single-qubit rotation gates
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215506 NOV 14 2010
21. Van Donkelaar, Jessica A.; Greentree, Andrew D.; Alves, Andrew D. C.; Jong, Lenneke M.; Hollenberg, Lloyd C. L.; Jamieson, David N.
Top-down pathways to devices with few and single atoms placed to high precision
NEW JOURNAL OF PHYSICS 12: Art. No. 065016 JUN 28 2010
20. Gambhir, Monica; Lahon, Siddhartha; Jha, Pradeep Kumar; Mohan, Man
Laser-induced adiabatic population transfer in asymmetric quantum wells
NANO 4 (5): 289-297 OCT 2009
19. Xu, Jian; Xu, Rui-Xue; Yan, Yi Jing
Exact quantum dissipative dynamics under external time-dependent driving fields
NEW JOURNAL OF PHYSICS 11: Art. No. 105037 OCT 30 2009
18. Meng Shao-Ying; Wu Wei; Liu Bin; Ye Di-Fa; Fu Li-Bin
Dynamical instability and adiabatic evolution of the atom-homonuclear-trimer dark state in a condensate system
CHINESE PHYSICS B 18 (9): 3844-3849 SEP 2009
17. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic evolution for the Rb-87 atom-molecule conversion system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (18): Art. No. 185301 SEP 28 2009
16. Meng Shao-Ying; Wu Wei
Adiabatic fidelity for atom-dimer conversion system in stimulated Raman adiabatic passage
ACTA PHYSICA SINICA Volume: 58 Issue: 8 Pages: 5311-5317 Published: AUG 2009
15. Egorova, Dussia; Gelin, Maxim F.; Thoss, Michael; Wang, Haobin; Domcke, Wolfgang
Effects of intense femtosecond pumping on ultrafast electronic-vibrational dynamics in molecular systems with relaxation
JOURNAL OF CHEMICAL PHYSICS 129 (21): Art. No. 214303 DEC 7 2008
14. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic fidelity for atom-molecule conversion in a nonlinear three-level Lambda system
PHYSICAL REVIEW A 78 (5): Art. No. 053410 NOV 2008
13. Kuznetsova, Elena; Pellegrini, Philippe; Cote, Robin; Lukin, M. D.; Yelin, S. F.
Formation of deeply bound molecules via chainwise adiabatic passage
PHYSICAL REVIEW A 78 (2): Art. No. 021402 Part A AUG 2008
12. Cole, JH; Greentree, AD; Hollenberg, LCL; Das Sarma, S
Spatial adiabatic passage in a realistic triple well structure
PHYSICAL REVIEW B 77 (23): Art. No. 235418 JUN 2008
11. Mangano, G; Siewert, J; Falci, G
Sensitivity to parameters of STIRAP in a Cooper pair box
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 259-268 JUL 2008
10. Yan, Tian-Min; Han, Yong-Chang; Yuan, Kai-Jun; Cong, Shu-Lin
Steering population transfer via continuum structure of the Li-2 molecule with ultrashort laser pulses
CHEMICAL PHYSICS 348 (1-3): 39-44 JUN 2 2008
9. Kamleitner, I; Cresser, J; Twamley, J
Adiabatic information transport in the presence of decoherence
PHYSICAL REVIEW A 77 (3): Art. No. 032331 MAR 2008
8. Goto, Hayato; Ichimura, Kouichi
Stimulated Raman adiabatic passage with small two-photon detunings and its geometrical description
PHYSICS LETTERS A 372 (9): 1535-1540 FEB 25 2008
7. Moller, D; Sorensen, JL; Thomsen, JB; Drewsen, M
Efficient qubit detection using alkaline-earth-metal ions and a double stimulated Raman adiabatic process
PHYSICAL REVIEW A 76 (6): Art. No. 062321 DEC 2007
6. Sugny D, Ndong M, Lauvergnat D, et al.
Laser control in open molecular systems: STIRAP and optimal control
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY 190 (2-3): 359-371 AUG 15 2007
5. Demirplak, M., Rice, S.A.
Adiabatic transfer of population in a dense fluid: The role of dephasing statistics
2006 Journal of Chemical Physics 125 (19), art. no. 194517
4. Goto H, Ichimura K
Observation of coherent population transfer in a four-level tripod system with a rare-earth-metal-ion-doped crystal
PHYSICAL REVIEW A 75 (3): Art. No. 033404 MAR 2007
3. V.I. Romanenko
Stimulated Raman Adiabatic Passage in Phase-Fluctuating fields
Ukrainian Journal of Physics V. 51 P. 1054 (2006)
2. Hollenberg LCL, Greentree AD, Fowler AG, et al.
Two-dimensional architectures for donor-based quantum computing
PHYSICAL REVIEW B 74 (4): Art. No. 045311 JUL 2006
1. Greentree AD, Devitt SJ, Hollenberg LCL
Quantum-information transport to multiple receivers
PHYSICAL REVIEW A 73 (3): Art. No. 032319 MAR 2006
- =====
- 54. Kyoseva ES, Vitanov NV**
Resonant excitation amidst dephasing: An exact analytic solution
PHYSICAL REVIEW A 71 (5): Art. No. 054102 MAY 2005
15. Begzjav, Tuguldur Kh; Eleuch, Hichem
Magnus expansion applied to a dissipative driven two-level system
Results in Physics Volume 17, June 2020, 103098
14. Ghiu, Iulia; Grimaudo, Roberto; Mihaescu, Tatiana; Isar, Aurelian; Messina, Antonino
Quantum Correlation Dynamics in Controlled Two-Coupled-Qubit Systems
ENTROPY Volume: 22 Issue: 7 Article Number: 785 Published: JUL 2020
13. Hai, Kuo; Zhu, Wenhua; Chen, Qiong; Hai, Wenhua
Transparently manipulating spin-orbit qubit via exact degenerate ground states
CHINESE PHYSICS B Volume: 29 Issue: 8 Article Number: 083203 Published: JUL 2020
12. Grimaudo, Roberto; Isar, Aurelian; Mihaescu, Tatiana; Ghiu, Iulia; Messina, Antonino
Dynamics of quantum discord of two coupled spin-1/2's subjected to time-dependent magnetic fields

11. Li, DX; Shao, XQ

Rapid population transfer of a two-level system by a polychromatic driving field
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-45558-5 JUN 21 2019

10. Avanesov, Ashot S.; Man'ko, Vladimir I.

Dissipative Evolution of the Qubit State in the Tomographic-Probability Representation
JOURNAL OF RUSSIAN LASER RESEARCH, 38 (4):311-323; 10.1007/s10946-017-9647-3 JUL 2017

9. Farzanehpour, M; Tokatly, IV

Dynamics of observables and exactly solvable quantum problems: Using time-dependent density-functional theory to control quantum systems
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052515 MAY 24 2016

8. Dada, Adetunmise C.; Santana, Ted S.; Malein, Ralph N. E.; Koutroumanis, Antonios; Ma, Yong; Zajac, Joanna M.; Lim, Y.; Song, Jin D.; Gerardot, Brian D. Indistinguishable single photons with flexible electronic triggering
OPTICA, 3 (5):493-498; 10.1364/OPTICA.3.000493 MAY 20 2016

7. Scheuer, Jochen; Kong, Xi; Said, Ressa S.; Chen, Jeson; Kurz, Andrea; Marseglia, Luca; Du, Jiangfeng; Hemmer, Philip R.; Montangero, Simone; Calarco, Tommaso; Naydenov, Boris; Jelezko, Fedor
Precise qubit control beyond the rotating wave approximation
NEW JOURNAL OF PHYSICS, 16 10.1088/1367-2630/16/9/093022 SEP 19 2014

6. Lu, Xiao-Jing; Chen, Xi; Ruschhaupt, A.; Alonso, D.; Guerin, S.; Muga, J. G. Fast and robust population transfer in two-level quantum systems with dephasing noise and/or systematic frequency errors
PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.033406 SEP 5 2013

5. Barnes, Edwin

Analytically solvable two-level quantum systems and Landau-Zener interferometry
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013818 JUL 15 2013

4. Barnes, Edwin; Das Sarma, S.

Analytically Solvable Driven Time-Dependent Two-Level Quantum Systems
PHYSICAL REVIEW LETTERS, 109 (6):10.1103/PhysRevLett.109.060401 AUG 7 2012

3. Ramsay, AJ; Gopal, A; Gauger, EM; Nazir, A; Lovett, BW; Fox, AM; Skolnick, MS
Damping of Exciton Rabi Rotations by Acoustic Phonons in Optically Excited InGaAs/GaAs Quantum Dots
PHYSICAL REVIEW LETTERS 104 (1): Art. No. 017402 JAN 8 2010

2. de Vasconcellos SM, Stufler S, Wegner SA, et al.

Quantum interferences of a single quantum dot in the case of detuning
PHYSICAL REVIEW B 74 (8): Art. No. 081304 AUG 2006

1. Michaelis De Vasconcellos, S., Stufler, S., Wegner, S.-A., (...), Zrenner, A., Bichler, M.

Quantum interferences of a single quantum dot in the case of detuning
Physica Status Solidi (c) 3, 3730 (2006)

=====

55. Ivanov PA, Vitanov NV

Adiabatic evolution amidst dephasing
PHYSICAL REVIEW A 71 (6): Art. No. 063407 JUN 2005

5. Yatsenko, LP; Shore, BW; Bergmann, K

Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

4. Pankaj K. Jha and Yuri V. Rostovtsev

Analytical solutions for a two-level system driven by a class of chirped pulses
Phys. Rev. A 82, 015801 (2010)

3. Shore, Bruce W.

Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

2. Lacour, X; Guerin, S; Jauslin, HR

Optimized adiabatic passage with dephasing
PHYSICAL REVIEW A 78 (3): Art. No. 033417 SEP 2008

1. Chr. Wunderlich, Th. Hannemann, T. Koerber, H. Haeffner, Ch. Roos, W. Haensel, R. Blatt, F. Schmidt-Kaler

Robust state preparation of a single trapped ion by adiabatic passage
JOURNAL OF MODERN OPTICS Volume: 54 Issue: 11 Pages: 1541-1549
Published: 2007

=====

56. Garcia-Fernandez R, Ekers A, Yatsenko LP, Vitanov NV, Bergmann K
Control of population flow in coherently driven quantum ladders
PHYSICAL REVIEW LETTERS 95 (4): Art. No. 043001 JUL 22 2005

14. Berrada, K; Eleuch, H

Coherence and squeezing of a two-level system with a phase jump
LASER PHYSICS, 29 (7):10.1088/1555-6611/ab0a6e JUL 2019

13. Zeng, Bing; Duan, Lingze

Carrier-envelope phase sensitive inversion driven by few-cycle pulse pairs
OSA CONTINUUM, 1 (4):1304-1312; 10.1364/OSAC.1.001304 DEC 15 2018

12. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.

Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017

11. Shore, Bruce W.

Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

10. Berrada, K; Eleuch, H

Quantum preservation of the measurements precision using ultra-short strong pulses in exact analytical solution
LASER PHYSICS LETTERS, 14 (9):10.1088/1612-202X/aa7ba7 SEP 2017

9. Berrada, K; Eleuch, H

Quantum control of the geometric phase in exact analytical solution using ultra-short strong pulses
LASER PHYSICS, 25 (10):10.1088/1054-660X/25/10/105201 OCT 2015

8. Demtroeder, W.

Laser Spectroscopy 2: Experimental Techniques, Fifth Edition pp. 1-757 (Springer, 2015)

7. Jha, Pankaj K.; Eleuch, Hichem; Grazioso, Fabio

Ultra-short strong excitation of two-level systems
OPTICS COMMUNICATIONS Volume: 331 Pages: 198-203 Published: NOV 15 2014

6. Kumar, Parvendra; Sarma, Amarendra K.

Frequency-modulated few-cycle optical-pulse-train-induced controllable ultrafast coherent population oscillations in two-level atomic systems
PHYSICAL REVIEW A, 87 (2):10.1103/PhysRevA.87.025401 FEB 1 2013

5. Kumar, Parvendra; Sarma, Amarendra K.

Optical dipole force on ladderlike three-level atomic systems induced by few-cycle-pulse laser fields
PHYSICAL REVIEW A Volume: 86 Issue: 5 Article Number: 053414 DOI: 10.1103/PhysRevA.86.053414 Published: NOV 26 2012

4. Kumar, Parvendra; Sarma, Amarendra K.

Gaussian and sinc-shaped few-cycle-pulse-driven ultrafast coherent population transfer in Lambda-like atomic systems
PHYSICAL REVIEW A Volume: 85 Issue: 4 Article Number: 043417 DOI: 10.1103/PhysRevA.85.043417 Published: APR 20 2012

3. Zhang, B., Wu, J.-H., Yan, X.-Z., (...), Zhang, X.-J., Gao, J.-Y.

Coherence generation and population transfer by stimulated Raman adiabatic passage and pi pulse in a four-level ladder system
Optics Express 19(13), pp. 12000-12007 (2011)

2. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue

Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011

1. Xue Y, Wang G, Wu JH, et al.

Optical gain properties in a coherently prepared four-level cold atomic system
PHYSICAL REVIEW A 75 (6): Art. No. 063832 JUN 2007

=====

57. Kis Z, Vitanov NV, Karpati A, Barthel C, Bergmann K
Creation of arbitrary coherent superposition states by stimulated Raman adiabatic passage
PHYSICAL REVIEW A 72 (3): Art. No. 033403 SEP 2005
23. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020
22. Sun, Hui; Xu, Ning; Fan, Shuangli; Liu, Mingwei
Speeding up the creation of coherent superposition states by shortcut-to-adiabaticity means
ANNALS OF PHYSICS Volume: 418 Article Number: 168200 Published: JUL 2020
21. Ngoc-Loan Phan; Thanh-Tuynh Nguyen; Mineo, Hirobumi; Van-Hung Hoang
Depletion effect in high-order harmonic generation with coherent superposition state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 2 Pages: 311-319 Published: FEB 1 2020
20. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, 533
10.1016/j.physa.2019.121932 NOV 1 2019
19. Csehi, Andras
Single-pulse-induced total population inversion between indirectly coupled quantum states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 2 Article Number: 025002 Published: JAN 28 2019
18. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018
17. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
16. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
15. Chen, Ming-Feng; Shen, Li-Tuo; Chen, Rong-Xin; Yang, Zhen-Biao
Driving to the steady ground-state superposition assisted by spontaneous emission
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033403 SEP 4 2015
14. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
13. Amnat-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI
10.1080/09500340.2013.877164 2014
12. Siddons, Paul
Light propagation through atomic vapours
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (9):10.1088/0953-4075/47/9/093001 MAY 15 2014
11. Mukherjee, Nandini; Dong, Wenrui; Zare, Richard N.
Coherent superposition of M-states in a single rovibrational level of H-2 by Stark-induced adiabatic Raman passage
JOURNAL OF CHEMICAL PHYSICS, 140 (7):10.1063/1.4865131 FEB 21 2014
10. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012
9. Sandor, N; Bakos, JS; Sorlei, Z; Djotyan, GP
Creation of coherent superpositions between metastable atomic states in Doppler-broadened media
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011), 350 10.1088/1742-6596/350/1/012002 2012
Editors: Bhattacharjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series
8. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11): 2785-2796 NOV 2011
7. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
6. Deng Li; Niu Yueping; Xiang Yang; Jin Shiqi; Gong Shangqing
Creation of an arbitrary coherent superposition state with chirped delayed pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (3): Art. No. 035401 FEB 14 2010
5. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
4. Boozer, AD
Stimulated Raman adiabatic passage in a multilevel atom
PHYSICAL REVIEW A 77 (2): Art. No. 023411 FEB 2008
3. Djotyan, GP; Bakos, JS; Demeter, G; Sorlei, Z; Szigeti, J; Dzsotjan, D
Creation of a coherent superposition of quantum states by a single frequency-chirped short laser pulse
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 25 (2): 166-174 FEB 2008
2. Eilam A, Wilson-Gordon AD, Friedmann H
Enhanced frequency conversion of nonadiabatic pulses in a double Lambda system driven by two pumps with and without carrier beams
OPTICS COMMUNICATIONS 277 (1): 186-195 SEP 1 2007
1. Eilam A, Wilson-Gordon AD
Enhanced frequency conversion of nonadiabatic resonant pulses in coherently prepared Lambda systems
PHYSICAL REVIEW A 73 (5): Art. No. 053805 MAY 2006
- =====
- 58. Vasilev GS, Vitanov NV**
Coherent excitation of a two-state system by a linearly chirped Gaussian pulse
JOURNAL OF CHEMICAL PHYSICS 123 (17): Art. No. 174106 NOV 1 2005
7. Siemss, Jan-Niclas; Fitzek, Florian; Abend, Sven; Rasel, Ernst M.; Gaaloul, Naceur; Hammerer, Klemens
Analytic theory for Bragg atom interferometry based on the adiabatic theorem
PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 033709
Published: SEP 10 2020
6. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, 533
10.1016/j.physa.2019.121932 NOV 1 2019
5. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019
4. Dou, Fu-quan; Liu, Jie; Fu, Li-bin
High-fidelity superadiabatic population transfer of a two-level system with a linearly chirped Gaussian pulse
EPL, 116 (6):10.1209/0295-5075/116/60014 DEC 2016
3. Torosov, Boyan T.; Della Valle, Giuseppe; Longhi, Stefano
Non-Hermitian shortcut to adiabaticity
PHYSICAL REVIEW A, 87 (5):10.1103/PhysRevA.87.052502 MAY 6 2013

2. Dridi, G; Guerin, S
Adiabatic passage for a lossy two-level quantum system by a complex time method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (18):10.1088/1751-8113/45/18/185303 MAY 11 2012
1. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011
- =====
- 59. Maniscalco S, Piilo J, Vitanov N, Stenholm S**
Transient dynamics of linear quantum amplifiers
EUROPEAN PHYSICAL JOURNAL D 36 (3): 329-338 DEC 2005
2. Dodonov, VV
Loss of nonclassical properties of quantum states in linear phase-insensitive processes with arbitrary time-dependent parameters
PHYSICS LETTERS A 373 (31): 2646-2651 JUL 20 2009
1. Ban, M
Decoherence caused by transient linear amplifiers
EUROPEAN PHYSICAL JOURNAL D 49 (1): 147-155 AUG 2008
- =====
- 60. Rangelov AA, Vitanov NV, Yatsenko LP, Shore BW, Halfmann T, Bergmann K**
Stark-shift-chirped rapid-adiabatic-passage technique among three states
PHYSICAL REVIEW A 72 (5): Art. No. 053403 NOV 2005
53. Wan, Ting; Wang, Tengfei; Zhang, Handa; Chen, Changshui
The synthesis of white-laser source based on the frequency conversion with the Stark-chirped rapid adiabatic passage
RESULTS IN PHYSICS Volume: 22 Article Number: 103871 Published: MAR 2021
52. Shirkhaghah, N.; Saadati-Niari, M.; Nedaei-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021
51. Wan, Ting; Wang, Tengfei; Zhou, Wenhui; Chen, Changshui
Coupling modulation for efficient wavelength conversion with the Stark-chirped rapid adiabatic passage
RESULTS IN PHYSICS Volume: 19 Article Number: 103387 Published: DEC 2020
50. Foroozandeh, M.
Spin dynamics during chirped pulses: applications to homonuclear decoupling and broadband excitation
Journal of Magnetic Resonance 318, 106768 (2020)
49. Shirkhaghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
48. Kuang, Sen; Dong, Daoyi; Petersen, Ian R.
Lyapunov Control of Quantum Systems Based on Energy-Level Connectivity Graphs
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY Volume: 27 Issue: 6 Pages: 2315-2329 Published: NOV 2019
47. Wang, Tengfei; Wan, Ting; Zhou, Wenhui; Chen, Changshui
Three-process cascaded frequency conversion based on Stark-chirped rapid adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 36 (7):1958-1963; 10.1364/JOSAB.36.001958 JUL 1 2019
46. Wang, Tengfei; Li, Jinfeng; Zhou, Wenhui; Chen, Changshui
Efficient cascaded wavelength conversion based on Stark-chirped rapid adiabatic passage
APPLIED PHYSICS EXPRESS, 11 (12):10.7567/APEX.11.122202 DEC 2018
45. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
44. Niu, Dong-Hua; Wang, Shuo; Zhan, Wei-Shen; Tao, Hong-Cai; Wang, Si-Qi
Steering population transfer of the Na-2 molecule by an ultrashort pulse train
LASER PHYSICS, 28 (5):10.1088/1555-6611/aaac6c MAY 2018
43. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19; 10.1007/s10773-017-3535-z JAN 2018
42. Dutta, Shovan; Mueller, Erich J.
Protocol to engineer Fulde-Ferrell-Larkin-Ovchinnikov states in a cold Fermi gas
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023612 AUG 14 2017
41. Shang, Y., Wang, H.-T., Sui, Y., Cong, S.
Two control methods for the maximum entangled states preparations of a double quantum system
Kongzhi Lilun Yu Yingyong/Control Theory and Applications 34(7), pp. 965-973 (2017)
40. Yang, Jian; Wang, Shuo; Zhan, Wei-Shen; Jing, Da; Zhang, You-De
Controlling vibrational population distribution of the Na-2 molecule by ultrashort pulses in the three-state system
EUROPEAN PHYSICAL JOURNAL D, 71 (7):10.1140/epjd/e2017-80145-3 JUL 2017
39. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited quantum states of molecular hydrogen
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (14):10.1088/1361-6455/aa786f JUL 28 2017
38. Gazazyan, EA
Transfer of Populations in the Multi-Level System by Partly Overlapping of the Laser Pulses
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 52 (1):5-9; 10.3103/S1068337217010029 JAN 2017
37. Du, Yan-Xiong; Liang, Zhen-Tao; Li, Yi-Chao; Yue, Xian-Xian; Lv, Qing-Xian; Huang, Wei; Chen, Xi; Yan, Hui; Zhu, Shi-Liang
Experimental realization of stimulated Raman shortcut-to-adiabatic passage with cold atoms
NATURE COMMUNICATIONS, 7 10.1038/ncomms12479 AUG 2016
36. Bayer, Tim; Wollenhaupt, Matthias; Braun, Hendrike; Baumert, Thomas
Ultrafast and Efficient Control of Coherent Electron Dynamics via SPODS
Edited by: Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 235-282; 2016
35. Nori, Franco; You, J. Q.
Microwave Photonics on a Chip: Superconducting Circuits as Artificial Atoms for Quantum Information Processing
Edited by: Yamamoto Y; Semba K
PRINCIPLES AND METHODS OF QUANTUM INFORMATION TECHNOLOGIES, 911 461-476; 10.1007/978-4-431-55756-2_21 2016
34. Wollenhaupt, Matthias; Bayer, Tim; Baumert, Thomas
Control of Ultrafast Electron Dynamics with Shaped Femtosecond Laser Pulses: From Atoms to Solids
Edited by: Kitzler M; Grafe S
ULTRAFAST DYNAMICS DRIVEN BY INTENSE LIGHT PULSES: FROM ATOMS TO SOLIDS, FROM LASERS TO INTENSE X-RAYS, 86 63-122; 10.1007/978-3-319-20173-3_4 2016
33. Remizov, Sergey V.; Shapiro, Dmitriy S.; Rubtsov, Alexey N.
Synchronization of qubit ensembles under optimized pi-pulse driving
PHYSICAL REVIEW A, 92 (5):10.1103/PhysRevA.92.053814 NOV 5 2015
32. Sola, Ignacio R.; Gonzalez-Vazquez, Jesus; de Nalda, Rebeca; Banares, Luis
Strong field laser control of photochemistry
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 17 (20):13183-13200; 10.1039/c5cp00627a 2015
31. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014
30. Yao Hong-Bin; Li Wen-Liang; Zhang Ji; Peng Min

- Quantum control of K-2 molecule in an intense laser field: Selective population of dressed states
ACTA PHYSICA SINICA, 63 (17):10.7498/aps.63.178201 SEP 5 2014
29. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014
28. Shi Xuan; Wei LianFu; Oh, Choo Hiap
Quantum computation with surface-state electrons by rapid population passages
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 57 (9):1718-1724;
10.1007/s11433-014-5547-5 SEP 2014
27. Liu, Ji-Cai; Zhang, Ye-Qi; Chen, Lei
Coherent control of nondegenerate two-photon absorption by femtosecond laser pulses
JOURNAL OF MODERN OPTICS, 61 (10):781-786; SI
10.1080/09500340.2013.821534 2014
26. Shi Xuan; Oh, C. H.; Wei Lian-Fu
Stark-Chirped Rapid Adiabatic Passage in Presence of Dissipation for Quantum Computation
COMMUNICATIONS IN THEORETICAL PHYSICS, 61 (2):235-240; FEB 2014
25. Sharaby, YA; Joshi, A; Hassan, SS
Coherent population transfer in V-type atomic system
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (4):10.1142/S0218863513500446 DEC 2013
24. Morgan, T; O'Riordan, LJ; Crowley, N; O'Sullivan, B; Busch, T
Coherent transport by adiabatic passage on atom chips
PHYSICAL REVIEW A, 88 (5):10.1103/PhysRevA.88.053618 NOV 15 2013
23. Hu Jing-Yu ; Mao Teng-Fei ; Dou Fu-Quan ; et al.
Application of the composite adiabatic passage technique in the Landau-Zener model with harmonic interaction modulation
ACTA PHYSICA SINICA Volume: 62 Issue: 17 Article Number: 170303 DOI: 10.7498/aps.62.170303 Published: 2013
22. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013
21. Gazazyan, EA; Grigoryan, GG; Chaltykyan, VO; Schraft, D
Implementation of all-optical Toffoli gate in Lambda-systems
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 47 (5):216-221; 10.3103/S1068337212050040 SEP 2012
20. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11): 2785-2796 NOV 2011
19. Fainberg, B.D., Levinsky, B.
Stimulated Raman adiabatic passage in a dense medium
Advances in Physical Chemistry 2010, 798419 (2010)
18. You, J. Q.; Nori, Franco
Atomic physics and quantum optics using superconducting circuits
NATURE 474 (7353): 589-597 10.1038/nature10122 JUN 30 2011
17. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
16. Yao, Hongbin; Zheng, Yujun
Quantum control of a molecular system in an intense field via the selective population of dressed states
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 13 (19): 8900-8907 2011
15. Wang, Zhendong; Jia, Kening; Liang, Ying; Tong, Dianmin; Fan, Xijun
Achieving efficient and stable coherent population transfer by ultrashort double pulses
QUANTUM AND NONLINEAR OPTICS 7846: Art. No. 78460M 2010
14. Nie, W; Huang, JS; Shi, X; Wei, LF
Quantum state engineering with flux-biased Josephson phase qubits by rapid adiabatic passages
PHYSICAL REVIEW A 82 (3): Art. No. 032319 SEP 21 2010
13. Djotyan, G.P., Bakos, J.S., Sorlei, Z.S., (...), IgnAcz, P.N., Szigeti, J.
Frequency chirped laser pulses in atomic physics: Coherent control of inner and translational quantum states
Modern Optics and Photonics: Atoms and Structured Media
pp. 77-91 (World Scientific, 2010)
12. Cong, S.
Manipulation technology and system control theory in quantum molecular dynamics
Kongzhi Lilun Yu Yingyong/Control Theory and Applications 27(1), pp. 1-12 (2010)
11. Radonjic, M; Jelenkovic, BM
Stark-Chirped Rapid Adiabatic Passage in a Multilevel Atom
ACTA PHYSICA POLONICA A 116 (4): 476-478 OCT 2009
10. Schoenfeldt, Johann-Heinrich; Twamley, Jason; Rebic, Stojan
Optimized control of Stark-shift-chirped rapid adiabatic passage in a Lambda-type three-level system
PHYSICAL REVIEW A 80 (4): Art. No. 043401 OCT 2009
9. Radonjic, M; Jelenkovic, BM
Stark-chirped rapid adiabatic passage among degenerate-level manifolds
PHYSICAL REVIEW A 80 (4): Art. No. 043416 OCT 2009
8. Clow, Stephen D.; Trallero-Herrero, Carlos; Bergeman, Thomas; Weinacht, Thomas
Strong field multiphoton inversion of a three-level system using shaped ultrafast laser pulses
PHYSICAL REVIEW LETTERS 100 (23): Art. No. 233603 JUN 13 2008
7. Trallero-Herrero, Carlos; Clow, Stephen D.; Bergeman, Thomas; Weinacht, Thomas
Strong field coherent control of atomic population transfer
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41 (7): Art. No. 074014 APR 14 2008
6. Cong, S., Lou, Y.-S.
Coherent control of spin 1/2 quantum systems using phases
Kongzhi Lilun Yu Yingyong/Control Theory and Applications 25(2), pp. 187-192 (2008)
5. Wei, LF; Johansson, JR; Cen, LX; Ashhab, S; Nori, F
Controllable coherent population transfers in superconducting qubits for quantum computing
PHYSICAL REVIEW LETTERS 100 (11): Art. No. 113601 MAR 21 2008
4. Choi, Hyeonho; Son, Won-Joon; Shin, Seokmin; Chang, Bo Y.; Sola, Ignacio R.
Selective photodissociation in diatomic molecules by dynamical Stark-shift control
JOURNAL OF CHEMICAL PHYSICS 128 (10): Art. No. 104315 MAR 14 2008
3. Shu, Chuan-Cun; Yuan, Kai-Jun; Han, Yong-Chang; Hu, Wen-Hui; Cong, Shu-Lin
Steering population transfer of a five-level polar NaK molecule by Stark shifts
CHEMICAL PHYSICS 344 (1-2): 121-127 FEB 22 2008
2. Chang, BY; Sola, IR
Raman excitation of rovibrational coherent and incoherent states via adiabatic passage assisted by dynamic Stark effect
CHEMICAL PHYSICS 338 (2-3): 228-236 SEP 25 2007
1. B. Y. Chang, Hyeonho Choi, Seokmin Shin, and Ignacio R. Sola
Quantum-state-selective two-photon excitation of multilevel systems assisted by the Stark shift
PHYSICAL REVIEW A 75 (6): Art. No. 063405 JUN 2007
- =====
- 61. Rangelov AA, Piilo J, Vitanov NV**
Counterintuitive transitions between crossing energy levels
PHYSICAL REVIEW A 72 (5): Art. No. 053404 NOV 2005
20. Gomez, Sergio S.; Romero, Rodolfo H.
Superadiabatic spin-preserving control of a single-spin qubit in a double quantum dot with spin-orbit interaction
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 23 Article Number: 235502 Published: DEC 14 2019

19. Nyisomeh, IF; Ateuafack, ME; Fai, LC
Noise-induced multilevel Landau-Zener transitions: Density matrix investigation
PHYSICS LETTERS A, 383 (12):1350-1356; 10.1016/j.physleta.2019.01.035 APR 10 2019
18. Yang, Guang; Li, Wei; Cen, Li-Xiang
Nonadiabatic Population Transfer in a Tangent-Pulse Driven Quantum Model
CHINESE PHYSICS LETTERS, 35 (1):10.1088/0256-307X/35/1/013201 JAN 2018
17. Malla, Rajesh K.; Raikh, M. E.
Landau-Zener transition in a two-level system coupled to a single highly excited oscillator
PHYSICAL REVIEW B, 97 (3):10.1103/PhysRevB.97.035428 JAN 22 2018
16. Malla, Rajesh K.; Raikh, M. E.
Loss of adiabaticity with increasing tunneling gap in nonintegrable multistate Landau-Zener models
PHYSICAL REVIEW B, 96 (11):10.1103/PhysRevB.96.115437 SEP 19 2017
15. Sinitsyn, N.A., Chernyak, V.Y.
The quest for solvable multistate Landau-Zener models
Journal of Physics A: Mathematical and Theoretical 50(25), 255203 (2017)
14. Sinitsyn, Nikolai A.; Lin, Jeffmin; Chernyak, Vladimir Y.
Constraints on scattering amplitudes in multistate Landau-Zener theory
PHYSICAL REVIEW A, 95 (1):10.1103/PhysRevA.95.012140 JAN 30 2017
13. Rancic, Marko J.; Stepanenko, Dimitrije
Coherent manipulation of single electron spins with Landau-Zener sweeps
PHYSICAL REVIEW B, 94 (24):10.1103/PhysRevB.94.241301 DEC 12 2016
12. Qin, Xiao-Ke
Decoherence of the hybrid qubit in a double quantum dot
EPL, 114 (3):10.1209/0295-5075/114/3/7006 MAY 2016
11. Sinitsyn, Nikolai A.; Li, Fuxiang
Solvable multistate model of Landau-Zener transitions in cavity QED
PHYSICAL REVIEW A, 93 (6):10.1103/PhysRevA.93.063859 JUN 29 2016
10. Qin, Xiao-Ke
How to control the coherent oscillations in Landau-Zener-Stueckelberg dynamics of three-level system
MODERN PHYSICS LETTERS B, 30 (9):10.1142/S0217984916501499 APR 10 2016
9. Sun, Chen; Sinitsyn, N. A.
Exact transition probabilities for a linear sweep through a Kramers-Kronig resonance
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 48 Issue: 50 Article Number: 505202 Published: DEC 18 2015
8. Sinitsyn, NA
Solvable four-state Landau-Zener model of two interacting qubits with path interference
PHYSICAL REVIEW B, 92 (20):10.1103/PhysRevB.92.205431 NOV 30 2015
7. Sinitsyn, NA
Exact results for models of multichannel quantum nonadiabatic transitions
PHYSICAL REVIEW A, 90 (6):10.1103/PhysRevA.90.062509 DEC 11 2014
6. Lin, J; Sinitsyn, NA
Exact transition probabilities in the three-state Landau-Zener-Coulomb model
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 47 (1):10.1088/1751-8113/47/1/015301 JAN 10 2014
5. Lin, J., Sinitsyn, N.A.
The model of a level crossing with a Coulomb band: Exact probabilities of nonadiabatic transitions
Journal of Physics A: Mathematical and Theoretical (17),175301 (2014)
4. Sinitsyn, NA
Nonadiabatic Transitions in Exactly Solvable Quantum Mechanical Multichannel Model: Role of Level Curvature and Counterintuitive Behavior
PHYSICAL REVIEW LETTERS, 110 (15):10.1103/PhysRevLett.110.150603 APR 10 2013
3. Sinitsyn, NA
Landau-Zener transitions in chains
PHYSICAL REVIEW A, 87 (3):10.1103/PhysRevA.87.032701 MAR 4 2013
2. Gorges, AR; Bingham, NS; DeAngelo, MK; Hamilton, MS; Roberts, JL
Light-assisted collisional loss in a Rb-85/87 ultracold optical trap
PHYSICAL REVIEW A 78 (3): Art. No. 033420 SEP 2008
1. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008
- =====
- 62. Vitanov NV, Shore BW**
Quantum transitions driven by missing frequencies
PHYSICAL REVIEW A 72 (5): Art. No. 052507 NOV 2005
1. Huang, Jin-Feng; Law, C. K.
Phase-kicked control of counter-rotating interactions in the quantum Rabi model
PHYSICAL REVIEW A, 91 (2):10.1103/PhysRevA.91.023806 FEB 4 2015
- =====
- 63. Ivanov PA, Vitanov NV, Bergmann K**
Spontaneous emission in stimulated Raman adiabatic passage
PHYSICAL REVIEW A 72 (5): Art. No. 053412 NOV 2005
22. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021
21. Mathisen, Thomas; Larson, Jonas
Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018
20. Wang, Ying-Dan; Zhang, Rong; Yan, Xiao-Bo; Chesì, Stefano
Optimization of STIRAP-based state transfer under dissipation
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa7f5d SEP 28 2017
19. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19; 10.1007/s10773-017-3535-z JAN 2018
18. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016
17. Thomasen, A.M.D., Byrnes, T.
STIRAP schemes for atomic Bose-Einstein condensates
Journal of Physics: Conference Series 752(1),012004 (2016)
16. Sibalic, N; Kondo, JM; Adams, CS; Weatherill, KJ
Dressed-state electromagnetically induced transparency for light storage in uniform-phase spin waves
PHYSICAL REVIEW A, 94 (3):10.1103/PhysRevA.94.033840 SEP 21 2016
15. Chen, Zhen; Chen, Ye-Hong; Xia, Yan
Deterministic generation of singlet state of N atoms in coupled cavities via adiabatic passage of a dark state
JOURNAL OF MODERN OPTICS, 63 (2):92-102; 10.1080/09500340.2015.1066460 2016
14. Trautmann, N; Alber, G; Agarwal, GS; Leuchs, G
Time-Reversal-Symmetric Single-Photon Wave Packets for Free-Space Quantum Communication
PHYSICAL REVIEW LETTERS, 114 (17):10.1103/PhysRevLett.114.173601 APR 27 2015
13. Wang, Qiong; Nie, Jian-Jun; Zeng, Hao-Sheng
Roles of dephasing in the population transfer in stimulated Raman adiabatic process
EUROPEAN PHYSICAL JOURNAL D Volume: 67 Issue: 7 Article Number: 151 Published: JUL 2013
12. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

11. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012
10. Leon-Montiel, R. de J.; Torres, Juan P.
Enhancing the sensitivity and robustness of label-free imaging systems via stimulated Raman adiabatic passage
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/1/013018 JAN 12 2012
9. Amniat-Talab, M., Saadati-Niari, M., Sedghi, H.
Effect of spontaneous emission and cavity decay on intracavity stimulated raman adiabatic passage
Iranian Journal of Physics Research 10(4), pp. 329-336 (2011)
8. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue
Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011
7. Nader-Ali, R., Amniat-Talab, M., Saadati-Niari, M., Mir-Mehdi, M.
Implementation of one-qubit holonomic rotation gate by adiabatic passage
Iranian Journal of Physics Research 10(1), pp. 17-23 (2010)
6. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic evolution for the Rb-87 atom-molecule conversion system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (18): Art. No. 185301 SEP 28 2009
5. Yang Xi-Hua; Zhang Jun; Zhang Hui-Fang; Yan Xiao-Na
Collision-Induced Coherence Effect on Coherent Population Transfer
CHINESE PHYSICS LETTERS 26 (7): Art. No. 073202 JUL 2009
4. Mangano, G; Siewert, J; Falci, G
Sensitivity to parameters of STIRAP in a Cooper pair box
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 259-268 JUL 2008
3. Meng, Shao-Ying; Fu, Li-Bin; Liu, Jie
Adiabatic fidelity for atom-molecule conversion in a nonlinear three-level Lambda system
PHYSICAL REVIEW A 78 (5): Art. No. 053410 NOV 2008
2. Yang, Xihua; Zhu, Shiyao
Control of coherent population transfer via spontaneous decay-induced coherence
PHYSICAL REVIEW A 77 (6): Art. No. 063822 JUN 2008
1. Kamleitner, I; Cresser, J; Twamley, J
Adiabatic information transport in the presence of decoherence
PHYSICAL REVIEW A 77 (3): Art. No. 032331 MAR 2008
- =====
- 64. Vasilev GS, Vitanov NV**
Complete population transfer by a zero-area pulse
PHYSICAL REVIEW A 73 (2): Art. No. 023416 FEB 2006
19. He, Run-Hong; Wang, Rui; Ren, Feng-Hua; Zhang, Li-Cheng; Wang, Zhao-Ming
Adiabatic speedup in cutting a spin chain via zero-area pulse control
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052606
Published: MAY 14 2021
18. Al-Mahmoud, Mouhamad; Coda, Virginie; Rangelov, Andon; Montemezzani, Germano
Broadband Polarization Rotator With Tunable Rotation Angle Composed of Three Wave Plates
PHYSICAL REVIEW APPLIED Volume: 13 Issue: 1 Article Number: 014048
Published: JAN 24 2020
17. Yao Shao-Wu; Cao Hong; Cen Li-Xiang
Exact solution to a kind of multi-level Rosen-Zener models
ACTA PHYSICA SINICA, 68 (13):10.7498/aps.68.20190353 JUL 5 2019
16. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
15. Danga, JE; Sadem, CK; Jipdi, MN; Fotue, AJ; Fai, LC
Landau-Zener tunneling and magnetic control of spin qubit in a quantum wire:
Dynamic matrix approach
PHYSICA B-CONDENSED MATTER, 515 75-81; 10.1016/j.physb.2017.04.008 JUN 15 2017
14. Lehto, JMS; Suominen, KA
Two-level parabolic model with phase-jump coupling
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013404 JUL 5 2016
13. Lee, Han-gyeol; Song, Yunheung; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Quantum dynamics of a two-state system induced by a chirped zero-area pulse
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023423 FEB 23 2016
12. Lehto, JMS; Suominen, KA
Time-dependent two-level models and zero-area pulses
PHYSICA SCRIPTA, 91 (1):10.1088/0031-8949/91/1/013005 JAN 2016
11. Robust coherent superposition of states by single-shot shaped pulse
Ndong, M., Djotyan, G., Ruschhaupt, A., Guerin, S.
Journal of Physics B: Atomic, Molecular and Optical Physics 48(17),174007 (2015)
10. Derouault, S; Bouchene, MA
Non-adiabatic effects in the detuned micro-mazer: From the hot to the intermediate regime
OPTICS COMMUNICATIONS, 355 200-208; 10.1016/j.optcom.2015.06.044 NOV 15 2015
9. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
8. Derouault, S; Bouchene, MA
One-photon wavepacket interacting with a two-level atom in a waveguide: Constraint on the pulse shape
PHYSICS LETTERS A, 376 (46):3491-3494; 10.1016/j.physleta.2012.10.025 OCT 15 2012
7. Seo, Wontaek; Hong, Hyun-Gue; Lee, Moonjoo; Song, Younghoon; Choi, Wonshik; Dasari, R. R.; An, Kyungwon
Reply to "Comment on 'Realization of a bipolar atomic Solc filter in the cavity-QED microlaser'"
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.037802 SEP 29 2011
6. Bouchene, MA
Comment on "Realization of a bipolar atomic Solc filter in the cavity-QED microlaser"
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.037801 SEP 29 2011
5. Yu, Xiang-yang; Liu, Wei; Li, Cheng
Near-resonant propagation of short pulses in a two-level medium
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033811 SEP 9 2011
4. Gillot, J; Bouchene, MA
Complete population transfer induced by transient nonadiabatic effects in a strongly detuned micromaser
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (5): 1324-1327 MAY 2011
3. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
2. Hashmi, FA; Bouchene, MA
Nonadiabatic optical transitions as a turn-on switch for pulse shaping
PHYSICAL REVIEW A 82 (4): Art. No. 043432 OCT 26 2010
1. Hashmi, FA; Bouchene, MA
Phase control of nonadiabatic optical transitions
PHYSICAL REVIEW A 79 (2): Art. No. 025401 FEB 2009
- =====
- 65. Kyoseva ES, Vitanov NV**
Coherent pulsed excitation of degenerate multistate systems: Exact analytic solutions
PHYSICAL REVIEW A 73 (2): Art. No. 023420 FEB 2006
44. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill, Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses

43. Wang, Yuchen; Hu, Zixuan; Sanders, Barry C.; Kais, Sabre
Qudits and High-Dimensional Quantum Computing
FRONTIERS IN PHYSICS Volume: 8 Article Number: 589504 Published: NOV
10 2020

42. Zheng, Ri-Hua; Kang, Yi-Hao; Su, S-L; Song, Jie; Xia, Yan
Robust and high-fidelity nondestructive Rydberg parity meter
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012609
Published: JUL 6 2020

41. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published:
MAR 2020

40. Yi-Hao Kang, Zhi-Cheng Shi, Bi-Hua Huang, Jie Song, and Yan Xia
Flexible scheme for the implementation of nonadiabatic geometric quantum
computation
Phys. Rev. A 101, 032322 – Published 16 March 2020; Erratum Phys. Rev. A 101,
049902 (2020)

39. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia,
Yan
One-Step Implementation of N-Qubit Nonadiabatic Holonomic Quantum Gates
with Superconducting Qubits via Inverse Hamiltonian Engineering
ANNALEN DER PHYSIK, 531 (7):10.1002/andp.201800427 JUL 2019

38. Finkelstein-Shapiro, Daniel; Felicetti, Simone; Hansen, Thorsten; Pullerits,
Tonu; Keller, Arne
Classification of dark states in multilevel dissipative systems
PHYSICAL REVIEW A, 99 (5):10.1103/PhysRevA.99.053829 MAY 20 2019

37. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent
coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018

36. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia,
Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018

35. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018

34. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual
Magnetic Monopole (Springer, 2018)

33. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017

32. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

31. Fan, Fu-You
An Implementation Method of Elementary Qutrit Quantum Logic Gate with
Trapped Ions
International Conference on Computer Science and Information Security (CSIS
2016), 515-520; 2016, Nanjing, China, Destech Publicat Inc

30. Turkpence, Deniz; Mustecaphoglu, Ozgur E.
Quantum fuel with multilevel atomic coherence for ultrahigh specific work in a
photonic Carnot engine
PHYSICAL REVIEW E, 93 (1):10.1103/PhysRevE.93.012145 JAN 27 2016

29. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17
2015

28. Chang, Bo Y.; Shin, Seokmin; Sola, Ignacio R.
"Stirred, Not Shaken": Vibrational Coherence Can Speed Up Electronic Absorption

JOURNAL OF PHYSICAL CHEMISTRY A, 119 (34):9091-9097;
10.1021/acs.jpca.5b05994 AUG 27 2015

27. Chang, Bo Y.; Shin, Seokmin; Sola, Ignacio R.
Ultrafast Population Inversion without the Strong Field Catch: The Parallel
Transfer
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 6 (9):1724-1728;
10.1021/acs.jpcllett.5b00651 MAY 7 2015

26. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

25. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of
coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499;
10.1080/09500340.2014.942404 2014

24. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

23. Amniat-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area
method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI
10.1080/09500340.2013.877164 2014

22. Wang, Wen-Yuan; Duan, Wen-Shan; Sun, Jian-An; Yang, Yang
Landau-Zener tunneling of fermi superfluid gases in deep BEC regime
PHYSICA B-CONDENSED MATTER, 407 (18):3876-3880;
10.1016/j.physb.2012.06.013 SEP 15 2012

21. Amniat-Talab, M; Saadati-Niari, M; Guerin, S
Quantum state engineering in ion-traps via adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30249-3 AUG 2012

20. Meng Hong-Juan; Yang Yang; Wang Wen-Yuan; Qi Peng-Tang; Ma Yun-Yun; Ma
Ying; Wang Shan-Jin; Duan Wen-Shan
Nonlinear Rosen-Zener transition of Fermi superfluid gases
ACTA PHYSICA SINICA, 61 (6):MAR 2012

19. Shapiro, M., Brumer, P.
Quantum Control of Molecular Processes: Second Edition (Wiley, 2012)

18. Kumar, S; Laupretre, T; Proux, C; Bretenaker, F; Ghosh, R; Goldfarb, F
Interacting double dark resonances in a tripod system of room-temperature
(4)He
PHOTONICS 2010: TENTH INTERNATIONAL CONFERENCE ON FIBER OPTICS AND
PHOTONICS 8173 10.1117/12.897791 2011
Editor(s): Khijwania SK; Gupta BD; Pal BP; Sharma A

17. Xu, Qiang; Wang, Yao-xiong; Shuang, Feng; Rabitz, Herschel
Hamiltonian Reduction of Quantum Systems Controlled by Pulses
CHINESE JOURNAL OF CHEMICAL PHYSICS 24 (4): 378-382 10.1088/1674-
0068/24/04/378-382 AUG 2011

16. Kumar, S; Laupretre, T; Ghosh, R; Bretenaker, F; Goldfarb, F
Interacting double dark resonances in a hot atomic vapor of helium
PHYSICAL REVIEW A 84 (2): 10.1103/PhysRevA.84.023811 AUG 9 2011

15. Weymann, I; Bulka, BR; Barnas, J
Dark states in transport through triple quantum dots: The role of cotunneling
PHYSICAL REVIEW B 83 (19): Art. No. 195302 MAY 5 2011

14. Amniat-Talab, M; Saadati-Niari, M; Guerin, S; Nader-Ali, R
Superposition of states by adiabatic passage in N-pod systems
PHYSICAL REVIEW A 83 (1): Art. No. 013817 JAN 21 2011

13. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press,
2011)

12. Chen, Xin; Wang, Yaoxiong; Ge, Yunjian; Shi, Junhui; Rabitz, Herschel; Shuang,
Feng
PERFECT POPULATION TRANSFER IN PULSE-DRIVEN QUANTUM CHAINS

11. Deng, ZJ; Liang, LM; Yang, WL

Quantum Key Distribution Using a chi-Type State
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS 49 (8): 1904-1910 AUG 2010

10. Vewinger, Frank; Shore, Bruce W.; Bergmann, Klaas
Superpositions of Degenerate Quantum States: Preparation and Detection in Atomic Beams
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 58 58: 113-172 2010

9. Deng, ZJ; Liang, LM; Chen, JM; Wu, CW
State transfer and entanglement with atomic ensembles in a one-dimensional fibre-coupled cavity chain
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (6): Art. No. 065506 MAR 28 2010

8. Zhdanovich, S; Shapiro, EA; Hepburn, JW; Shapiro, M; Milner, V
Complete transfer of populations from a single state to a preselected superposition of states using piecewise adiabatic passage: Experiment
PHYSICAL REVIEW A 80 (6): Art. No. 063405 DEC 2009

7. Shore, BW; Gromovyy, MV; Yatsenko, LP; Romanenko, VI
Simple mechanical analogs of rapid adiabatic passage in atomic physics
AMERICAN JOURNAL OF PHYSICS 77 (12): 1183-1194 DEC 2009

6. Xin Jiang, Wen-shan Duan, Sheng-chang Li, Yu-ren Shi
Rosen-Zener transition of two-component Bose-Einstein condensates
Journal of Physics B Atomic Molecular and Optical Physics 42, 185001 (2009)

5. Jiang, X., Duan, W.-S., Li, S.-C., Shi, Y.-R.
Rosen-Zener transition of two-component Bose-Einstein condensates
Journal of Physics B: Atomic, Molecular and Optical Physics 42(18),185001 (2009)

4. Jiang Xin; Lin Mai-Mai; Li Sheng-Chang; Duan Wen-Shan
Rosen-Zener Transition in a Nonlinear System for Two-Component Bose-Einstein Condensates in Optical Lattices
CHINESE PHYSICS LETTERS 26 (1): Art. No. 013701 JAN 2009

3. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

2. Ye, Di-Fa; Fu, Li-Bin; Liu, Jie
Rosen-Zener transition in a nonlinear two-level system
PHYSICAL REVIEW A 77 (1): Art. No. 013402 JAN 2008

1. Frank Vewinger, Manfred Heinz, Bruce W. Shore, and Klaas Bergmann
Amplitude and phase control of a coherent superposition of degenerate states. I. Theory
PHYSICAL REVIEW A 75 (4): Art. No. 043406 APR 2007

=====

66. Vitanov NV, Shore BW
Stimulated Raman adiabatic passage in a two-state system
PHYSICAL REVIEW A 73 (5): Art. No. 053402 MAY 2006

41. Liu, Dan; Gao, Yichun; Xu, Jianqin; Qian, Jing
Stable quantum interference enabled by coexisting detuned and resonant STIRAPs*
CHINESE PHYSICS B Volume: 30 Issue: 5 Article Number: 053701
Published: MAY 2021

40. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020

39. Csehi, Andras
Control of the populations and phases of two-level quantum systems by a single frequency-chirped laser pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52 (19):10.1088/1361-6455/ab3c05 OCT 14 2019

38. Wang, Tengfei; Wan, Ting; Zhou, Wenhui; Chen, Changshui
Three-process cascaded frequency conversion based on Stark-chirped rapid

adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 36 (7):1958-1963; 10.1364/JOSAB.36.001958 JUL 1 2019

37. Deng, Li; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in two-level systems with permanent dipole moments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063830 DEC 20 2018

36. Niu, Ying-Yu; Wang, Rong
Adiabatic population transfer between electronic states of LiH molecule in two picosecond laser pulses
AIP ADVANCES, 8 (11):10.1063/1.5052465 NOV 2018

35. Deng, Li; Lin, Gongwei; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in dense two-level systems
JOURNAL OF MODERN OPTICS, 65 (9):1121-1126; 10.1080/09500340.2018.1426797 2018

34. Shi, Jian; Ma, Rui-Qiong; Duan, Zuo-Liang; Liang, Meng; Chai, Bao-Yu; Dong, Jun
Geometrical representation of coherent tunneling process in two-waveguide and three-waveguide coupler
CHINESE PHYSICS B, 26 (12):10.1088/1674-1056/26/12/124214 DEC 2017

33. Dorier, V; Gevorgyan, M; Ishkhanyan, A; Leroy, C; Jauslin, HR; Guerin, S
Nonlinear Stimulated Raman Exact Passage by Resonance-Locked Inverse Engineering
PHYSICAL REVIEW LETTERS, 119 (24):10.1103/PhysRevLett.119.243902 DEC 13 2017

32. Aydinoglu, Gunes; Guven, Kaan
Asymmetric Rosen-Zener-like transition through a soliton-surface-plasmon photonic Josephson junction with spatially varying coupling
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053802 NOV 1 2017

31. Deng, Li; Nakajima, Takashi; Gong, Shangqing
Transparency under double detuning-induced stimulated Raman adiabatic passage in atoms with hyperfine structure
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.063828 JUN 20 2017

30. Niu Ying-Yu; Wang Rong; Qiu Ming-Hui; Xiu Jun-Ling
The extended "ladder" transition controlled by two harmonic pulses
ACTA PHYSICA SINICA, 65 (23):10.7498/aps.65.233301 DEC 5 2016

29. Population transfer of a NaH molecule via stimulated Raman adiabatic passage
Zai, J.-B., Zhan, W.-S., Wang, S., Dang, H.-P., Han, X.
Laser Physics 26(9), 096002 (2016)

28. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016

27. Chen, Bing; Peng, Yan-Dong; Li, Yong; Qian, Xiao-Feng
Robust Multiple-Range Coherent Quantum State Transfer
SCIENTIFIC REPORTS, 6 10.1038/srep28886 JUL 1 2016

26. Chen, Bing; Li, Yong
Coherent state transfer through a multi-channel quantum network: Natural versus controlled evolution passage
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 59 (4):10.1007/s11433-016-5791-y APR 2016

25. Li, Li-hang; Han, Yong-chang; Cong, Shy-lin
Steering Vibrational Population Transfer via Double-Sigma-Type Laser Scheme
CHINESE JOURNAL OF CHEMICAL PHYSICS, 28 (1):43-48; 10.1063/1674-0068/28/cjcp1410186 FEB 2015

24. Wang, Rong; Niu, Ying-Yu; Qiu, Ming-Hui; Han, Yong-Chang
Rovibrational population transfer in the ground state controlled by two coherent laser pulses
PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.013401 JAN 5 2015

23. Wang, Rong; Qiu, Ming-hui; Xiu, Jun-ling
Rovibrational State-Selectivity in Photoassociation through Multi-photon Transitions

22. Longhi, Stefano

Coherent transfer by adiabatic passage in two-dimensional lattices
ANNALS OF PHYSICS, 348 161-175; 10.1016/j.aop.2014.05.020 SEP 2014

21. Deng, Li; Nakajima, Takashi

Detuning-induced stimulated Raman adiabatic passage in atoms with hyperfine structure
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023406 FEB 7 2014

20. Zhang, Jingfu; Souza, Alexandre M.; Brandao, Frederico Dias; Suter, Dieter
Protected Quantum Computing: Interleaving Gate Operations with Dynamical Decoupling Sequences

PHYSICAL REVIEW LETTERS, 112 (5):10.1103/PhysRevLett.112.050502 FEB 6 2014

19. Chen, Bing; Fan, Wei; Xu, Yan; Peng, Yan-Dong; Zhang, Hui-Yun

Multipath adiabatic quantum state transfer
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.022323 AUG 20 2013

18. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian

High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013

17. Wang Rong; Xiu Jun-Ling; Niu Ying-Yu

Population transfer of HF molecules in the ground electronic state through multiphoton transition
ACTA PHYSICA SINICA Volume: 62 Issue: 9 Article Number: 093301 DOI: 10.7498/aps.62.093301 Published: 2013

16. Deng, Li; Nakajima, Takashi

Generation of vacuum-ultraviolet pulses with a Doppler-broadened gas utilizing high atomic coherence
OPTICS EXPRESS, 20 (16):17566-17580; JUL 30 2012

15. Xu, Qianqian ; Yao, Duanzheng ; Liu, Xiaona ; et al.

Adiabatic self-induced transparency in GaN/AlN inhomogeneously broadened quantum-dot ensemble
OPTICS AND LASER TECHNOLOGY Volume: 45 Pages: 768-774 DOI: 10.1016/j.optlastec.2012.04.038 Published: FEB 2013

14. Xu, QQ; Yao, DZ; Liu, XN; Zhou, Q; Xiong, GG

Solitary propagation effect of a well-defined chirped femtosecond laser pulse in a resonance-absorbing medium
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023853 AUG 29 2012

13. Xu, Yan; Fan, Wei; Chen, Bing

QUANTUM CORRECTIONS TO THE DYNAMICS OF THE BOSE-EINSTEIN CONDENSATE IN A DOUBLE-WELL POTENTIAL
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, 26 (6):10.1142/S0217979212500439 MAR 10 2012

12. Jia, Ning; Qian, Jing; Dong, Guangjiong; Zhang, Weiping

Stability, adiabaticity and transfer efficiency in a nonlinear Lambda-system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (1):10.1088/0953-4075/45/1/015301 JAN 14 2012

11. Watanabe, T; Nomura, S; Toyoda, K; Urabe, S

Sideband excitation of trapped ions by rapid adiabatic passage for manipulation of motional states
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033412 SEP 14 2011

10. Niu, Ying-Yu; Wang, Rong; Qiu, Ming-Hui

Stimulated Raman adiabatic passage in an extended ladder system
PHYSICAL REVIEW A 84 (2): 10.1103/PhysRevA.84.023406 AUG 10 2011

9. Cui, B; Wang, LC; Yi, XX

Time-dependent self-trapping of Bose-Einstein condensates in a double-well potential
PHYSICAL REVIEW A 82 (6): Art. No. 062105 DEC 7 2010

8. Ottaviani, C; Ahufinger, V; Corbalan, R; Mompart, J

Adiabatic splitting, transport, and self-trapping of a Bose-Einstein condensate in a double-well potential
PHYSICAL REVIEW A 81 (4): Art. No. 043621 APR 2010

7. Niu, Ying-Yu; Wang, Rong; Qiu, Ming-Hui

Stimulated Raman adiabatic passage through permanent dipole moment transitions

PHYSICAL REVIEW A 81 (4): Art. No. 043406 APR 2010

6. Ottaviani, C., Ahufinger, V., Corbalan, R., Mompart, J.

Adiabatic splitting and self-trapping of a bose-einstein condensate in a double-well potential
CLEO/Europe - EQEC 2009 - European Conference on Lasers and Electro-Optics and the European Quantum Electronics Conference 5194134

5. Malinovskaya, Svedana A.

Optimal coherence via adiabatic following
OPTICS COMMUNICATIONS 282 (17): 3527-3529 SEP 1 2009

4. Loiko, Yu.; Serrat, C.; Vilaseca, R.; Ahufinger, V.; Mompart, J.; Corbalan, R.

Doppler-free adiabatic self-induced transparency
PHYSICAL REVIEW A 79 (5): Art. No. 053809 MAY 2009

3. Shu, Chuan-Cun; Yu, Jie; Yuan, Kai-Jun; Hu, Wen-Hui; Yang, Jing; Cong, Shu-Lin

Stimulated Raman adiabatic passage in molecular electronic states
PHYSICAL REVIEW A 79 (2): Art. No. 023418 FEB 2009

2. Yamazaki, Rekishu; Kanda, Ken-ichi; Inoue, Fumihiko; Toyoda, Kenji; Urabe, Shinji

Robust generation of superposition states
PHYSICAL REVIEW A 78 (2): Art. No. 023808 Part B AUG 2008

1. Bateman J, Freearge T

Fractional adiabatic passage in two-level systems: Mirrors and beam splitters for atomic interferometry
PHYSICAL REVIEW A 76 (1): Art. No. 013416 JUL 2007

=====
67. Yatsenko LP, Rangelov AA, Vitanov NV and Shore BW
Steering population flow in coherently driven lossy quantum ladders
JOURNAL OF CHEMICAL PHYSICS 125 (1): Art. No. 014302 JUL 1 2006

4. Yan, Xiang-an; Wang, Li-qiang

Study of the maximum conversion efficiency of the four-wave mixing process based on the Hamiltonian approach
OPTIK, 123 (11):964-970; 10.1016/j.ijleo.2011.06.061 2012

3. Zhang Bing; Jiang Yun; Wang Gang; Zhang Li-Da; Wu Jin-Hui; Gao Jin-Yue

Coherence generation and population transfer in a three-level ladder system
CHINESE PHYSICS B 20 (5): Art. No. 050304 MAY 2011

2. Zhang, B., Zhang, L., Yang, X., Gao, J.

Frequency conversion based on atomic coherence in a four-level ladder atomic system
Guangxue Xuebao/Acta Optica Sinica 29(SUPPL.), pp. 26-31 (2009)

1. Xue Y, Wang G, Wu JH, et al.

Optical gain properties in a coherently prepared four-level cold atomic system
PHYSICAL REVIEW A 75 (6): Art. No. 063832 JUN 2007

=====
68. Lacour X, Guerin S, Vitanov NV, Yatsenko LP and Jauslin HR
Implementation of single-qubit quantum gates by adiabatic passage and static laser phases
OPTICS COMMUNICATIONS 264 (2): 362-367 AUG 15 2006

19. Petziol, Francesco; Arimondo, Ennio; Giannelli, Luigi; Mintert, Florian; Wimberger, Sandro

Optimized three-level quantum transfers based on frequency-modulated optical excitations
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 2185 Published: FEB 10 2020

18. Benmachiche, Abderrahim; Bahloul, Derradj; Mahmoud, Gharib Subhi; Messikh, Azeddine

Rotation Gates with Controlled Adiabatic Evolutions in Open Systems
OPEN SYSTEMS & INFORMATION DYNAMICS, 25 (3):10.1142/S1230161218500130 SEP 2018

17. Vepsalainen, A; Danilin, S; Paraoanu, GS

Optimal superadiabatic population transfer and gates by dynamical phase corrections
QUANTUM SCIENCE AND TECHNOLOGY, 3 (2):10.1088/2058-9565/aaa640 APR 2018

16. Mahmoud, Gharib Subhi; Messikh, Azeddine
The effect of dephasing on superadiabatic single-qubit rotation gates
Journal of Physics Conference Series, Edited by: Rakhimov A; Ural B; Daoud JI; Saburov K; Chowdhury MSH, 4TH INTERNATIONAL CONFERENCE ON MATHEMATICAL APPLICATIONS IN ENGINEERING 2017 (ICMAE'17), 949 10.1088/1742-6596/949/1/012018 2018
15. Du, Yan-Xiong; Liang, Zhen-Tao; Li, Yi-Chao; Yue, Xian-Xian; Lv, Qing-Xian; Huang, Wei; Chen, Xi; Yan, Hui; Zhu, Shi-Liang
Experimental realization of stimulated Raman shortcut-to-adiabatic passage with cold atoms
NATURE COMMUNICATIONS, 7 10.1038/ncomms12479 AUG 2016
14. Huang, Wei; Du, Yan-Xiong; Liang, Zhen-Tao; Yan, Hui
Detecting quantumness witness with atoms manipulated by the fractional stimulated Raman adiabatic passage processes
OPTICS COMMUNICATIONS, 363 42-46; 10.1016/j.optcom.2015.10.053 MAR 15 2016
13. Issoufa, Y.H., Messikh, A.
Superadiabatic STIRAP: Population transfer and quantum rotation gates
Communications in Computer and Information Science 681, pp. 299-313 (2016)
12. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014
11. Zhang, Jingfu; Souza, Alexandre M.; Brandao, Frederico Dias; Suter, Dieter
Protected Quantum Computing: Interleaving Gate Operations with Dynamical Decoupling Sequences
PHYSICAL REVIEW LETTERS, 112 (5):10.1103/PhysRevLett.112.050502 FEB 6 2014
10. Yang, Liu; Yan, Dong; Wang, Xiao-Chang; Yang, Hong; Wu, Jin-Hui
Accurate accumulation of arbitrary Berry phases via fractional stimulated Raman adiabatic passage
OPTICS COMMUNICATIONS, 313 345-349; 10.1016/j.optcom.2013.10.059 FEB 15 2014
9. Koh, Teck Seng; Coppersmith, S. N.; Friesen, Mark
High-fidelity gates in quantum dot spin qubits
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, 110 (49):19695-19700; 10.1073/pnas.1319875110 DEC 3 2013
8. Issouffa, YH; Messikh, A; Wahiddin, MR; Umarov, B; Gharib, MS
Generalized Quantum Rotation Gates Using STIRAP
2013 5th International Conference on Information and Communication Technology for the Muslim World, ICT4M 2013 6518925
7. Issoufa, Youssouf Hamidou; Messikh, Azeddine
Effect of dephasing on single-qubit rotation gates
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (21): Art. No. 215506 NOV 14 2010
6. Bomble, L; Lauvergnat, D; Remacle, F; Desouter-Lecomte, M
Controlled full adder or subtractor by vibrational quantum computing
PHYSICAL REVIEW A 80 (2): Art. No. 022332 AUG 2009
5. Bomble, L; Lavorel, B; Remacle, F; Desouter-Lecomte, M
Computational investigation and experimental considerations for the classical implementation of a full adder on SO₂ by optical pump-probe schemes
JOURNAL OF CHEMICAL PHYSICS 128 (19): Art. No. 194308 MAY 12 2008
4. Wei, LF; Johansson, JR; Cen, LX; Ashhab, S; Nori, F
Controllable coherent population transfers in superconducting qubits for quantum computing
PHYSICAL REVIEW LETTERS 100 (11): Art. No. 113601 MAR 21 2008
3. Bomble, L; Lauvergnat, D; Remacle, F; Desouter-Lecomte, M
Vibrational computing: Simulation of a full adder by optimal control
JOURNAL OF CHEMICAL PHYSICS 128 (6): Art. No. 064110 FEB 14 2008
2. Goto, Hayato; Ichimura, Kouichi
Upper bound for the success probability of cavity-mediated adiabatic transfer in the presence of dissipation
PHYSICAL REVIEW A 77 (1): Art. No. 013816 JAN 2008
1. Xue Y, Wang G, Wu JH, et al.
Optical gain properties in a coherently prepared four-level cold atomic system
PHYSICAL REVIEW A 75 (6): Art. No. 063832 JUN 2007
- =====
- 69. Ivanov PA, Vitanov NV**
State reconstruction of a qutrit by a minimal set of discrete measurements
OPTICS COMMUNICATIONS 264 (2): 368-374 AUG 15 2006
7. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
6. Fan, Fu-You
An Implementation Method of Elementary Qutrit Quantum Logic Gate with Trapped Ions
International Conference on Computer Science and Information Security (CSIS 2016), 515-520; 2016, Nanjing, China, Destech Publicat Inc
5. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014
4. Yan, Fei; Yang, Ming; Cao, Zhuo-Liang
Optimal reconstruction of the states in qutrit systems
PHYSICAL REVIEW A 82 (4): Art. No. 044102 OCT 8 2010
3. Deshpande SA, Ezra GS
Quantum state reconstruction for rigid rotors
CHEMICAL PHYSICS LETTERS 440 (4-6): 341-347 JUN 8 2007
2. Vewinger F, Heinz M, Shore BW, et al.
Amplitude and phase control of a coherent superposition of degenerate states. I. Theory
PHYSICAL REVIEW A 75 (4): Art. No. 043406 APR 2007
1. Vewinger F, Heinz M, Schneider U, et al.
Amplitude and phase control of a coherent superposition of degenerate states. II. Experiment
PHYSICAL REVIEW A 75 (4): Art. No. 043407 APR 2007
- =====
- 70. Ivanov PA, Kyoseva ES, Vitanov NV**
Engineering of arbitrary U(N) transformations by quantum Householder reflections
PHYSICAL REVIEW A 74 (2): Art. No. 022323 AUG 2006
37. Malvetti, Emanuel; Iten, Raban; Colbeck, Roger
Quantum Circuits for Sparse Isometries
QUANTUM Volume: 5 Published: MAR 15 2021
36. Liu, Bao-Jie; Yung, Man-Hong
Coherent control with user-defined passage
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 025002 Published: APR 2021
35. Low, Pei Jiang; White, Brendan M.; Cox, Andrew A.; Day, Matthew L.; Senko, Crystal
Practical trapped-ion protocols for universal qudit-based quantum computing
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033128 Published: JUL 23 2020
34. Zheng, Ri-Hua; Kang, Yi-Hao; Su, S-L; Song, Jie; Xia, Yan
Robust and high-fidelity nondestructive Rydberg parity meter
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012609 Published: JUL 6 2020
33. Toffano, Zeno
Eigenlogic in the Spirit of George Boole
LOGICA UNIVERSALIS Volume: 14 Issue: 2 Pages: 175-207 Published: JUN 2020
32. de Brugiere, Timothee Goubault; Baboulin, Marc; Valiron, Benoit; Allouche, Cyril
Quantum circuits synthesis using Householder transformations
COMPUTER PHYSICS COMMUNICATIONS Volume: 248 Article Number: UNSP 107001 Published: MAR 2020

31. Bian, Teng; Murphy, Daniel; Xia, Rongxin; Daskin, Ammar; Kais, Sabre
Quantum computing methods for electronic states of the water molecule
MOLECULAR PHYSICS, 117 (15-16):2069-2082; SI
10.1080/00268976.2019.1580392 AUG 18 2019
30. Daskin, Ammar; Kais, Sabre
Direct application of the phase estimation algorithm to find the eigenvalues of the Hamiltonians
CHEMICAL PHYSICS, 514 87-94; SI 10.1016/j.chemphys.2018.01.002 OCT 25 2018
29. Cariolaro, Gianfranco; Pierobon, Gianfranco
Implementation of multimode Gaussian unitaries using primitive components
PHYSICAL REVIEW A, 98 (3):10.1103/PhysRevA.98.032111 SEP 17 2018
28. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
27. Shirkhaghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
26. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018
25. Hu, J., Wang, P., Zhang, Q.
Multiplex householder reflection gate and its application in preparation of quantum state
IPPTA: Quarterly Journal of Indian Pulp and Paper Technical Association 30(1), pp. 233-241 (2018)
24. Oxman, Luis E.; Khoury, Antonio Z.; Lombardo, Fernando C.; Villar, Paula, I
Two-qudit geometric phase evolution under dephasing
ANNALS OF PHYSICS, 390 159-179; 10.1016/j.aop.2018.01.005 MAR 2018
23. de Guise, Hubert; Di Matteo, Olivia; Sanchez-Soto, Luis L.
Simple factorization of unitary transformations
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.022328 FEB 20 2018
22. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018
21. Daskin, A.
A quantum implementation model for artificial neural networks
Quanta 7(1), pp. 7-18 (2018)
20. Delgado, Francisco
TWO-QUBIT QUANTUM GATES DESIGN VIA UNITARY FACTORIZATION UNDER ANISOTROPIC HEISENBERG-ISING INTERACTION
QUANTUM INFORMATION & COMPUTATION, 17 (9-10):721-746; AUG 2017
19. Luo, Ming-Xing; Li, Hui-Ran; Wang, Xiaojun
Distributed atomic quantum information processing via optical fibers
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-01245-x APR 27 2017
18. Luo, Ming-Xing; Li, Hui-Ran; Wang, Xiaojun
Distributed atomic quantum information processing via optical fibers
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-01245-x APR 27 2017
17. De Vos, A; De Baerdemacker, S
Block-ZXZ synthesis of an arbitrary quantum circuit
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052317 NOV 14 2016
16. Daskin, Ammar
Obtaining a linear combination of the principal components of a matrix on quantum computers
QUANTUM INFORMATION PROCESSING, 15 (10):4013-4027; 10.1007/s11128-016-1388-7 OCT 2016
15. Chen, Li-Bing; Lu, Hong
Remotely and Conclusively Mapping One Finite Set of Qudit States onto Another Assisted by Qubit Entanglements
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 55 (5):2397-2404; 10.1007/s10773-015-2877-7 MAY 2016
14. Urias, Jesus; Quinones, Diego A.
Householder methods for quantum circuit design
CANADIAN JOURNAL OF PHYSICS, 94 (2):150-157; 10.1139/cjp-2015-0490 FEB 2016
13. Turkpence, Deniz; Mustecaphoglu, Ozgur E.
Quantum fuel with multilevel atomic coherence for ultrahigh specific work in a photonic Carnot engine
PHYSICAL REVIEW E, 93 (1):10.1103/PhysRevE.93.012145 JAN 27 2016
12. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
11. Bang, Jeongho; Lee, Seung-Woo; Lee, Chang-Woo; Jeong, Hyunseok
A quantum algorithm for obtaining the lowest eigenstate of a Hamiltonian assisted with an ancillary qubit system
QUANTUM INFORMATION PROCESSING, 14 (1):103-118; 10.1007/s11128-014-0836-5 JAN 2015
10. Luo MingXing; Wang XiaoJun
Universal quantum computation with qudits
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 57 (9):1712-1717; 10.1007/s11433-014-5551-9 SEP 2014
9. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014
8. Luo, Ming-Xing; Chen, Xiu-Bo; Yang, Yi-Xian; Wang, Xiaojun
Geometry of Quantum Computation with Qudits
SCIENTIFIC REPORTS, 4 10.1038/srep04044 FEB 10 2014
7. Luo, Ming-Xing; Deng, Yun; Chen, Xiu-Bo; Yang, Yi-Xian
The rational approximations of the unitary groups
QUANTUM INFORMATION PROCESSING, 12 (10):3149-3166; 10.1007/s11128-013-0588-7 OCT 2013
6. Bruning, E; Makela, H; Messina, A; Petruccione, F
Parametrizations of density matrices
JOURNAL OF MODERN OPTICS, 59 (1):1-20; 10.1080/09500340.2011.632097 2012
5. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
4. Cabrera, Renan; Strohecker, Traci; Rabitz, Herschel
The canonical coset decomposition of unitary matrices through Householder transformations
JOURNAL OF MATHEMATICAL PHYSICS 51 (8): Art. No. 082101 AUG 2010
3. Urias, Jesus
Householder factorizations of unitary matrices
JOURNAL OF MATHEMATICAL PHYSICS 51 (7): Art. No. 072204 JUL 2010
2. Vewinger, Frank; Shore, Bruce W.; Bergmann, Klaas
Superpositions of Degenerate Quantum States: Preparation and Detection in Atomic Beams
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 58 58: 113-172 2010
1. B.W. Shore,
Sir Peter Knight and the Jaynes-Cummings model,
Journal of Modern Optics 54, 2009 (2007).
- =====
- 71. Rangelov AA, Vitanov NV, Shore BW**
Extension of the Morris-Shore transformation to multilevel ladders
PHYSICAL REVIEW A 74 (5): Art. No. 053402 NOV 2006
33. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

32. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020
31. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
30. Shirikhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published: MAY-JUN 2020
29. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5 Article Number: 1950049 Published: AUG 2019
28. Finkelstein-Shapiro, Daniel; Felicetti, Simone; Hansen, Thorsten; Pullerits, Tonu; Keller, Arne
Classification of dark states in multilevel dissipative systems
PHYSICAL REVIEW A, 99 (5):10.1103/PhysRevA.99.053829 MAY 20 2019
27. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
26. Shirikhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
25. Sun, Yuan; Liu, Chang; Chen, Ping-Xing; Liu, Liang
Polarization-induced interference within electromagnetically induced transparency for atoms of double-V linkage
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.023815 FEB 12 2018
24. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017
23. Kirova, T; Cinins, A; Efimov, DK; Bruvelis, M; Miculis, K; Bezuglov, NN; Auzinsh, M; Ryabtsev, Il; Ekers, A
Hyperfine interaction in the Autler-Townes effect: The formation of bright, dark, and chameleon states
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043421 OCT 26 2017
22. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384; 10.1080/09500340.2017.1361478 2017
21. DiLoreto, CS; Rangan, C
Polarization control of spontaneous emission for rapid quantum-state initialization
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.043834 APR 21 2017
20. Fan, Fu-You
An Implementation Method of Elementary Qutrit Quantum Logic Gate with Trapped Ions
International Conference on Computer Science and Information Security (CSIS 2016), 515-520; 2016, Nanjing, China, Destech Publicat Inc
19. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
18. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016
17. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
16. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
15. Chang, Bo Y.; Shin, Seokmin; Sola, Ignacio R.
State-Selective Excitation of Quantum Systems via Geometrical Optimization
JOURNAL OF CHEMICAL THEORY AND COMPUTATION, 11 (9):4005-4010; 10.1021/acs.jctc.5b00522 SEP 2015
14. Chang, Bo Y.; Shin, Seokmin; Sola, Ignacio R.
"Stirred, Not Shaken": Vibrational Coherence Can Speed Up Electronic Absorption
JOURNAL OF PHYSICAL CHEMISTRY A, 119 (34):9091-9097; 10.1021/acs.jpca.5b05994 AUG 27 2015
13. Hope, Anthony P; Nguyen, Thach G.; Mitchell, Arnan; Greentree, Andrew D.
Adiabatic two-photon quantum gate operations using a long-range photonic bus
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (5):10.1088/0953-4075/48/5/055503 MAR 14 2015
12. Enferad, Shirin; Amniat-Talab, Mahdi; Saadati-Niari, Maghsud
Creation of cluster state of four ions in ion-trap system by individual addressing
OPTIK, 125 (21):6395-6403; 10.1016/j.ijleo.2014.06.126 2014
11. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499; 10.1080/09500340.2014.942404 2014
10. Greentree, Andrew D.; Koiller, Belita
Dark-state adiabatic passage with spin-one particles
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.012319 JUL 14 2014
9. Amniat-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI 10.1080/09500340.2013.877164 2014
8. Yuan, Haidong; Koch, Christiane P; Salamon, Peter; Tannor, David J.
Controllability on relaxation-free subspaces: On the relationship between adiabatic population transfer and optimal control
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.033417 MAR 15 2012
7. Toyoda, K; Watanabe, T; Kimura, T; Nomura, S; Haze, S; Urabe, S
Generation of Dicke states using adiabatic passage
PHYSICAL REVIEW A 83 (2): Art. No. 022315 FEB 17 2011
6. Thanopoulos, Ioannis; Shapiro, Moshe
Coherence Effects in Laser-Induced Continuum Structure
ADVANCES IN QUANTUM CHEMISTRY, VOL 60: UNSTABLE STATES IN THE CONTINUOUS SPECTRA, PART 1: ANALYSIS, CONCEPTS, METHODS, AND RESULTS 60: 105-161 2010
5. Mustecaplioglu, OE
Quantum coherence and correlations of optical radiation by atomic ensembles interacting with a two-level atom in a microwave cavity
PHYSICAL REVIEW A 83 (2): Art. No. 023805 FEB 9 2011
4. Amniat-Talab, M; Saadati-Niari, M; Guerin, S; Nader-Ali, R
Superposition of states by adiabatic passage in N-pod systems
PHYSICAL REVIEW A 83 (1): Art. No. 013817 JAN 21 2011
3. Hume, DB; Chou, CW; Rosenband, T; Wineland, DJ
Preparation of Dicke states in an ion chain
PHYSICAL REVIEW A 80 (5): Art. No. 052302 NOV 2009
2. Radonjic, M; Jelenkovic, BM
Stark-chirped rapid adiabatic passage among degenerate-level manifolds
PHYSICAL REVIEW A 80 (4): Art. No. 043416 OCT 2009
1. Xu, ZY; Hu, YM; Yang, WL; Feng, M; Du, JF
Deterministically entangling distant nitrogen-vacancy centers by a nanomechanical cantilever

=====

72. Yannopapas V, Vitanov NV

Photoexcitation-induced magnetism in arrays of semiconductor nanoparticles with a strong excitonic oscillator strength

PHYSICAL REVIEW B 74 (19): Art. No. 193304 NOV 2006

41. Daneshfar, Nader

The Study of Scattering-to-absorption Ratio in Plasmonic Nanoparticles for Photovoltaic Cells and Sensor Applications

PLASMONICS [early access icon] Early Access: MAY 2021

40. Grillo, Rossella; Beutel, Dominik; Cataldi, Ugo; Rockstuhl, Carsten; Buergi, Thomas

Self-Assembled Arrays of Gold Nanorod-Decorated Dielectric Microspheres with a Magnetic Dipole Response in the Visible Range for Perfect Lensing and Cloaking Applications

ACS APPLIED NANO MATERIALS Volume: 3 Issue: 6 Pages: 6108-6117

Published: JUN 26 2020

39. Jia, Yu-Rou; Yao, Jie; Wu, Da-Jian; Cheng, Ying; Liu, Xiao-Jun

Optical bistability in the plexcitonic Ag-CuCl nanowire

OPTICS COMMUNICATIONS, 405 43-47; 10.1016/j.optcom.2017.07.074 DEC 15 2017

38. Yao, Jie; Ji, WenQian; Wu, DaJian; Cheng, Ying; Liu, XiaoJun

Plasmon-exciton couplings in Al-CuCl nanoshells and the effects of oxidation

OPTICS COMMUNICATIONS, 389 310-313; 10.1016/j.optcom.2016.12.061 APR 15 2017

37. Manassah, Jamal T.

Exceptional Transparency Window in a Finite Alternating Stack of Ag and CuCl Films

PLASMONICS, 10 (6):1909-1914; 10.1007/s11468-015-0006-3 DEC 2015

36. Jiang, ShuMin; Xie, QiuYue; Wu, DaJian

Plasmon-exciton induced transparency in plexcitonic Ag-CuCl-coated nanowires and associated arrays

APPLIED PHYSICS B-LASERS AND OPTICS, 119 (2):355-361; 10.1007/s00340-015-6083-3 MAY 2015

35. Wu, DaJian; Cheng, Ying; Wu, XueWei; Liu, XiaoJun

Exciton-plasmon couplings in plexcitonic CuCl-Ag nanoshells: Rabi splitting and induced transparency

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (10):2273-2277; 10.1364/JOSAB.31.002273 OCT 2014

34. Savelev, Roman S.; Slobozhanyuk, Alexey P.; Miroshnichenko, Andrey E.; Kivshar, Yuri S.; Belov, Pavel A.

Subwavelength waveguides composed of dielectric nanoparticles

PHYSICAL REVIEW B, 89 (3):10.1103/PhysRevB.89.035435 JAN 30 2014

33. Ma, Junming; Zhao, Qian; Meng, Yonggang

Magnetically controllable Casimir force based on a superparamagnetic metamaterial

PHYSICAL REVIEW B, 89 (7):10.1103/PhysRevB.89.075421 FEB 19 2014

32. Manassah, Jamal T.

Slow light in glass dispersed with CuCl-coated silver nanoshells

PHYSICAL REVIEW A, 88 (3):10.1103/PhysRevA.88.035803 SEP 5 2013

31. Manassah, Jamal T.

Electrodynamics of semiconductor-coated noble metal nanoshells

PHYSICAL REVIEW A, 87 (5):10.1103/PhysRevA.87.053845 MAY 29 2013

30. Panahpour, Ali; Silani, Yaser; Farrokhan, Marzieh; Lavrinenko, Andrei V.; Latifi, Hamid

Coupled plasmon-exciton induced transparency and slow light in plexcitonic metamaterials

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (9):2297-2308; SEP 2012

29. Foteinopoulou, S

Photonic crystals as metamaterials

PHYSICA B-CONDENSED MATTER, 407 (20):4056-4061;

10.1016/j.physb.2012.01.092 OCT 15 2012

28. Dintinger Jose; Muehlig Stefan; Rockstuhl Carsten; et al.

A bottom-up approach to fabricate optical metamaterials by self-assembled metallic nanoparticles

OPTICAL MATERIALS EXPRESS Volume: 2 Issue: 3 Pages: 269-278 Published: MAR 1 2012

27. Yue, R.-Z., Feng, M., Zhan, H.-B.

Numerical and simulation study on silver nanoparticles composite metamaterials

Guangzi Xuebao/Acta Photonica Sinica 40(12), pp. 1860-1864 (2011)

26. Tao, Y.C., Zhao, X.L., Dong, Z.C., Hu, J.G.

Junctions with ferromagnetic contacts to probe the pairing symmetry of iron pnictide superconductors

New Journal of Physics 13, 123016 (2011)

25. Vallecchi, A., Albani, M.

Negative effective refractive index metamaterials at optical frequencies based on superlattices of noble metals and excitonic semiconductors

30th URSI General Assembly and Scientific Symposium, URSIGASS 2011 6050439

24. Vallecchi, Andrea; Albani, Matteo

Super Lattices of Noble Metals and Excitonic Semiconductors for Negative Index Metamaterials at Visible Frequencies

2011 IEEE INTERNATIONAL SYMPOSIUM ON ANTENNAS AND PROPAGATION (APSURSI), 1510-1512; 2011

23. Paniagua-Dominguez, R; Lopez-Tejiera, F; Marques, R; Sanchez-Gil, JA

Metallo-dielectric core-shell nanospheres as building blocks for optical three-dimensional isotropic negative-index metamaterials

NEW JOURNAL OF PHYSICS, 13 10.1088/1367-2630/13/12/123017 DEC 9 2011

22. Liu, LY; Sun, JB; Fu, XJ; Zhou, J; Zhao, Q; Fu, B; Liao, JP; Lippens, D

ARTIFICIAL MAGNETIC PROPERTIES OF DIELECTRIC METAMATERIALS IN TERMS OF EFFECTIVE CIRCUIT MODEL

PROGRESS IN ELECTROMAGNETICS RESEARCH-PIER 116: 159-170 2011

21. Chen, Hongsheng

Metamaterials: constitutive parameters, performance, and chemical methods for realization

JOURNAL OF MATERIALS CHEMISTRY 21 (18): 6452-6463 2011

20. Zhao, Wei; Zhao, Xiaopeng; Song, Kun; Zhou, Yawei

Three-dimensional optical metamaterials consisting of metal-dielectric stacks

PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS 9 (1): 49-56 FEB 2011

19. Panahpour, Ali; Latifi, Hamid

Electromagnetic transparency and slow light in an isotropic 3D optical metamaterial, due to Fano-like coupling of Mie resonances in excitonic nanosphere inclusions

OPTICS COMMUNICATIONS 284 (6): 1701-1710 MAR 15 2011

18. Liu, L.Y., Sun, J.B., Fu, X.J., (...), Liao, J.P., Lippens, D.

Artificial magnetic properties of dielectric metamaterials in terms of effective circuit model

Progress in Electromagnetics Research 116, pp. 159-170 (2011)

17. Pawlak, Dorota A.; Turczynski, Sebastian; Gajc, Marcin; Kolodziejak, Katarzyna;

Diduszko, Ryszard; Rozniatowski, Krzysztof; Smalc, Julita; Vendik, Irina

How Far Are We from Making Metamaterials by Self-Organization? The Microstructure of Highly Anisotropic Particles with an SRR-Like Geometry

ADVANCED FUNCTIONAL MATERIALS 20 (7): 1116-1124 APR 9 2010

16. Hu, Yonghua; Zhou, Jianhua

Control of nonlinear self-action of high-power Gaussian beams: using a nonlinear left-handed material slab

JOURNAL OF MODERN OPTICS 57 (1): 43-50 2010

15. Zhao Q, Zhou J, Zhang FL, et al.

Mie resonance-based dielectric metamaterials

MATERIALS TODAY Volume: 12 Issue: 12 Pages: 60-69 Published: DEC 2009

14. Jelinek L; Marques R

Artificial magnetism and left-handed media from dielectric rings and rods

JOURNAL OF PHYSICS-CONDENSED MATTER 22 (2): Art. No. 025902 JAN 20 2010

13. Hu, Yonghua; Zhuo, Hui

Investigation of quasi-steady-state self-focusing in nonlinear left-handed metamaterials

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 26 (12): B68-B73 DEC 2009

12. Rodriguez-Fortuno, Francisco J.; Garcia-Meca, Carlos; Ortuno, Ruben; Marti, Javier; Martinez, Alejandro
Modeling high-order plasmon resonances of a U-shaped nanowire used to build a negative-index metamaterial
PHYSICAL REVIEW B 79 (7): Art. No. 075103 FEB 2009
11. Tserkezis, C; Papanikolaou, N; Gantzounis, G; Stefanou, N
Understanding artificial optical magnetism of periodic metal-dielectric-metal layered structures
PHYSICAL REVIEW B 78 (16): Art. No. 165114 OCT 2008
10. Liu, Shiyang; Du, Junjie; Lin, Zhifang; Wu, R. X.; Chui, S. T.
Formation of robust and completely tunable resonant photonic band gaps
PHYSICAL REVIEW B 78 (15): Art. No. 155101 OCT 2008
9. Smigaj, Wojciech; Gralak, Boris
Validity of the effective-medium approximation of photonic crystals
PHYSICAL REVIEW B 77 (23): Art. No. 235445 JUN 2008
8. Wu, Qi; Park, Wounghang
Negative index materials based on metal nanoclusters
APPLIED PHYSICS LETTERS 92 (15): Art. No. 153114 APR 14 2008
7. Hu, Yonghua; Wen, Shuangchun; Zhuo, Hui; You, Kaiming; Fan, Dianyuan
Focusing properties of Gaussian beams by a slab of Kerr-type left-handed metamaterial
OPTICS EXPRESS 16 (7): 4774-4784 MAR 31 2008
6. Schuller, J.A., Zia, R., Taubner, T., Brongersma, M.L.
Negative index metamaterials based on electric and magnetic resonances of dielectric silicon carbide particles Optical Fabrication and Testing, OFT 2008 Optics InfoBase Conference Papers
5. Lam, VD; Kim, JB; Lee, SJ; Lee, YP
Dependence of the magnetic-resonance frequency on the cut-wire width of cut-wire pair medium
OPTICS EXPRESS 15 (25): 16651-16656 DEC 10 2007
4. Carsten Rockstuhl and Falk Lederer
Negative-index metamaterials from nanoapertures
Phys. Rev. B 76, 125426 (2007)
3. Jon A. Schuller, Rashid Zia, Thomas Taubner, and Mark L. Brongersma
Dielectric Metamaterials Based on Electric and Magnetic Resonances of Silicon Carbide Particles
PHYSICAL REVIEW LETTERS 99 (10): Art. No. 107401 SEP 7 2007
2. Rockstuhl C, Zentgraf T, Pshenay-Severin E, et al.
The origin of magnetic polarizability in metamaterials at optical frequencies - an electrodynamic approach
OPTICS EXPRESS 15 (14): 8871-8883 JUL 9 2007
1. Carsten Rockstuhl, Falk Lederer, Christoph Etrich, Thomas Pertsch, and Toralf Scharf
Design of an Artificial Three-Dimensional Composite Metamaterial with Magnetic Resonances in the Visible Range of the Electromagnetic Spectrum
Phys. Rev. Lett. 99, 017401 (2007)
- =====
- 73. Shore BW, Vitanov NV**
Overdamping of coherently driven quantum systems
CONTEMPORARY PHYSICS 47 (6): 341-362 2006
7. Alrifai, Rim; Coda, Virginia; Peltier, Jonathan; Rangelov, Andon A.; Montemezzani, Germano
Ultrabroadband beam splitting in a dissipative system of three waveguides
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023527
Published: FEB 22 2021
6. Morsch, O; Lesanovsky, I
Dissipative many-body physics of cold Rydberg atoms
RIVISTA DEL NUOVO CIMENTO, 41 (7):383-414; 10.1393/ncr/i2018-10149-7 JUL 2018
5. Rangelov, Andon; Longhi, Stefano
Nonlinear adiabatic optical isolator
APPLIED OPTICS, 56 (11):2991-2994; 10.1364/AO.56.002991 APR 10 2017
4. Rodriguez, Said Rahimzadeh-Kalaleh
Classical and quantum distinctions between weak and strong coupling
EUROPEAN JOURNAL OF PHYSICS, 37 (2):10.1088/0143-0807/37/2/025802 MAR 2016
3. Avishai, Y; Band, YB
Landau-Zener problem with decay and dephasing
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.032116 SEP 30 2014
2. Bhattacharya, M.; Stoutimore, M. J. A.; Osborn, K. D.; Mizel, Ari
Understanding the damping of a quantum harmonic oscillator coupled to a two-level system using analogies to classical friction
AMERICAN JOURNAL OF PHYSICS, 80 (9):810-815; 10.1119/1.4735707 SEP 2012
1. Thrapsaniotis, EG
PATH INTEGRAL APPROACH TO A DAMPED AND DRIVEN OSCILLATOR COUPLED WITH ANOTHER ONE
INTERNATIONAL JOURNAL OF MODERN PHYSICS B 23 (5): 679-694 FEB 20 2009
- =====
- 74. Ivanov PA, Torosov BT, Vitanov NV**
Navigation between quantum states by quantum mirrors
PHYSICAL REVIEW A 75 (1): Art. No. 012323 JAN 2007
12. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
11. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018
10. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018
9. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
8. Turkpence, Deniz; Mustecaphoglu, Ozgur E.
Quantum fuel with multilevel atomic coherence for ultrahigh specific work in a photonic Carnot engine
PHYSICAL REVIEW E, 93 (1):10.1103/PhysRevE.93.012145 JAN 27 2016
7. Izadyari, M; Saadati-Niari, M; Khadem-Hosseini, R; Amniat-Talab, M
Creation of N-atom GHZ state in atom-cavity-fiber system by multi-state adiabatic passage
OPTICAL AND QUANTUM ELECTRONICS, 48 (1):10.1007/s11082-015-0356-2 JAN 2016
6. Bang, Jeongho; Lee, Seung-Woo; Lee, Chang-Woo; Jeong, Hyunseok
A quantum algorithm for obtaining the lowest eigenstate of a Hamiltonian assisted with an ancillary qubit system
QUANTUM INFORMATION PROCESSING, 14 (1):103-118; 10.1007/s11128-014-0836-5 JAN 2015
5. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014
4. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499;
10.1080/09500340.2014.942404 2014
3. Bruning, E; Makela, H; Messina, A; Petruccione, F
Parametrizations of density matrices
JOURNAL OF MODERN OPTICS, 59 (1):1-20; 10.1080/09500340.2011.632097 2012
2. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press,

2011)

1. Urias, Jesus

Householder factorizations of unitary matrices
JOURNAL OF MATHEMATICAL PHYSICS 51 (7): Art. No. 072204 JUL 2010

=====

75. Vasilev GS, Ivanov SS, Vitanov NV
Degenerate Landau-Zener model: Analytical solution
PHYSICAL REVIEW A 75 (1): Art. No. 013417 JAN 2007

23. Ginzel, Florian; Mills, Adam R.; Petta, Jason R.; Burkard, Guido
Spin shuttling in a silicon double quantum dot
PHYSICAL REVIEW B Volume: 102 Issue: 19 Article Number: 195418
Published: NOV 11 2020

22. Kam, Chon-Fai; Chen, Yang
Analytical results for the dynamics of parabolic level-crossing model
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 2 Article Number: 023021
Published: FEB 2020

21. Pavlyukh, Y.
Toroidal spin states in molecular magnets
PHYSICAL REVIEW B Volume: 101 Issue: 14 Article Number: 144408
Published: APR 7 2020

20. Xie, Dong; Xu, Chunling
Optimal control for multi-parameter quantum estimation with time-dependent Hamiltonians
RESULTS IN PHYSICS Volume: 15 Article Number: 102620 Published: DEC 2019

19. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5
Article Number: 1950049 Published: AUG 2019

18. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019

17. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019

16. Parafilo, AV; Kiselev, MN
Landau-Zener transitions and Rabi oscillations in a Cooper-pair box: beyond two-level models
LOW TEMPERATURE PHYSICS, 44 (12):1325-1330; 10.1063/1.5078628 DEC 2018

15. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

14. Ashhab, S
Landau-Zener transitions in an open multilevel quantum system
PHYSICAL REVIEW A, 94 (4):10.1103/PhysRevA.94.042109 OCT 14 2016

13. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016

12. Mehl, Sebastian
Two-qubit pulse gate for the three-electron double quantum dot qubit
PHYSICAL REVIEW B, 91 (3):10.1103/PhysRevB.91.035430 JAN 21 2015

11. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

10. Kiselev, MN; Kikoin, K; Kenmoe, MB
SU(3) Landau-Zener interferometry
EPL, 104 (5):10.1209/0295-5075/104/57004 DEC 2013

9. Ribeiro, H., Burkard, G.
Theory of electron and nuclear spins in iii-v semiconductor and carbon-based dots
in Quantum Dots: Optics, Electron Transport and Future Applications, pp. 277-295, Editor A. Tartakovskii, (Cambridge University Press, 2012)

8. Weymann, I; Bulka, BR; Barnas, J
Dark states in transport through triple quantum dots: The role of cotunneling
PHYSICAL REVIEW B 83 (19): Art. No. 195302 MAY 5 2011

7. Amniat-Talab, M; Saadati-Niari, M; Guerin, S; Nader-Ali, R
Superposition of states by adiabatic passage in N-pod systems
PHYSICAL REVIEW A 83 (1): Art. No. 013817 JAN 21 2011

6. Wang, J.-B., Tong, G.-P., Li, S.
Effect of Landau-Zener tunneling by the varying sweeping rate of external field
Chinese Physics B
19(3), 033201 (2010)

5. Shore, BW; Gromovyy, MV; Yatsenko, LP; Romanenko, VI
Simple mechanical analogs of rapid adiabatic passage in atomic physics
AMERICAN JOURNAL OF PHYSICS 77 (12): 1183-1194 DEC 2009

4. Ribeiro, Hugo; Burkard, Guido
Nuclear State Preparation via Landau-Zener-Stueckelberg Transitions in Double Quantum Dots
PHYSICAL REVIEW LETTERS 102 (21): Art. No. 216802 MAY 29 2009

3. Shore, Bruce W.
Coherent manipulations of atoms using laser light
ACTA PHYSICA SLOVACA 58 (3): 243-486 2008

2. Foeldi, P; Benedict, MG
Pure states resulting from decoherence in periodic Landau-Zener transitions
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS 160: 175-181 JUL 2008

1. Foldi, P; Benedict, MG; Peeters, FM
Dynamics of periodic anticrossings: Decoherence, pointer states, and hysteresis curves
PHYSICAL REVIEW A 77 (1): Art. No. 013406 JAN 2008

=====

76. Unanyan RG, Shore BW, Fleischhauer M, and Vitanov NV
Symmetry-protected creation of superposition states and entanglement using circulant Hamiltonians
PHYSICAL REVIEW A 75 (2): Art. No. 022305 FEB 2007

=====

77. Yannopoulos V, Vitanov NV
Spontaneous emission of a two-level atom placed within clusters of metallic nanoparticles
JOURNAL OF PHYSICS-CONDENSED MATTER 19 (9): Art. No. 096210 MAR 7 2007

22. Klimov, V. V.; Sharonov, G. V.
Optical properties of Platonic clusters of plasmonic nanoparticles
QUANTUM ELECTRONICS Volume: 50 Issue: 3 Pages: 237-241 Published: 2020

21. Abad, Mohsen Ghaderi Goran; Mahmoudi, Mohammad
Atom-photon entanglement near a plasmonic nanostructure
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 135 Issue: 4 Article Number: 352 Published: APR 7 2020

20. Lima, FN; Lima, RPA; Lyra, ML
Spontaneous Radiation of a Two-Level System Confined in a Reflective Spherical Shell Quantum Dot: Spontaneous Radiation of a Two-Level System in a Spherical Shell
BRAZILIAN JOURNAL OF PHYSICS, 49 (3):423-431; 10.1007/s13538-019-00648-7 JUN 2019

19. Talkhabi, Hamid; Mortezaipoor, Ali
Gain-Assisted Magneto-Optical Rotation in a Four-Level Quantum System Near a Plasmonic Nanostructure
PLASMONICS, 13 (4):1243-1253; 10.1007/s11468-017-0626-x AUG 2018

18. Sukharev, Maxim; Nitzan, Abraham
Optics of exciton-plasmon nanomaterials
JOURNAL OF PHYSICS-CONDENSED MATTER, 29 (44):10.1088/1361-648X/aa85ef

17. Tserkezis, Christos; Stefanou, Nikolaos; Wubs, Martijn; Mortensen, N. Asger
Molecular fluorescence enhancement in plasmonic environments: exploring the role of nonlocal effects
NANOSCALE, 8 (40):17532-17541; 10.1039/c6nr06393d 2016
16. Lima, RPA; Lima, FN; Lyra, ML
Spontaneous decay of a two-level system close to a perfectly reflecting sphere
ANNALS OF PHYSICS, 378 162-170; 10.1016/j.aop.2017.01.017 MAR 2017
15. Solookinejad, Gh.; Panahi, M.; Sangachin, E. Ahmadi; Asadpour, Seyyed Hossein
Plasmonic structure induced giant Goos-Hanchen shifts in a four-level quantum system
CHINESE JOURNAL OF PHYSICS, 54 (5):651-658; 10.1016/j.cjph.2016.07.013 OCT 2016
14. Tserkezis, Christos; Stefanou, Nikolaos; Wubs, Martijn; Mortensen, N. Asger
Molecular fluorescence enhancement in plasmonic environments: exploring the role of nonlocal effects
NANOSCALE, 8 (40):17532-17541; 10.1039/c6nr06393d 2016
13. Sukharev, Maxim; Nitzan, Abraham
Plasmon transmission through excitonic subwavelength gaps
JOURNAL OF CHEMICAL PHYSICS, 144 (14):10.1063/1.4945446 APR 14 2016
12. Jabbari, M
Goos-Hanchen shifts in a four-level quantum system near plasmonic nanostructure
PHYSICA B-CONDENSED MATTER, 488 13-18; 10.1016/j.physb.2016.02.016 MAY 1 2016
11. Asadpour, Seyyed Hossein; Soleimani, H. Rahimpour
Optical bistability and multistability in a four-level quantum system in the presence of plasmonic nanostructure
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, 75 112-117; 10.1016/j.physe.2015.09.011 JAN 2016
10. Zhao, Dongxing; Gu, Ying; Chen, Hongyi; Ren, Juanjuan; Zhang, Tiancai; Gong, Qihuang
Quantum statistics control with a plasmonic nanocavity: Multimode-enhanced interferences
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033836 SEP 18 2015
9. Suttorp, LG; van Wonderen, AJ
Modified atomic decay rate near absorptive scatterers at finite temperature
PHYSICAL REVIEW A, 92 (1):10.1103/PhysRevA.92.013843 JUL 24 2015
8. Hakami, Jabir; Wang, Ligang; Zubairy, M. Suhail
Spectral properties of a strongly coupled quantum-dot-metal-nanoparticle system
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053835 MAY 28 2014
7. Klimov, V.
Nanoplasmonics (Jenny Stanford Publishing, 2013)
6. Sasihithlu, Karthik; Narayanaswamy, Arvind
EFFECT OF CURVATURE ON NEAR-FIELD RADIATIVE TRANSFER: THE MODIFIED PROXIMITY APPROXIMATION
PROCEEDINGS OF THE ASME MICRO/NANOSCALE HEAT AND MASS TRANSFER INTERNATIONAL CONFERENCE, 2012, 491-501; 2012
5. Sasihithlu, Karthik; Narayanaswamy, Arvind
Convergence of vector spherical wave expansion method applied to near-field radiative transfer
OPTICS EXPRESS 19 (14): A772-A785 JUL 4 2011
4. Feng, Tianhua; Zhou, Ying; Liu, Dahe; Li, Jensen
Controlling magnetic dipole transition with magnetic plasmonic structures
OPTICS LETTERS 36 (12): 2369-2371 JUN 15 2011
3. Gonzalez-Tudela, A; Rodriguez, FJ; Quiroga, L; Tejedor, C
Dissipative dynamics of a solid-state qubit coupled to surface plasmons: From non-Markov to Markov regimes
PHYSICAL REVIEW B 82 (11): Art. No. 115334 SEP 30 2010
2. Vandenbem, C; Brayer, D; Froufe-Perez, LS; Carminati, R
Controlling the quantum yield of a dipole emitter with coupled plasmonic modes
PHYSICAL REVIEW B Volume: 81 Issue: 8 Article Number: 085444 Published: FEB 2010
1. Chen YN, Chen GY, Chuu DS, et al.
Quantum-dot exciton dynamics with a surface plasmon: Band-edge quantum optics
PHYSICAL REVIEW A Volume: 79 Issue: 3 Article Number: 033815 Published: MAR 2009
- =====
- 78. Vitanov NV**
Complete population inversion by a phase jump: an exactly soluble model
NEW JOURNAL OF PHYSICS 9: Art. No. 58 MAR 16 2007
26. Neumann, A.; Gebbe, M.; Walser, R.
Aberrations in (3+1)-dimensional Bragg diffraction using pulsed Laguerre-Gaussian laser beams
PHYSICAL REVIEW A Volume: 103 Issue: 4 Article Number: 043306 Published: APR 5 2021
25. Begzjav, Tuguldur Kh; Eleuch, Hichem
Magnus expansion applied to a dissipative driven two-level system
Results in Physics Volume 17, June 2020, 103098
24. Ghiu, Iulia; Grimaudo, Roberto; Mihaescu, Tatiana; Isar, Aurelian; Messina, Antonino
Quantum Correlation Dynamics in Controlled Two-Coupled-Qubit Systems
ENTROPY Volume: 22 Issue: 7 Article Number: 785 Published: JUL 2020
23. Huang, Wei; Ang, Lay-Kee; Kyoseva, Elica
Shortcut to adiabatic light transfer in waveguide couplers with a sign flip in the phase mismatch
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 3 Article Number: 035104 Published: JAN 16 2020
22. Enriquez, Marco; Jaimes-Najera, Alfonso; Delgado, Francisco
Single-Qubit Driving Fields and Mathieu Functions
SYMMETRY-BASEL, 11 (9):10.3390/sym11091172 SEP 2019
21. Grimaudo, Roberto; Isar, Aurelian; Mihaescu, Tatiana; Ghiu, Iulia; Messina, Antonino
Dynamics of quantum discord of two coupled spin-1/2's subjected to time-dependent magnetic fields
RESULTS IN PHYSICS, 13 10.1016/j.rinp.2019.02.083 JUN 2019
20. Li, DX; Shao, XQ
Rapid population transfer of a two-level system by a polychromatic driving field
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-45558-5 JUN 21 2019
19. Enriquez, Marco; Cruz y Cruz, Sara
Exactly Solvable One-Qubit Driving Fields Generated via Nonlinear Equations
SYMMETRY-BASEL, 10 (11):10.3390/sym10110567 NOV 2018
18. Luo, Xiaobing; Yang, Baiyuan; Zhang, Xiaofei; Li, Lei; Yu, Xiaoguang
Analytical results for a parity-time-symmetric two-level system under synchronous combined modulations
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.052128 MAY 30 2017
17. Lehto, JMS; Suominen, KA
Two-level parabolic model with phase-jump coupling
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013404 JUL 5 2016
16. Farzanehpour, M; Tokatly, IV
Dynamics of observables and exactly solvable quantum problems: Using time-dependent density-functional theory to control quantum systems
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052515 MAY 24 2016
15. Lee, Han-gyeol; Song, Yunheung; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Quantum dynamics of a two-state system induced by a chirped zero-area pulse
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023423 FEB 23 2016
14. Fang, Wen-Qi; Liu, Bang-Gui
Exact magnetic field control of nitrogen-vacancy center spin for realizing fast quantum logic gates
PHYSICAL REVIEW B, 92 (17):10.1103/PhysRevB.92.174423 NOV 30 2015
13. Ndong, Mamadou; Djotyan, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI 10.1088/0953-4075/48/17/174007 SEP 14 2015
12. Huang, Wei; Rangelov, Andon A.; Kyoseva, Elica

Complete achromatic optical switching between two waveguides with a sign flip of the phase mismatch

PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.053837 NOV 19 2014

11. Jha, Pankaj K.; Eleuch, Hichem; Grazioso, Fabio

Ultra-short strong excitation of two-level systems

OPTICS COMMUNICATIONS Volume: 331 Pages: 198-203 Published: NOV 15 2014

10. Messina, A., Nakazato, H.

Analytically solvable Hamiltonians for quantum two-level systems and their dynamics

Journal of Physics A: Mathematical and Theoretical 47(44), 445302 (2014)

9. Shore, Bruce W.

Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed

JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI

10.1080/09500340.2013.837205 2014

8. Cheng, Wenjing; Jia, Tianqing; Shang, Xiaoying; Zhang, Shian; Ma, Jing; Feng, Donghai; Sun, Zhenrong; Qiu, Jianrong

Coherent quantum control of green emission in Er³⁺-doped glass by pi-phase-shaped ultrashort laser pulses

PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023401 FEB 3 2014

7. Barnes, Edwin

Analytically solvable two-level quantum systems and Landau-Zener interferometry

PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013818 JUL 15 2013

6. Hai, Wenhua; Hai, Kuo; Chen, Qiong

Transparent control of an exactly solvable two-level system via combined modulations

PHYSICAL REVIEW A, 87 (2):10.1103/PhysRevA.87.023403 FEB 8 2013

5. Barnes, Edwin; Das Sarma, S.

Analytically Solvable Driven Time-Dependent Two-Level Quantum Systems

PHYSICAL REVIEW LETTERS, 109 (6):10.1103/PhysRevLett.109.060401 AUG 7 2012

4. Hashmi, FA; Bouchene, MA

Nonadiabatic optical transitions as a turn-on switch for pulse shaping

PHYSICAL REVIEW A 82 (4): Art. No. 043432 OCT 26 2010

3. Jha, Pankaj K.; Eleuch, Hichem; Rostovtsev, Yuri V.

Coherent control of atomic excitation using off-resonant strong few-cycle pulses

PHYSICAL REVIEW A 82 (4): Art. No. 045805 OCT 20 2010

2. Qian, Jun; Qian, Yong; Ke, Min; Feng, Xun-Li; Oh, C. H.; Wang, Yuzhu

Breakdown of the dipole blockade with a zero-area phase-jump pulse

PHYSICAL REVIEW A 80 (5): Art. No. 053413 NOV 2009

1. Hashmi, FA; Bouchene, MA

Phase control of nonadiabatic optical transitions

PHYSICAL REVIEW A 79 (2): Art. No. 025401 FEB 2009

=====

79. Yannopapas V, Vitanov NV

Electromagnetic Green's tensor and local density of states calculations for collections of spherical scatterers

PHYSICAL REVIEW B 75 (11): Art. No. 115124 MAR 2007

18. Song, Jinlin; Cheng, Qiang; Zhang, Bo; Lu, Lu; Zhou, Xinping; Luo, Zixue; Hu, Run

Many-body, near-field radiative heat transfer: methods, functionalities and applications

REPORTS ON PROGRESS IN PHYSICS Volume: 84 Issue: 3 Article Number: 036501 Published: MAR 2021

17. Mishchenko, Michael I.; Zakharova, Nadezhda T.; Khlebtsov, Nikolai G.; Videen, Gordon; Wriedt, Thomas

Comprehensive thematic T-matrix reference database: A 2015-2017 update

JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, 202 240-246; 10.1016/j.jqsrt.2017.08.007 NOV 2017

16. Solookinejad, G., Panahi, M., Ahmadi Sangachin, E., Asadpour, S.H.

Plasmonic structure induced giant Goos-Hanchen shifts in a four-level quantum system

Chinese Journal of Physics 54(5), pp. 651-658 (2016)

15. Naz, Ehsan Saei Ghareh; Jorgensen, Matthew R.; Schmidt, Oliver G.

Density of optical states in rolled-up photonic crystals and quasi crystals

COMPUTER PHYSICS COMMUNICATIONS Volume: 214 Pages: 117-127

Published: MAY 2017

14. Sadrara, Mahdiyeh; Miri, MirFaez

Scattering of electromagnetic waves by a cluster of charged spherical nanoparticles

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (12):2552-2559; 10.1364/JOSAB.33.002552 DEC 1 2016

13. Ren, Jun; Wu, Tong; Yang, Bing; Zhang, Xiangdong

Simultaneously giant enhancement of Forster resonance energy transfer rate and efficiency based on plasmonic excitations

PHYSICAL REVIEW B, 94 (12):10.1103/PhysRevB.94.125416 SEP 12 2016

12. Jabbari, M

Goos-Hanchen shifts in a four-level quantum system near plasmonic nanostructure

PHYSICA B-CONDENSED MATTER, 488 13-18; 10.1016/j.physb.2016.02.016 MAY 1 2016

11. Asadpour, Seyyed Hossein; Soleimani, H. Rahimpour

Optical bistability and multistability in a four-level quantum system in the presence of plasmonic nanostructure

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, 75 112-117;

10.1016/j.physe.2015.09.011 JAN 2016

10. Suttorp, LG; van Wonderen, AJ

Modified atomic decay rate near absorptive scatterers at finite temperature

PHYSICAL REVIEW A, 92 (1):10.1103/PhysRevA.92.013843 JUL 24 2015

9. Xu, Jinying; Zhang, Xiangdong

Second harmonic generation in three-dimensional structures based on homogeneous centrosymmetric metallic spheres

OPTICS EXPRESS, 20 (2):1668-1684; JAN 16 2012

8. Muehlig, S., Menzel, C., Rockstuhl, C., Lederer, F.

Multipole analysis of meta-atoms

Metamaterials 5(2-3), pp. 64-73 (2011)

7. Ben-Abdallah, Philippe; Biehs, Svend-Age; Joulain, Karl

Many-Body Radiative Heat Transfer Theory

PHYSICAL REVIEW LETTERS 107 (11): 10.1103/PhysRevLett.107.114301 SEP 6 2011

6. Ghasemi, Amir H. Baradaran; Khorasani, Sina; Latifi, Hamid; Atabaki, Amir H.

Local density of states of a finite-sized rectangular-lattice photonic crystal with separable profile of permittivity

WAVES IN RANDOM AND COMPLEX MEDIA 20 (3): 419-442 2010

5. Suttorp, LG; van Wonderen, AJ

Atomic decay near a quantized medium of absorbing scatterers

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (10): Art. No. 105501 MAY 28 2010

4. Kristensen, Philip Trost; Lodahl, Peter; Mork, Jesper

Light propagation in finite-sized photonic crystals: multiple scattering using an electric field integral equation

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 27 (2): 228-237 FEB 2010

3. Chen YN, Chen GY, Chuu DS, et al.

Quantum-dot exciton dynamics with a surface plasmon: Band-edge quantum optics

PHYSICAL REVIEW A Volume: 79 Issue: 3 Article Number: 033815 Published: MAR 2009

2. Luo, Ma; Liu, Qing Huo; Li, Zhibing

Two-dimensional Green's function tensor and projected local density of states for TM and TE modes in dispersive and anisotropic photonic crystals

WAVES IN RANDOM AND COMPLEX MEDIA 19 (1): 28-38 2009

1. T. Matsunaga, H. Morita, R. Kojima, N. Yamada, K. Kifune, Y. Kubota, Y. Tabata, J.-J. Kim, M. Kobata, E. Ikenaga

Structural characteristics of GeTe-rich GeTe-Sb₂Te₃ pseudobinary metastable crystals

Journal of Applied Physics 103, 093511 (2008)

1. Noel, T; Dietrich, MR; Kurz, N; Shu, G; Wright, J; Blinov, BB
Adiabatic passage in the presence of noise
PHYSICAL REVIEW A, 85 (2):10.1103/PhysRevA.85.023401 FEB 1 2012

=====
81. V. Yannopoulos and N. V. Vitanov
Fluctuational electrodynamics in the presence of finite thermal sources
Phys. Rev. Lett. 99, 053901(4) (2007)

6. Zare, Saman; Edalatpour, Sheila
Spatial coherence of the thermal emission of a sphere
PHYSICAL REVIEW B Volume: 101 Issue: 16 Article Number: 165424
Published: APR 22 2020

5. Hsieh, Mei-Li; Lin, Shawn-Yu; Bur, James A.; Shenoj, Rajeev
Experimental observation of anomalous thermal radiation from a three-dimensional metallic photonic crystal
NANOTECHNOLOGY, 26 (23):10.1088/0957-4484/26/23/234002 JUN 12 2015

4. Withington, S.; Thomas, C. N.
Probing the dynamical behavior of surface dipoles through energy-absorption interferometry
PHYSICAL REVIEW A Volume: 86 Issue: 4 Article Number: 043835 Published: OCT 25 2012

3. Wen, Sy-Bor
Direct Numerical Simulation of Near Field Thermal Radiation Based on Wiener Chaos Expansion of Thermal Fluctuating Current
JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME 132 (7): Art. No. 072704 JUL 2010

2. Zhuromskyy, O; Sydoruk, O; Shamonina, E; Solymar, L
Slow waves on magnetic metamaterials and on chains of plasmonic nanoparticles: Driven solutions in the presence of retardation
JOURNAL OF APPLIED PHYSICS 106 (10): Art. No. 104908 NOV 15 2009

1. Wan, Jones T. K.
Tunable thermal emission at infrared frequencies via tungsten gratings
OPTICS COMMUNICATIONS 282 (8): 1671-1675 APR 15 2009

=====
82. E. S. Kyoseva, N. V. Vitanov, and B. W. Shore
Physical realization of coupled Hilbert-space mirrors for quantum-state engineering
J. Mod. Opt. 54, S393-S413 (2007)

6. Auzinger, W., Hofstaetter, H., Koch, O., Quell, M.
Adaptive Time Propagation for Time-dependent Schroedinger equations
International Journal of Applied and Computational Mathematics 7(1), 6 (2021)

5. Blanes, Sergio; Casas, Fernando; Thalhammer, Mechthild
High-order commutator-free quasi-Magnus exponential integrators for non-autonomous linear evolution equations
COMPUTER PHYSICS COMMUNICATIONS, 220 243-262;
10.1016/j.cpc.2017.07.016 NOV 2017

4. Blanes, Sergio; Casas, Fernando; Murua, Ander
Symplectic time-average propagators for the Schrodinger equation with a time-dependent Hamiltonian
JOURNAL OF CHEMICAL PHYSICS, 146 (11):10.1063/1.4978410 MAR 21 2017

3. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016

2. Amniat-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI
10.1080/09500340.2013.877164 2014

1. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses

=====
80. Lacour X, Guerin S, Yatsenko LP, et al.
Uniform analytic description of dephasing effects in two-state transitions
PHYSICAL REVIEW A 75 (3): Art. No. 033417 MAR 2007

16. Low, Pei Jiang; White, Brendan M.; Cox, Andrew A.; Day, Matthew L.; Senko, Crystal
Practical trapped-ion protocols for universal qudit-based quantum computing
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033128
Published: JUL 23 2020

15. Fuerst, H. A.; Yeh, C-H; Kalincev, D.; Kulosa, A. P.; Dreissen, L. S.; Lange, R.; Benkler, E.; Huntemann, N.; Peik, E.; Mehlstaeubler, T. E.
Coherent Excitation of the Highly Forbidden Electric Octupole Transition in Yb-172(+)
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 16 Article Number: 163001
Published: OCT 16 2020

14. Ran, Du; Shan, Wu-Jiang; Shi, Zhi-Cheng; Yang, Zhen-Biao; Song, Jie; Xia, Yan
Pulse reverse engineering for controlling two-level quantum systems
PHYSICAL REVIEW A Volume: 101 Issue: 2 Article Number: 023822
Published: FEB 14 2020

13. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5
Article Number: 1950049 Published: AUG 2019

12. Medina, I; Semiao, FL
Pulse engineering for population control under dephasing and dissipation
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012103 JUL 2 2019

11. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019

10. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019

9. Feng, Ping; Wang, Wen-Yuan; Sun, Jian-An; Dou, Fu-Quan
Demkov-Kunike transition dynamics in a nonlinear two-level system
NONLINEAR DYNAMICS, 91 (4):2477-2484; 10.1007/s11071-017-4026-8 MAR 2018

8. Ashhab, S
Landau-Zener transitions in an open multilevel quantum system
PHYSICAL REVIEW A, 94 (4):10.1103/PhysRevA.94.042109 OCT 14 2016

7. Lu, Xiao-Jing; Chen, Xi; Ruschhaupt, A.; et al.
Fast and robust population transfer in two-level quantum systems with dephasing noise and/or systematic frequency errors
PHYSICAL REVIEW A Volume: 88 Issue: 3 Article Number: 033406 Published: SEP 5 2013

6. Ashhab, S
Landau-Zener transitions in a two-level system coupled to a finite-temperature harmonic oscillator
PHYSICAL REVIEW A, 90 (6):10.1103/PhysRevA.90.062120 DEC 16 2014

5. Lucas, Felix; Hornberger, Klaus
Adaptive Resummation of Markovian Quantum Dynamics
PHYSICAL REVIEW LETTERS, 110 (24):10.1103/PhysRevLett.110.240401 JUN 12 2013

4. Burin, Alexander L.; Khalil, Moe S.; Osborn, Kevin D.
Universal Dielectric Loss in Glass from Simultaneous Bias and Microwave Fields
PHYSICAL REVIEW LETTERS, 110 (15):10.1103/PhysRevLett.110.157002 APR 8 2013

3. Pascual-Winter, MF; Tongning, RC; Lauro, R; Louchet-Chauvet, A; Chaneliere, T; Le Gouet, JL
Adiabatic passage with spin locking in Tm3+:YAG
PHYSICAL REVIEW B, 86 (6):10.1103/PhysRevB.86.064301 AUG 6 2012

2. Weimer, Hendrik; Yao, Norman Y.; Laumann, Chris R.; Lukin, Mikhail D.
Long-Range Quantum Gates using Dipolar Crystals

=====
83. V. Yannopoulos and N. V. Vitanov
First-Principles Theory of Van der Waals Forces between Macroscopic Bodies
Phys. Rev. Lett. 99, 120406(4) (2007)

4. Ben-Abdallah, Philippe; Messina, Riccardo; Biehs, Svend-Age; Tschikin, Maria; Joulain, Karl; Henkel, Carsten
Heat Superdiffusion in Plasmonic Nanostructure Networks
PHYSICAL REVIEW LETTERS, 111 (17):10.1103/PhysRevLett.111.174301 OCT 22 2013

3. Priye, Aashish; Marlow, William H.
Computations of Lifshitz-van der Waals interaction energies between irregular particles and surfaces at all separations for resuspension modelling
JOURNAL OF PHYSICS D-APPLIED PHYSICS, 46 (42):10.1088/0022-3727/46/42/425306 OCT 23 2013

2. Xu, Jinying; Zhang, Xiangdong
Electromagnetic interactions in a cluster of cylinders
PHYSICS LETTERS A 375 (13): 1524-1527 MAR 28 2011

1. Yan, Wen; Li, Shuiqing; Zhang, Yiyang; Yao, Qiang; Tse, Stephen D.
Effects of Dipole Moment and Temperature on the Interaction Dynamics of Titania Nanoparticles during Agglomeration
JOURNAL OF PHYSICAL CHEMISTRY C 114 (24): 10755-10760 JUN 24 2010

=====
84. A. A. Rangelov, N. V. Vitanov and E. Arimondo
Stimulated Raman adiabatic passage into continuum
Phys. Rev. A 76, 043414(8) (2007)

9. Aashna, Pragati; Thyagarajan, K.
Wideband two-process frequency conversion under stimulated Raman adiabatic passage via a continuum of dark intermediate states
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 11 Pages: 3370-3378 Published: NOV 1 2020

8. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430 Published: DEC 30 2019

7. Baksic, Alexandre; Belyansky, Ron; Ribeiro, Hugo; Clerk, Aashish A.
Shortcuts to adiabaticity in the presence of a continuum: Applications to itinerant quantum state transfer
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.021801 AUG 31 2017

6. Sen, Surajit; Dey, Tushar Kanti; Deb, Bimalendu
A unified approach to Lambda-, Xi- and V-type systems with one continuum
JOURNAL OF MODERN OPTICS, 64 (19):2083-2096;
10.1080/09500340.2017.1337941 2017

5. Saha, Subrata; Naskar, Somnath; Deb, Bimalendu
Photoassociative cooling and trapping of a pair of interacting atoms
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.023413 AUG 19 2016

4. Ye, Li-Xiang; Lin, Xiu; Chen, Xiang; He, Juan; Yang, Rong-Can; Liu, Hong-Yu
Generation of GHZ states with invariant-based shortcuts
QUANTUM INFORMATION PROCESSING, 15 (7):2785-2796; 10.1007/s11128-016-1303-2 JUL 2016

3. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

2. Demekhin, Philipp V.; Cederbaum, Lorenz S.
Quantum oscillations between close-lying states mediated by the electronic continuum in intense high-frequency pulses
PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.013417 JAN 28 2015

1. Bayal, Indranil; Dutta, Bibhas Kumar; Panchadhyayee, Pradipta; Mahapatra, Prasanta Kumar
Variable-coupling-induced optical trapping in optical waveguides via dressed continuum

=====
85. B. T. Torosov and N. V. Vitanov
Coherent control of a quantum transition by a phase jump
Phys. Rev. A 76, 053404(7) (2007)

16. Tseng, Shuo-Yen
Robust Light Coupling in a Quadratically Bent Directional Coupler
IEEE PHOTONICS TECHNOLOGY LETTERS Volume: 33 Issue: 7 Pages: 343-346 Published: APR 1 2021

15. Colmenar, RKL; Kestner, JP
Stroboscopically robust gates for capacitively coupled singlet-triplet qubits
PHYSICAL REVIEW A, 99 (1):10.1103/PhysRevA.99.012347 JAN 30 2019

14. Feng, Ping; Wang, Wen-Yuan; Sun, Jian-An; Dou, Fu-Quan
Demkov-Kunike transition dynamics in a nonlinear two-level system
NONLINEAR DYNAMICS, 91 (4):2477-2484; 10.1007/s11071-017-4026-8 MAR 2018

13. Ma, Ling; Chai, Shuo; Zhang, Xiao-Miao; Yu, Jie; Cong, Shu-Lin
Molecular orientation controlled by few-cycle phase-jump pulses
LASER PHYSICS LETTERS, 15 (1):10.1088/1612-202X/aa94eb JAN 2018

12. Kenmoe, MB; Tchabda, AB; Fai, LC
Demkov-Kunike models with decay
JOURNAL OF MATHEMATICAL PHYSICS, 57 (12):10.1063/1.4972289 DEC 2016

11. Ndong, Mamadou; Djotyan, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI 10.1088/0953-4075/48/17/174007 SEP 14 2015

10. Huang, Wei; Rangelov, Andon A.; Kyoseva, Elica
Complete achromatic optical switching between two waveguides with a sign flip of the phase mismatch
PHYSICAL REVIEW A, 90 (5):10.1103/PhysRevA.90.053837 NOV 19 2014

9. Jha, Pankaj K.; Eleuch, Hichem; Grazioso, Fabio
Ultra-short strong excitation of two-level systems
OPTICS COMMUNICATIONS Volume: 331 Pages: 198-203 Published: NOV 15 2014

8. Cheng, Wenjing; Jia, Tianqing; Shang, Xiaoying; Zhang, Shian; Ma, Jing; Feng, Donghai; Sun, Zhenrong; Qiu, Jianrong
Coherent quantum control of green emission in Er³⁺-doped glass by pi-phase-shaped ultrashort laser pulses
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023401 FEB 3 2014

7. Hu, Pidong; Niu, Yueping; Xiang, Yang; Gong, Shangqing
Above-threshold ionization by few-cycle phase jump pulses
OPTICS EXPRESS, 21 (20):24309-24317; 10.1364/OE.21.024309 OCT 7 2013

6. Wang Jian-Zhong; Cao Hui; Dou Fu-Quan
Many-body quantum fluctuation effects of Rosen-Zener transition in Bose-Einstein condensates
ACTA PHYSICA SINICA, 61 (22):10.7498/aps.61.220305 2012

5. Xiang, Yang; Niu, Yueping; Feng, Hongmei; Qi, Yihong; Gong, Shangqing
Coherent control of high-order harmonic generation by phase jump pulses
OPTICS EXPRESS, 20 (17):19289-19296; AUG 13 2012

4. Hashmi, FA; Bouchene, MA
Nonadiabatic optical transitions as a turn-on switch for pulse shaping
PHYSICAL REVIEW A 82 (4): Art. No. 043432 OCT 26 2010

3. Jha, Pankaj K.; Eleuch, Hichem; Rostovtsev, Yuri V.
Coherent control of atomic excitation using off-resonant strong few-cycle pulses
PHYSICAL REVIEW A 82 (4): Art. No. 045805 OCT 20 2010

2. Qian, Jun; Qian, Yong; Ke, Min; Feng, Xun-Li; Oh, C. H.; Wang, Yuzhu
Breakdown of the dipole blockade with a zero-area phase-jump pulse
PHYSICAL REVIEW A 80 (5): Art. No. 053413 NOV 2009

1. Hashmi, FA; Bouchene, MA
Phase control of nonadiabatic optical transitions
PHYSICAL REVIEW A 79 (2): Art. No. 025401 FEB 2009

=====

86. I. E. Linington and N. V. Vitanov
Robust creation of arbitrary-sized Dicke states of trapped ions by global addressing
Phys. Rev. A 77, 010302(R)(4) (2008)

27. Kirkova, Aleksandrina, V; Li, Weibin; Ivanov, Peter A.
Adiabatic sensing technique for optimal temperature estimation using trapped ions
PHYSICAL REVIEW RESEARCH Volume: 3 Issue: 1 Article Number: 013244
Published: MAR 15 2021

26. Taherkhani, Masoomeh; Willatzen, Morten; Denning, Emil, V; Protsenko, Igor E.; Gregersen, Niels
High-fidelity optical quantum gates based on type-II double quantum dots in a nanowire
PHYSICAL REVIEW B, 99 (16):10.1103/PhysRevB.99.165305 APR 10 2019

25. Shammah, Nathan; Ahmed, Shah Nawaz; Lambert, Neill; De Liberato, Simone; Nori, Franco
Open quantum systems with local and collective incoherent processes: Efficient numerical simulations using permutational invariance
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063815 DEC 10 2018

24. Ananth, N; Senthilvelan, M
On the Non-k-Separability of Dicke Class of States and N-Qudit W States
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 55 (3):1854-1870;
10.1007/s10773-015-2825-6 MAR 2016

23. Bhatti, Daniel; von Zanthier, Joachim; Agarwal, Girish S.
Superbunching and Nonclassicality as new Hallmarks of Superradiance
SCIENTIFIC REPORTS, 5 10.1038/srep17335 DEC 3 2015

22. Chakraborty, Kaushik; Choi, Byung-Soo; Maitra, Arpita; Maitra, Subhamoy
Efficient quantum algorithms to construct arbitrary Dicke states
QUANTUM INFORMATION PROCESSING, 13 (9):2049-2069; 10.1007/s11128-014-0797-8 SEP 2014

21. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

20. Kamsap, MR; Ekogo, TB; Pedregosa-Gutierrez, J; Hagel, G; Houssin, M; Morizot, O; Knoop, M; Champenois, C
Coherent internal state transfer by a three-photon STIRAP-like scheme for many-atom samples
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (14):10.1088/0953-4075/46/14/145502 JUL 28 2013

19. Lamata, L; Lopez, CE; Lanyon, BP; Bastin, T; Retamal, JC; Solano, E
Deterministic generation of arbitrary symmetric states and entanglement classes
PHYSICAL REVIEW A, 87 (3):10.1103/PhysRevA.87.032325 MAR 22 2013

18. Noguchi, Atsushi; Toyoda, Kenji; Urabe, Shinji
Generation of Dicke States with Phonon-Mediated Multilevel Stimulated Raman Adiabatic Passage
PHYSICAL REVIEW LETTERS, 109 (26):10.1103/PhysRevLett.109.260502 DEC 27 2012

17. Amnat-Talab, M; Saadati-Niari, M; Guerin, S
Quantum state engineering in ion-traps via adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30249-3 AUG 2012

16. Chen, Li-Bo; Shi, Peng; Zheng, Chun-Hong; Gu, Yong-Jian
Generation of three-dimensional entangled state between a single atom and a Bose-Einstein condensate via adiabatic passage
OPTICS EXPRESS, 20 (13):14547-14555; JUN 18 2012

15. Balachandran, Vinitha; Gong, Jiangbin
Scalable engineering of multipartite W states in a spin chain
PHYSICAL REVIEW A, 85 (6):10.1103/PhysRevA.85.062303 JUN 4 2012

14. Lopez, CE; Lastra, F; Romero, G; Solano, E; Retamal, JC
Multipartite entanglement generation assisted by inhomogeneous coupling
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.032319 MAR 16 2012

13. Watanabe, T; Nomura, S; Toyoda, K; Urabe, S
Sideband excitation of trapped ions by rapid adiabatic passage for manipulation of motional states
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033412 SEP 14 2011

12. Fujii, K., Maeda, H., Yamamoto, K.
Robust and scalable scheme to generate large-scale entanglement webs
Physical Review A - Atomic, Molecular, and Optical Physics 83(5), 050303 (2011)

11. Toyoda, K; Watanabe, T; Kimura, T; Nomura, S; Haze, S; Urabe, S
Generation of Dicke states using adiabatic passage
PHYSICAL REVIEW A 83 (2): Art. No. 022315 FEB 17 2011

10. Agarwal, GS
Quantum-entanglement-initiated super Raman scattering
PHYSICAL REVIEW A 83 (2): Art. No. 023802 FEB 7 2011

9. Zhao, Chunran; Ye, Liu
Efficient scheme for the preparation of symmetric Dicke states via cross-Kerr nonlinearity
PHYSICS LETTERS A 375 (3): 401-405 JAN 17 2011

8. Li, Peng-Bo; Li, Fu-Li
Deterministic generation of multiparticle entanglement in a coupled cavity-fiber system
OPTICS EXPRESS 19 (2): 1207-1216 JAN 17 2011

7. Peng, ZH; Zou, J; Liu, XJ
Perfect quantum information processing with Dicke-class state
EUROPEAN PHYSICAL JOURNAL D 58 (3): 403-407 JUN 2010

6. Hume, DB; Chou, CW; Rosenband, T; Wineland, DJ
Preparation of Dicke states in an ion chain
PHYSICAL REVIEW A 80 (5): Art. No. 052302 NOV 2009

5. R. Prevedel, G. Cronenberg, M. S. Tame, M. Paternostro, P. Walther, M. S. Kim, and A. Zeilinger
Experimental Realization of Dicke States of up to Six Qubits for Multiparty Quantum Networking
Phys. Rev. Lett. 103, 020503 (2009)

4. Preeti Parashar, Swapan Rana
Reducible correlations in Dicke states
Journal of Physics A Mathematical and Theoretical 42, 462003 (2009)

3. Rangan, C
THE TRAPPED-ION QUBIT: COHERENT CONTROL IN INFINITE-DIMENSIONAL QUANTUM SYSTEMS
MODERN PHYSICS LETTERS A 24 (32): 2565-2578 OCT 20 2009

2. Xu, ZY; Hu, YM; Yang, WL; Feng, M; Du, JF
Deterministically entangling distant nitrogen-vacancy centers by a nanomechanical cantilever
PHYSICAL REVIEW A 80 (2): Art. No. 022335 AUG 2009

1. Zheng SB
Conditional generation of highly excited Dicke states for N atoms via a single asymmetric atom-cavity interaction
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 42 Issue: 8 Article Number: 085501 Published: APR 28 2009

=====

87. P. A. Ivanov and N. V. Vitanov
Synthesis of arbitrary unitary transformations of collective states of trapped ions by quantum Householder reflections
Phys. Rev. A 77, 012335(7) (2008)

18. Gubarev, F. V.; Dyakonov, I. V.; Saygin, M. Yu.; Struchalin, G. I.; Straupe, S. S.; Kulik, S. P.
Improved heralded schemes to generate entangled states from single photons
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012604
Published: JUL 2 2020

17. Yi-Hao Kang, Zhi-Cheng Shi, Bi-Hua Huang, Jie Song, and Yan Xia
Flexible scheme for the implementation of nonadiabatic geometric quantum computation
Phys. Rev. A 101, 032322 – Published 16 March 2020; Erratum Phys. Rev. A 101, 049902 (2020)

16. Saygin, M. Yu; Kondratyev, I., V; Dyakonov, I., V; Mironov, S. A.; Straupe, S. S.; Kulik, S. P.
Robust Architecture for Programmable Universal Unitaries
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 1 Article Number: 010501
Published: JAN 2 2020
15. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
One-Step Implementation of N-Qubit Nonadiabatic Holonomic Quantum Gates with Superconducting Qubits via Inverse Hamiltonian Engineering
ANNALEN DER PHYSIK, 531 (7):10.1002/andp.201800427 JUL 2019
14. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
13. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018
12. Hu, J., Wang, P., Zhang, Q.
Multiplex householder reflection gate and its application in preparation of quantum state
IPPTA: Quarterly Journal of Indian Pulp and Paper Technical Association 30(1), pp. 233-241 (2018)
11. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018
10. Daskin, A.
A quantum implementation model for artificial neural networks
Quanta 7(1), pp. 7-18 (2018)
9. Daskin, Ammar
Obtaining a linear combination of the principal components of a matrix on quantum computers
QUANTUM INFORMATION PROCESSING, 15 (10):4013-4027; 10.1007/s11128-016-1388-7 OCT 2016
8. Izadyari, M; Saadati-Niari, M; Khadem-Hosseini, R; Amniat-Talab, M
Creation of N-atom GHZ state in atom-cavity-fiber system by multi-state adiabatic passage
OPTICAL AND QUANTUM ELECTRONICS, 48 (1):10.1007/s11082-015-0356-2 JAN 2016
7. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
6. Bang, Jeongho; Lee, Seung-Woo; Lee, Chang-Woo; Jeong, Hyunseok
A quantum algorithm for obtaining the lowest eigenstate of a Hamiltonian assisted with an ancillary qubit system
QUANTUM INFORMATION PROCESSING, 14 (1):103-118; 10.1007/s11128-014-0836-5 JAN 2015
5. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499; 10.1080/09500340.2014.942404 2014
4. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014
3. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)
2. Cabrera, Renan; Strohecker, Traci; Rabitz, Herschel
The canonical coset decomposition of unitary matrices through Householder transformations
JOURNAL OF MATHEMATICAL PHYSICS 51 (8): Art. No. 082101 AUG 2010
1. Yang, Wan-Li; Wei, Hua; Zhou, Fei; Chang, Weng-Long; Feng, Mang
Solution to the satisfiability problem using a complete Grover search with trapped ions
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (14): Art. No. 145503 JUL 28 2009
- =====
88. S. S. Ivanov and N. V. Vitanov
Steering quantum transitions between three crossing energy levels
Phys. Rev. A 77, 023406(9) (2008)
10. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Guo, Chu; Xiong, Xianming; Zhang, Wentao
Long-distance adiabatic wireless energy transfer via multiple coils coupling
RESULTS IN PHYSICS Volume: 19 Article Number: 103478 Published: DEC 2020
9. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019
8. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019
7. Kenmoe, MB; Tchabda, AB; Fai, LC
SU(3) Landau-Zener interferometry with a transverse periodic drive
PHYSICAL REVIEW B, 96 (12):10.1103/PhysRevB.96.125126 SEP 18 2017
6. Shwa, David; Katz, Nadav
Transient coherence of media under strong phase modulation exploiting electromagnetically induced transparency
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023858 AUG 29 2014
5. Ivanov, D.A., Ivanova, T.Y.
Bragg-reflection-based feedback cooling of optically trapped particles
Journal of Physics B: Atomic, Molecular and Optical Physics 47(13), 135303 (2014)
4. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011
3. Dridi, G; Guerin, S; Jauslin, HR; Viennot, D; Jolicard, G
Adiabatic approximation for quantum dissipative systems: Formulation, topology, and superadiabatic tracking
PHYSICAL REVIEW A 82 (2): Art. No. 022109 AUG 16 2010
2. Vinjanampathy, Sai; Rau, A. R. P.
Bloch sphere-like construction of SU(3) Hamiltonians using unitary integration
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42 (42): Art. No. 425303 OCT 23 2009
1. Gorges, AR; Bingham, NS; DeAngelo, MK; Hamilton, MS; Roberts, JL
Light-assisted collisional loss in a Rb-85/87 ultracold optical trap
PHYSICAL REVIEW A 78 (3): Art. No. 033420 SEP 2008
- =====
89. A. A. Rangelov, N. V. Vitanov, and B. W. Shore
Population trapping in three-state quantum loops revealed by Householder reflections
Phys. Rev. A 77, 033404(7) (2008)
5. Arimondo, E.
Laser phase spectroscopy in closed-loop multilevel schemes
in Exploring the World with the Laser: Dedicated to Theodor Haensch on his 75th Birthday, pp. 665-677 (2018)
4. Ahn, Kwang Jun
Resonance fluorescence of ladder- and triangular-type three-level systems: Continuous coherent photon generation
JOURNAL OF THE KOREAN PHYSICAL SOCIETY, 71 (10):657-664; 10.3938/jkps.71.722 NOV 2017
3. Arimondo, Ennio
Laser phase spectroscopy in closed-loop multilevel schemes
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (12):10.1007/s00340-016-6568-8

2. Huang, Ting; Qi, Yihong; Zhou, Fengxue; Niu, Yueping; Gong, Shangqing
Double-EIT laser cooling via amplitude and phase control of a microwave field
OPTIK, 127 (5):2978-2982; 10.1016/j.ijleo.2015.12.017 2016

1. Qi, Yihong; Niu, Yueping; Zhou, Fengxue; Peng, Yandong; Gong, Shangqing
Phase control of coherent pulse propagation and switching based on
electromagnetically induced transparency in a four-level atomic system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 44 (8): Art.
No. 085502 APR 28 2011

=====
90. B. T. Torosov and N. V. Vitanov
Exactly soluble two-state quantum models with linear couplings
J. Phys. A: Math. Theor. 41, 155309(16) (2008)

9. Fortin, Jean-Yves
Charge Oscillations in a Simple Model of Interacting Magnetic Orbits
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS Volume: 130 Issue: 6
Pages: 886-894 Published: JUN 2020

8. Padan, Alon; Suchowski, Haim
A quantum retrograde canon: complete population inversion in $n(2)$ -state
systems
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aab320 APR 13 2018

7. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

6. Fortin, Jean-Yves; Audouard, Alain
de Haas-van Alphen oscillations with non-parabolic dispersions
EUROPEAN PHYSICAL JOURNAL B, 90 (4):10.1140/epjb/e2017-70505-2 APR 3
2017

5. Lehto, JMS; Suominen, KA
Time-dependent two-level models and zero-area pulses
PHYSICA SCRIPTA, 91 (1):10.1088/0031-8949/91/1/013005 JAN 2016

4. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

3. Shore, Bruce W.
Two-state behavior in N -state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

2. Suchowski, Haim; Porat, Gil; Arie, Ady
Adiabatic processes in frequency conversion
LASER & PHOTONICS REVIEWS, 8 (3):333-367; 10.1002/lpor.201300107 MAY
2014

1. Suchowski, Haim; Oron, Dan; Arie, Ady; Silberberg, Yaron
Geometrical representation of sum frequency generation and adiabatic
frequency conversion
PHYSICAL REVIEW A 78 (6): Art. No. 063821 Part B DEC 2008

=====
91. I. E. Linington and N. V. Vitanov
Decoherence-free preparation of Dicke states of trapped ions by collective
stimulated Raman adiabatic passage
Phys. Rev. A 77, 062327 (2008)

14. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three-
and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54
Issue: 4 Article Number: 045502 Published: FEB 17 2021

13. Pingyu Zhu, Shichuan Xue, Qilin Zheng, Chao Wu, Xinyao Yu, Yang Wang,
Yingwen Liu, Xiaogang Qiang, Mingtang Deng, Junjie Wu, and Ping Xu
Reconfigurable multiphoton entangled states based on quantum photonic chips
OPTICS EXPRESS Volume: 28 Issue: 18 Pages: 26792-26806 Published: AUG

12. Bhatti, Daniel; von Zanthier, Joachim; Agarwal, Girish S.
Superbunching and Nonclassicality as new Hallmarks of Superradiance
SCIENTIFIC REPORTS, 5 10.1038/srep17335 DEC 3 2015

11. Viscor, Daniel; Li, Weibin; Lesanovsky, Igor
Electromagnetically induced transparency of a single-photon in dipole-coupled
one-dimensional atomic clouds
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/3/033007 MAR 3 2015

10. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

9. Chakraborty, Kaushik; Choi, Byung-Soo; Maitra, Arpita; Maitra, Subhamoy
Efficient quantum algorithms to construct arbitrary Dicke states
QUANTUM INFORMATION PROCESSING, 13 (9):2049-2069; 10.1007/s11128-014-
0797-8 SEP 2014

8. Noguchi, Atsushi; Toyoda, Kenji; Urabe, Shinji
Generation of Dicke States with Phonon-Mediated Multilevel Stimulated Raman
Adiabatic Passage
PHYSICAL REVIEW LETTERS, 109 (26):10.1103/PhysRevLett.109.260502 DEC 27
2012

7. Amnat-Talab, M; Saadati-Niari, M; Guerin, S
Quantum state engineering in ion-traps via adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 66 (8):10.1140/epjd/e2012-30249-3 AUG 2012

6. Agarwal, G.S.
Quantum-entanglement-initiated super Raman scattering
Physical Review A - Atomic, Molecular, and Optical Physics 83(2), 023802 (2011)

5. Li, P.-B., Li, F.-L.
Deterministic generation of multiparticle entanglement in a coupled cavity-fiber
system
Optics Express 19(2), pp. 1207-1216 (2011)

4. Lopez, CE; Lastra, F; Romero, G; Solano, E; Retamal, JC
Multipartite entanglement generation assisted by inhomogeneous coupling
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.032319 MAR 16 2012

3. Chen, Qiong; Hai, Kuo; Hai, Wenhua
Quantum control of a Paul-trapped ion via double radio-frequency driving
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 43 (45): Art. No.
455302 NOV 12 2010

2. Hume, DB; Chou, CW; Rosenband, T; Wineland, DJ
Preparation of Dicke states in an ion chain
PHYSICAL REVIEW A 80 (5): Art. No. 052302 NOV 2009

1. Zheng SB
Conditional generation of highly excited Dicke states for N atoms via a single
asymmetric atom-cavity interaction
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 42
Issue: 8 Article Number: 085501 Published: APR 28 2009

=====
92. I. E. Linington, P. A. Ivanov, N. V. Vitanov, and M. Plenio
Robust control of quantized motional states of a chain of trapped ions by
collective adiabatic passage
Phys. Rev. A 77, 063837 (2008)

6. Simon, M. A.; Palmero, M.; Martinez-Garaot, S.; Muga, J. G.
Trapped-ion Fock-state preparation by potential deformation
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 2 Article Number: 023372
Published: JUN 22 2020

5. Ortiz-Gutierrez, Luis; Gabrielly, Bruna; Munoz, Luis F.; Pereira, Kaina T.;
Filgueiras, Jefferson G.; Villar, Alessandro S.
Continuous variables quantum computation over the vibrational modes of a
single trapped ion
OPTICS COMMUNICATIONS Volume: 397 Pages: 166-174 Published: AUG 15
2017

4. Martinez-Garaot, S; Palmero, M; Muga, JG; Guery-Odelin, D
Fast driving between arbitrary states of a quantum particle by trap deformation

3. Gebert, F.; Wan, Y.; Wolf, F.; Heip, Jan C.; Schmidt, Piet O.
Detection of motional ground state population of a trapped ion using delayed pulses
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/1/013037 JAN 14 2016

2. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

1. Lou, Y; Cong, S; Yang, J; Kuang, S
Path programming control strategy of quantum state transfer
IET CONTROL THEORY AND APPLICATIONS 5 (2): 291-298 JAN 2011

=====

93. P. A. Ivanov, N. V. Vitanov, and M. B. Plenio
Creation of cluster states of trapped ions by collective addressing
Phys. Rev. A 78, 012323(5) (2008)

13. Yang, Rong-Can; Lin, Xiu; Ye, Li-Xiang; Chen, Xiang; He, Juan; Liu, Hong-Yu
Generation of singlet states with Rydberg blockade mechanism and driven by adiabatic passage
QUANTUM INFORMATION PROCESSING, 15 (2):731-740; 10.1007/s11128-015-1188-5 FEB 2016

12. Enferad, Shirin; Amniat-Talab, Mahdi; Saadati-Niari, Maghsud
Creation of cluster state of four ions in ion-trap system by individual addressing
OPTIK, 125 (21):6395-6403; 10.1016/j.ijleo.2014.06.126 2014

11. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

10. Hu, YM; Chen, CY; Yang, WL; Feng, M
Preparation of cluster states with endohedral fullerenes in single-walled carbon nanotubes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (10):10.1088/0953-4075/45/10/105501 MAY 28 2012

9. Katz, M.L., Wang, J.
Cluster state computation with quantum-dot charge qubits
2010 Advances in Mathematical Physics 482598

8. Xu You-Yang, Zhou Fei, Zhang Xiao-Long, Feng Mang
Fast generation of cluster states in a linear ion trap
CHINESE PHYSICS B Volume: 19 Issue: 9 Article Number: 090317 Published: SEP 2010

7. Munhoz, PP; Semiao, FL
Multipartite entangled states with two bosonic modes and qubits
EUROPEAN PHYSICAL JOURNAL D 59 (3): 509-519 SEP 2010

6. Munhoz, PP; Roversi, JA; Vidiella-Barranco, A; Semiao, FL
Bipartite quantum channels using multipartite cluster-type entangled coherent states
PHYSICAL REVIEW A 81 (4): Art. No. 042305 APR 2010

5. Matthew Lubelski Katz and Jingbo Wang
Cluster State Computation with Quantum-Dot Charge Qubits
Advances in Mathematical Physics, Volume 2010, Article ID 482598, 21 pages

4. Gao HM, Liu YM, Li ML, et al.
TELEPORTATION CAPABILITY OF FOUR-QUBIT CLUSTER STATE IN ONE-VERSUS-THREE OR THREE-VERSUS-ONE QUBIT DISTRIBUTION
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION 7 8 1507-1513 DEC 2009

3. Fan, Qiu-Bo; Zhou, Ling
Generation of Cluster-Type Entangled Coherent States via Cavity QED
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS 49 (1): 128-133 JAN 2010

2. Wunderlich, Harald; Wunderlich, Christof; Singer, Kilian; Schmidt-Kaler, Ferdinand
Two-dimensional cluster-state preparation with linear ion traps

1. Rosenkranz, Matthias; Jaksch, Dieter
Parameter estimation with cluster states
PHYSICAL REVIEW A 79 (2): Art. No. 022103 FEB 2009

=====

94. S. S. Ivanov, P. A. Ivanov, and N. V. Vitanov
Simple implementation of a quantum search with trapped ions
Phys. Rev. A 78, 030301(R) (2008)

7. Amniat-Talab, Mahdi; Saadati-Niari, Maghsud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015

6. Abdel-Aty, A.-H., Zakaria, N., Cheong, L.Y., Metwallay, N.
Quantum network via partial entangled state
Journal of Communications 9(5), pp. 379-384 (2014)

5. Ahmed, AHM; Zakaria, MN; Metwally, N
Teleportation in the presence of technical defects in transmission stations
APPLIED MATHEMATICS & INFORMATION SCIENCES, 6 (3):781-787; SEP 2012

4. Bruning, E; Makela, H; Messina, A; Petruccione, F
Parametrizations of density matrices
JOURNAL OF MODERN OPTICS, 59 (1):1-20; 10.1080/09500340.2011.632097 2012

3. Deng, ZJ; Liang, LM; Yang, WL
Quantum Key Distribution Using a chi-Type State
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS 49 (8): 1904-1910 AUG 2010

2. Kyoseva, ES; Angelakis, DG; Kwek, LC
A single-interaction step implementation of a quantum search in coupled micro-cavities
EPL 89 (2): Art. No. 20005 JAN 2010

1. Yang, Wan-Li; Wei, Hua; Zhou, Fei; Chang, Weng-Long; Feng, Mang
Solution to the satisfiability problem using a complete Grover search with trapped ions
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 42 (14): Art. No. 145503 JUL 28 2009

=====

95. V. Yannopapas and N. V. Vitanov
Ultra-subwavelength focusing of light by a monolayer of metallic nanoshells with an adsorbed defect
Physica Status Solidi – Rapid Research Letters 6, 287-9 (2008)

7. Alkhazraji, E., Ghalib, A., Manzoor, K., Alsunaidi, M.A.
Plasmonic Nanostructured Cellular Automata
EPJ Web of Conferences 139, 00001 (2017)

6. Miri, MirFaez; Naeimi, Zahra; Rezaei, Kouros
Fractal aggregate of hollow spherical nanoparticles: engineering the absorption spectrum by hollow size
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2802-2808; 10.1364/JOSAB.31.002802 NOV 2014

5. Zavareian, Nafiseh; Massudi, Reza
Controllable Trapping of Nanowires Using a Symmetric Slot Waveguide
JOURNAL OF PHYSICAL CHEMISTRY C, 117 (33):17159-17166; 10.1021/jp400495s AUG 22 2013

4. Tserkezis, C., Stefanou, N.
Negative refraction in plasmonic crystals of metallic nanoshells
Metamaterials 5(4), pp. 169-177 (2011)

3. Guo, Xiaowei; Dong, Qiming; Liu, Yong
Simulation study of 'perfect lens' for near-field nanolithography
OPTICS COMMUNICATIONS 284 (19): 4360-4365 10.1016/j.optcom.2011.05.037 SEP 1 2011

2. Luan, Pi-Gang; Chiang, Chen-Yu; Yeh, Hsiao-Yu
Influence of source displacement on the features of subwavelength imaging of a photonic crystal slab

1. Hu, Yonghua; Zhou, Jianhua
Control of nonlinear self-action of high-power Gaussian beams: using a nonlinear left-handed material slab
JOURNAL OF MODERN OPTICS 57 (1): 43-50 2010

=====
96. I. E. Lington, P. A. Ivanov, and N. V. Vitanov
Quantum search in a nonclassical database of trapped ions
Phys. Rev. A 79, 012322(7) (2009)

4. Gubaidullina, KV; Chivilikhin, SA
Stability of Grover's algorithm in respect to perturbations in quantum circuit
NANOSYSTEMS-PHYSICS CHEMISTRY MATHEMATICS, 8 (2):243-246;
10.17586/2220-8054-2017-8-2-243-246 APR 2017

3. Zhao, Lian-Jie; Li, Yan-Song; Hao, Liang; Zhou, Tao; Long, Gui Lu
Geometric pictures for quantum search algorithms
QUANTUM INFORMATION PROCESSING, 11 (2):325-340; 10.1007/s11128-011-0249-7 APR 2012

2. Tanaka, Yuji; Ichikawa, Tsubasa; Tada-Umezaki, Masahito; Ota, Yukihiko; Nakahara, Mikio
QUANTUM ORACLES IN TERMS OF UNIVERSAL GATE SET
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION 9 (6): 1363-1381
10.1142/S0219749911008106 SEP 2011

1. Harouni, M. Bagheri; Darareh, M. Davoudi
A single trapped ion in a finite range trap
ANNALS OF PHYSICS 326 (4): 968-978 APR 2011

=====
97. A. A. Rangelov, N. V. Vitanov and B. W. Shore
Stimulated Raman adiabatic passage analogues in classical physics
J. Phys. B 42, 055504(5) (2009)

3. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

2. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

1. Morgan, T; O'Sullivan, B; Busch, T
Coherent adiabatic transport of atoms in radio-frequency traps
PHYSICAL REVIEW A 83 (5): Art. No. 053620 MAY 19 2011

=====
98. B. T. Torosov and N. V. Vitanov
Phase shifts in nonresonant coherent excitation
Phys. Rev. A 79, 042108(9) (2009)

4. Kaufman, Brian; Rozgonyi, Tamas; Marquetand, Philipp; Weinacht, Thomas
Adiabatic elimination in strong-field light-matter coupling
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063117
Published: DEC 23 2020

3. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

2. Paulisch, Vanessa; Rui, Han; Ng, Hui Khoon; Englert, Berthold-Georg
Beyond adiabatic elimination: A hierarchy of approximations for multi-photon processes
EUROPEAN PHYSICAL JOURNAL PLUS, 129 (1):10.1140/epjp/i2014-14012-8 JAN 28 2014

1. Zhao, Lian-Jie; Li, Yan-Song; Hao, Liang; Zhou, Tao; Long, Gui Lu
Geometric pictures for quantum search algorithms
QUANTUM INFORMATION PROCESSING, 11 (2):325-340; 10.1007/s11128-011-

=====
99. V. Yannopoulos and N. V. Vitanov
All-optical nanotraps for atoms atop flat metamaterial lenses: a theoretical study
J. Phys.: Condens. Matter 21, 245901(6) (2009)

4. Ang, Angeleene S.; Shalin, Alexander S.; Karabchevsky, Alina
Tailored optical potentials for Cs atoms above waveguides with focusing dielectric nano-antenna
OPTICS LETTERS Volume: 45 Issue: 13 Pages: 3512-3515 Published: JUL 1 2020

3. Yang, Maosheng; Yan, Xin; Zhang, Zhang; Gao, Ju; Liang, Lanju; Guo, Xinyue; Li, Jie; Wei, Dequan; Wang, Meng; Ye, Yunxia; Song, Xiaoxian; Zhang, Haiting; Ren, Yunpeng; Ren, Xudong; Yao, Jianquan
Ultra-Wideband Low-Loss Control of Terahertz Scatterings via an All-Dielectric Coding Metasurface
ACS APPLIED ELECTRONIC MATERIALS Volume: 2 Issue: 4 Pages: 1122-1129
Published: APR 28 2020

2. Sukharev, Maxim; Seideman, Tamar; Gordon, Robert J.; Salomon, Adi; Prior, Yehiam
Ultrafast Energy Transfer between Molecular Assemblies and Surface Plasmons in the Strong Coupling Regime
ACS NANO, 8 (1):807-817; 10.1021/nn4054528 JAN 2014

1. Gillen-Christandl, Katharina; Copsey, Bert D.
Polarization-dependent atomic dipole traps behind a circular aperture for neutral-atom quantum computing
PHYSICAL REVIEW A 83 (2): Art. No. 023408 FEB 9 2011

=====
100. L. Praxmeyer, S. Stenholm and N. V. Vitanov
The information of ambiguity
J. Mod. Opt. 56, 1205-19 (2009)

=====
101. V. Yannopoulos, E. Paspalakis and N. V. Vitanov
Electromagnetically Induced Transparency and Slow Light in an Array of Metallic Nanoparticles
Phys. Rev. B 80, 035104(6) (2009)

155. Chen, Sihong; Pan, Taisong; Peng, Yueyu; Yao, Guang; Gao, Min; Lin, Yuan
Analogue of Electromagnetically Induced Transparency Based on Bright-Bright Mode Coupling Between Spoof Electric Localized Surface Plasmon and Electric Dipole
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES Volume: 69 Issue: 3 Pages: 1538-1546 Published: MAR 2021

154. Wang, Jin; Shi, Qian Yi; Liu, Ya Jie; Dong, Hui Yuan; Fung, Kin Hung; Dong, Zheng-Gao
Stopping surface magneto-plasmons by non-reciprocal graded waveguides
PHYSICS LETTERS A Volume: 398 Article Number: 127279 Published: MAY 17 2021

153. Li, Min; Xiong, Cuixiu; Liu, Chao; Zeng, Biao; Ruan, Banxian; Zhang, Baihui; Gao, Enduo; Li, Hongjian
Terahertz plasmonic sensing based on tunable multispectral plasmon-induced transparency and absorption in graphene metamaterials
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 54 Issue: 24 Article Number: 245201 Published: JUN 17 2021

152. Chen, Bin; Xing, Hong-Wu; Chen, Jian-Bin; Xue, Hai-Bin; Xing, Li-Li
Tunable fast-slow light conversion based on optomechanically induced absorption in a hybrid atom-optomechanical system
QUANTUM INFORMATION PROCESSING Volume: 20 Issue: 1 Article Number: 10 Published: JAN 6 2021

151. Islam, Maidul; Dhriti, K. M.; Sarkar, Rakesh; Kumar, Gagan
Tunable control of electromagnetically induced transparency effect in a double slot terahertz waveguide
OPTICS COMMUNICATIONS Volume: 483 Article Number: 126632 Published: MAR 15 2021

150. La, Yunju; Jeon, Ok Sung; Lee, Young Jun; Park, Sang Yoon; Yoo, Young Joon; Lim, Taekyung; Yang, Keun-Hyeok

Tunable Metamaterial Absorber Using Ferromagnetic Resonance
JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 77 Issue: 11 Pages:
1012-1015 Published: DEC 2020

149. La, Yunju; Jeon, Ok Sung; Lee, Young Jun; Park, Sang Yoon; Yoo, Young Joon;
Lim, Taekyung; Yang, Keun-Hyeok
Metamaterial's Acceptable Level of Wrecked Meta-pattern
JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 77 Issue: 11 Pages:
1016-1020 Published: DEC 2020

148. Choi, Yong Kyu; Yoo, Young Joon; Park, Sang Yoon; et al.
Metastructure-inspired ultraviolet and blue light filter
AIP ADVANCES Volume: 10 Issue: 10 Article Number: 105015 Published:
OCT 1 2020

147. Zhong, Min
Design and verification of a multiple bands terahertz plasmonic metasurface
based on electromagnetically induced transparency effect
OPTICAL MATERIALS Volume: 106 Article Number: UNSP 110019 Published:
AUG 2020

146. Wang, Yuqing; He, Zhihui; Cui, Wei; Ren, Xincheng; Li, Chunjiang; Xue,
Weiwei; Cao, Dongmei; Li, Gang; Lei, Wenli
Tunable plasmon induced transparency in the ellipse-shaped resonators coupled
waveguide
RESULTS IN PHYSICS Volume: 16 Article Number: 102981 Published: MAR
2020

145. Deng, Yide; Song, Zhengyong
Manipulating polarization and electromagnetically induced transparency in a
switchable metamaterial
OPTICAL MATERIALS Volume: 105 Article Number: UNSP 109972 Published:
JUL 2020

144. Seungwon Jung, Young Ju Kim, Young Joon Yoo, Ji Sub Hwang, Bui Xuan
Khuyen, Liang-Yao Chen & YoungPak Lee
High-Order Resonance in a Multiband Metamaterial Absorber
Journal of Electronic Materials volume 49, pages 1677–1688 (2020)

143. Muhammad, Naseer; Ouyang, Zhengbiao
Plasmon-induced anti-transparency modes in metasurface
APPLIED NANOSCIENCE Volume: 10 Issue: 1 Pages: 15-22 Published: JAN
2020

142. He, Yuwen; Zhang, Jianfa; Xu, Wei; Guo, Chucai; Liu, Ken; Yuan, Xiaodong;
Zhu, Zhihong
Graphene plasmonically induced analogue of tunable electromagnetically
induced transparency without structurally or spatially asymmetry
SCIENTIFIC REPORTS Volume: 9 Article Number: 20312 Published: DEC 30
2019

141. Michaeli, Lior; Suchowski, Haim; Ellenbogen, Tal
Near-Infrared Tunable Surface Lattice Induced Transparency in a Plasmonic
Metasurface
LASER & PHOTONICS REVIEWS Article Number: 1900204

140. Habib, M.; Ozbay, E.; Caglayan, H.
Tunable Reflection Type Plasmon Induced Transparency with Graphene
2018 12th International Congress On Artificial Materials For Novel Wave
Phenomena (Metamaterials) Pages: 170-172 Published: 2018

139. Wang, Xianjun; Meng, Hongyun; Deng, Shuying; Lao, Chaode; Wei,
Zhongchao; Wang, Faqiang; Tan, Chunhua; Huang, Xuguang
Hybrid Metal Graphene-Based Tunable Plasmon-Induced Transparency in
Terahertz Metasurface
NANOMATERIALS, 9 (3):10.3390/nano9030385 MAR 6 2019

138. Huang, Wanxia; Li, Chaogang; Wang, Maosheng; Zhou, Yong; Zhu, Cunyuan;
Li, Kuanguo; Yang, Xinyan; Zhang, Fabao
Modes conversion due to plasmons induced transparency
PHYSICS LETTERS A, 383 (13):1520-1525; 10.1016/j.physleta.2019.02.003 APR 24
2019

137. Habib, Mohsin; Ozbay, Ekmel; Caglayan, Humeyra
Tuning Plasmon Induced Reflectance with Hybrid Metasurfaces
PHOTONICS, 6 (1):10.3390/photronics6010029 MAR 16 2019

136. Liu, Jie-Tao; Hu, Hai-Feng; Shao, Xiao-Peng
Polarization-Insensitive Ultra-Narrow Plasmon-Induced Transparency and Short-
range Surface Plasmon Polariton Bloch Wave in Ultra-thin Metallic Film

Nanostructures
PLASMONICS, 14 (1):139-146; 10.1007/s11468-018-0786-3 FEB 2019

135. Xu, Zhixia; Liu, Siyuan; Li, Shunli; Yin, Xiaoxing
Analog of electromagnetically induced transparency based on magnetic
plasmonic artificial molecules with symmetric and antisymmetric states
PHYSICAL REVIEW B, 99 (4):10.1103/PhysRevB.99.041104 JAN 4 2019

134. Khadempir, Fateme; Askari, Hassan Ranjbar; Nejad, Ali Asghari
Investigation of nonlinear absorption and the electromagnetically induced
transparency in a SMNP-SQD hybrid system by using the Mie theory
OPTIK, 178 51-58; 10.1016/j.ijleo.2018.09.155 2019

133. Chen, YQ; Dong, LJ; Fang, Y; Wu, XZ; Wu, QY; Jiang, J; Shi, YL
Bistable switching in electromagnetically induced-transparency-like meta-
molecule
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, 125
(1):10.1007/s00339-018-2315-9 JAN 2019

132. Hwang, JS; Kim, YJ; Yoo, YJ; Kim, KW; Rhee, JY; Chen, LY; Li, SR; Guo, XW; Lee,
YP
Tunable quad-band transmission response, based on single-layer metamaterials
OPTICS EXPRESS, 26 (24):31607-31616; 10.1364/OE.26.031607 NOV 26 2018

131. Habib, Mohsin; Gokbayrak, Murat; Ozbay, Ekmel; Caglayan, Humeyra
Electrically controllable plasmon induced reflectance in hybrid metamaterials
APPLIED PHYSICS LETTERS, 113 (22):10.1063/1.5063461 NOV 26 2018

130. Devi, Koijam Monika; Islam, Maidul; Chowdhury, Dibakar Roy; Sarma,
Amarendra K.; Kumar, Gagan
Exploring plasmon induced transparency in graphene based terahertz
metamaterials
2017 IEEE WORKSHOP ON RECENT ADVANCES IN PHOTONICS (WRAP), 2017
Edited by: Chowdhury DR; Pal B

129. Lim, Taekyung; Jeong, Sang-Mi; Mun, Ju-Hyun; Yang, Keun-Hyeok; Park, Sang
Yoon; Yoo, Young Joon; Ju, Sanghyun
Heat flux effect of thermal metamaterials
AIP ADVANCES, 8 (10):10.1063/1.5055033 OCT 2018

128. Chen, Yongqiang; Li, Yunhui; Zhu, Kejia; Fang, Yu; Wu, Xingzhi; Sun, Yong;
Wu, Quanying
Nonlinear properties of light-tunneling heterostructures embedded with a high
dispersive meta-molecule
OPTICAL MATERIALS EXPRESS, 8 (11):3583-3592; 10.1364/OME.8.003583 NOV 1
2018

127. Devi, Koijam Monika; Chowdhury, Dibakar Roy; Kumar, Gagan; Sarma,
Amarendra K.
Dual-band electromagnetically induced transparency effect in a concentrically
coupled asymmetric terahertz metamaterial
JOURNAL OF APPLIED PHYSICS, 124 (6):10.1063/1.5040734 AUG 14 2018

126. Zhang, Jing; Xu, Yonggang; Zhang, Jie; Ma, Pingping; Zhang, Mengqiao; Li,
Yongfang
Extended coupled Lorentz oscillator model and analogue of electromagnetically
induced transparency in coupled plasmonic structures
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35
(8):1854-1860; 10.1364/JOSAB.35.001854 AUG 1 2018

125. Chu, Qiongqiong; Song, Zhengyong; Liu, Qing Huo
Omnidirectional tunable terahertz analog of electromagnetically induced
transparency realized by isotropic vanadium dioxide metasurfaces
APPLIED PHYSICS EXPRESS, 11 (8):10.7567/APEX.11.082203 AUG 2018

124. Guo, Xiaohan; Zhang, Huiyun; Chen, Huan; Zhang, Yuping
Tunable plasmon-induced transparency based on asymmetric coupling in three-
dimensional Dirac semimetal
OPTICAL ENGINEERING, 57 (5):10.1117/1.OE.57.5.057104 MAY 2018

123. Huang, Wan-Xia; Zhu, Cun-Yuan; Wang, Mao-Sheng; Li, Kuan-Guo; Shi, Jian-
Ping; Zhang, Fa-Bao
Plasmon-induced transparency in ring-bar meta atom
AIP ADVANCES, 8 (3):10.1063/1.5018028 MAR 2018

122. Habib, Mohsin; Rashed, Alireza Rahimi; Ozbay, Ekmel; Caglayan, Humeyra
Graphene-based tunable plasmon induced transparency in gold strips
OPTICAL MATERIALS EXPRESS, 8 (4):1069-1074; 10.1364/OME.8.001069 APR 1
2018

121. Wang, Zhiping; Yu, Benli
Plasmonic Control of Refractive Index Without Absorption in Metallic Photonic Crystals Doped with Quantum Dots
PLASMONICS, 13 (2):567-574; 10.1007/s11468-017-0545-x APR 2018
120. Vafapour, Zohreh
Slowing down light using terahertz semiconductor metamaterial for dual-band thermally tunable modulator applications
APPLIED OPTICS, 57 (4):722-729; 10.1364/AO.57.000722 FEB 1 2018
119. Ziemkiewicz, D; Slowik, K; Zielinska-Raczynska, S
Ultraslow long-living plasmons with electromagnetically induced transparency
OPTICS LETTERS, 43 (3):490-493; 10.1364/OL.43.000490 FEB 1 2018
118. Devi, Koijam Monika; Islam, Maidul; Chowdhury, Dibakar Roy; Sarma, Amarendra K.; Kumar, Gagan
Plasmon-induced transparency in graphene-based terahertz metamaterials
EPL, 120 (2):10.1209/0295-5075/120/27005 OCT 2017
117. Zamani, Naser; Hatef, Ali; Nadgaran, Hamid; Keshavarz, Alireza
Control of electromagnetically induced transparency via a hybrid semiconductor quantum dot-vanadium dioxide nanoparticle system
JOURNAL OF NANOPHOTONICS, 11 (3):10.1117/1.JNP.11.036011 JUL 2017
116. Yan, Xicheng; Wang, Tao; Han, Xu; Xiao, Shuyuan; Zhu, Youjiang; Wang, Yunbo
High Sensitivity Nanoplasmonic Sensor Based on Plasmon-Induced Transparency in a Graphene Nanoribbon Waveguide Coupled with Detuned Graphene Square-Nanoring Resonators
PLASMONICS, 12 (5):1449-1455; 10.1007/s11468-016-0405-0 OCT 2017
115. Yoo, YJ; Hwang, JS; Lee, YP
Flexible perfect metamaterial absorbers for electromagnetic wave
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, 31 (7):663-715; 10.1080/09205071.2017.1312557 2017
114. Devi, Koijam Monika; Sarma, Amarendra K.; Chowdhury, Dibakar Roy; Kumar, Gagan
Plasmon induced transparency effect through alternately coupled resonators in terahertz metamaterial
OPTICS EXPRESS, 25 (9):10484-10493; 10.1364/OE.25.010484 MAY 1 2017
113. Liang, Dachuan; Zhang, Huifang; Gu, Jianqiang; et al.
Plasmonic Analog of Electromagnetically Induced Transparency in Stereo Metamaterials
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 23 Issue: 4 Article Number: 4700907 Published: JUL-AUG 2017
112. Sun, Chen; Dong, Zhewei; Si, Jiangnan; Deng, Xiaoxu
Independently tunable dual-band plasmonically induced transparency based on hybrid metal-graphene metamaterials at mid-infrared frequencies
OPTICS EXPRESS, 25 (2):1242-1250; 10.1364/OE.25.001242 JAN 23 2017
111. Yang, Jun Gyu; Kim, Nam Jin; Yeom, In Su; Keum, Hong Sik; Yoo, Young Joon; Kim, Young Ju; Lee, Y. P.
Method of measuring the amounts of electromagnetic radiation absorbed and controlled by metamaterials in anechoic chamber
MEASUREMENT, 95 328-338; 10.1016/j.measurement.2016.10.029 JAN 2017
110. Lin, Linhan; Wang, Mingsong; Wei, Xiaoling; Peng, Xiaolei; Xie, Chong; Zheng, Yuebing
Photoswitchable Rabi Splitting in Hybrid Plasmon-Waveguide Modes
NANO LETTERS, 16 (12):7655-7663; 10.1021/acs.nanolett.6b03702 DEC 2016
109. Chai, Zhen; Hu, Xiaoyong; Li, Chong; Yang, Hong; Gong, Qihuang
On-Chip Multiple Electromagnetically Induced Transparencies in Photon-Plasmon Composite Nanocavities
ACS PHOTONICS, 3 (11):2068-2073; 10.1021/acsp Photonics.6b00399 NOV 2016
108. Zhou, Xin; He, Zhangming; Tang, Bin; Yang, Diwu; He, Jun
Plasmon-Induced Transparency Effect in the Nanostructures Composed of C-Shaped Resonator and Two Ellipsoid Strips
NANOSCIENCE AND NANOTECHNOLOGY LETTERS, 8 (9):734-738; 10.1166/nnl.2016.2232 SEP 2016
107. Zhou, Xin; Ouyang, Min; Tang, Bin; Wang, Zhibing; He, Jun
Transparency windows of the plasmonic nanostructure composed of C-shaped and U-shaped resonators
OPTICS COMMUNICATIONS, 384 65-70; 10.1016/j.optcom.2016.10.021 FEB 1 2017
106. Kim, Seung Jik; Yoo, Young Joon; Kim, Young Ju; Lee, YoungPak
Triple-band metamaterial absorption utilizing single rectangular hole
OPTICS COMMUNICATIONS, 382 151-156; 10.1016/j.optcom.2016.07.075 JAN 1 2017
105. Yoo, Young Joon; Yi, Changhyun; Hwang, Ji Sub; Kim, Young Ju; Park, Sang Yoon; Kim, Ki Won; Rhee, Joo Yull; Lee, YoungPak
Experimental Realization of Tunable Metamaterial Hyper-transmitter
SCIENTIFIC REPORTS, 6 10.1038/srep33416 SEP 15 2016
104. Chen, Fang; Yao, Duanzheng
Double plasmon induced transparency in disk and nanobars coupled nanosystems and its application to plasmonic resonance sensing
MODERN PHYSICS LETTERS B, 30 (14):10.1142/S0217984916501505 MAY 30 2016
103. Sun, Chen; Si, Jiangnan; Dong, Zhewei; Deng, Xiaoxu
Tunable multispectral plasmon induced transparency based on graphene metamaterials
OPTICS EXPRESS, 24 (11):1466-1474; 10.1364/OE.24.011466 MAY 30 2016
102. Huang, Meng; Chen, Dong; Zhang, Li; Zhou, Jun
Tunable Fano resonances and plasmonic hybridization of gold triangle-rod dimer nanostructure
CHINESE PHYSICS B, 25 (5):10.1088/1674-1056/25/5/057303 MAY 2016
101. Vafapour, Z; Zakery, A
New Approach of Plasmonically Induced Reflectance in a Planar Metamaterial for Plasmonic Sensing Applications
PLASMONICS, 11 (2):609-618; 10.1007/s11468-015-0077-1 APR 2016
100. Huang, Ben; Meng, Hongyun; Wang, Qinghao; Wang, Huihao; Zhang, Xing; Yu, Wei; Tan, Chunhua; Huang, Xuguang; Wang, Faqiang
Plasmonic-Induced Transparency and Slow-Light Effect Based on Stub Waveguide with Nanodisk Resonator
PLASMONICS, 11 (2):543-550; 10.1007/s11468-015-0085-1 APR 2016
99. Khunsin, Worawut; Dorfmueller, Jens; Esslinger, Moritz; Vogelgesang, Ralf; Rockstuhl, Carsten; Etrich, Christoph; Kern, Klaus
Quantitative and Direct Near-Field Analysis of Plasmonic-Induced Transparency and the Observation of a Plasmonic Breathing Mode
ACS NANO, 10 (2):2214-2224; 10.1021/acsnano.5b06768 FEB 2016
98. Ding Guo-Wen; Liu Shao-Bin; Zhang Hai-Feng; Kong Xiang-Kun; Li Hai-Ming; Li Bing-Xiang; Liu Si-Yuan; Li Hai
Tunable electromagnetically induced transparency at terahertz frequencies in coupled graphene metamaterials
CHINESE PHYSICS B, 24 (11):10.1088/1674-1056/24/11/118103 NOV 2015
97. Almpanis, E; Papanikolaou, N
Comparison of Ag and Si nanoparticle arrays: mimicking subwavelength plasmonic field concentrations with dielectric components
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (1):99-104; 10.1364/JOSAB.33.000099 JAN 1 2016
96. Li, Xianping; Wei, Zhongchao; Liu, Yuebo; Zhong, Nianfa; Tan, Xiaopei; Shi, Songsong; Liu, Hongzhan; Liang, Ruisheng
Analogy of electromagnetically induced transparency in plasmonic nanodisk with a square ring resonator
PHYSICS LETTERS A, 380 (1-2):232-237; 10.1016/j.physleta.2015.10.035 JAN 8 2016
95. Yoo, Young Joon; Kim, Young Ju; Lee, YoungPak
Perfect absorbers for electromagnetic wave, based on metamaterials
JOURNAL OF THE KOREAN PHYSICAL SOCIETY, 67 (7):1095-1109; 10.3938/jkps.67.1095 OCT 2015
94. Li, Chuanqi; Huang, Lei; Wang, Wenyan; Ma, Xiangjun; Zhou, Shengbang; Jiang, Yanhui
Electromagnetically induced transparency in nano-structures made from metallic nanorod and split-ring-resonator
OPTICS COMMUNICATIONS, 355 337-341; 10.1016/j.optcom.2015.06.051 NOV 15 2015
93. Liu Si-Yuan; Zheng Bu-Sheng; Li Hai-Ming; Liu Xiao-Chun; Liu Shao-Bin
Double transmission peaks electromagnetically induced transparency induced by simultaneously exciting the electric and magnetic resonance in one unit cell
CHINESE PHYSICS B, 24 (8):10.1088/1674-1056/24/8/084204 AUG 2015

92. Yoo, Young Joon; Ju, Sanghyun; Park, Sang Yoon; Kim, Young Ju; Bong, Jihye; Lim, Taekyung; Kim, Ki Won; Rhee, Joo Yull; Lee, Young Pak
Metamaterial Absorber for Electromagnetic Waves in Periodic Water Droplets
SCIENTIFIC REPORTS, 5 10.1038/srep14018 SEP 10 2015
91. Xiao, Xiao; Zhou, Bingpu; Wang, Xinke; He, Jingwen; Hou, Bo; Zhang, Yan; Wen, Weijia
An Analog of electrically induced transparency via surface delocalized modes
SCIENTIFIC REPORTS, 5 10.1038/srep12251 JUL 21 2015
90. Liu, Huaqing; Ren, Guobin; Gao, Yixiao; Zhu, Bofeng; Li, Haisu; Wu, Beilei; Jian, Shuisheng
Ultrafast and low-power all-optical switch based on asymmetry
electromagnetically induced transparency in MIM waveguide containing Kerr material
OPTICS COMMUNICATIONS, 353 189-194; 10.1016/j.optcom.2015.05.018 OCT 15 2015
89. Wan, Ming-li; He, Jin-na; Song, Yue-li; Zhou, Feng-qun
Electromagnetically induced transparency and absorption in plasmonic metasurfaces based on near-field coupling
PHYSICS LETTERS A, 379 (30-31):1791-1795; 10.1016/j.physleta.2015.05.011 SEP 4 2015
88. Zhou, Wen-Jin; Wang, Xiao-Xia; Wang, Jun-Qiao
Polarization and angle quasi-independent metamaterial crystal with electromagnetically induced transparency based on plasmon hybridization
JOURNAL OF MODERN OPTICS, 62 (12):1027-1031; 10.1080/09500340.2015.1019382 2015
87. Liu, Huaqing; Ren, Guobin; Gao, Yixiao; Lian, Yudong; Qi, Yang; Jian, Shuisheng
Tunable subwavelength terahertz plasmon-induced transparency in the InSb slot waveguide side-coupled with two stub resonators
APPLIED OPTICS, 54 (13):3918-3924; 10.1364/AO.54.003918 MAY 1 2015
86. Manjappa, Manukumara; Chiam, Sher-Yi; Cong, Longqing; Bettiol, Andrew A.; Zhang, Weili; Singh, Ranjan
Tailoring the slow light behavior in terahertz metasurfaces
APPLIED PHYSICS LETTERS, 106 (18):10.1063/1.4919531 MAY 4 2015
85. Ding, Pei; He, Jinna; Wang, Junqiao; Fan, Chunzhen; Liang, Erjun
Electromagnetically induced transparency in all-dielectric metamaterial-waveguide system
APPLIED OPTICS, 54 (12):3708-3714; 10.1364/AO.54.003708 APR 20 2015
84. Wang, Wudeng; Li, Yudong; Xu, Pengwei; Chen, Zongqiang; Chen, Jing; Qian, Jun; Qi, Jiwei; Sun, Qian; Xu, Jingjun
Polarization-insensitive plasmonic-induced transparency in planar metamaterial consisting of a regular triangle and a ring
JOURNAL OF OPTICS, 6 (12):10.1088/2040-8978/16/12/125013 DEC 2014
83. Song, Jiakun; Song, Yuzhi; Li, Kangwen; Zhang, Zuyin; Wei, Xin; Xu, Yun; Song, Guofeng
Tunable plasmon-induced transparency in hybrid waveguide-magnetic resonance system
APPLIED OPTICS, 54 (9):2279-2282; 10.1364/AO.54.002279 MAR 20 2015
82. Yoo, YJ; Kim, YJ; Hwang, JS; Rhee, JY; Kim, KW; Kim, YH; Cheong, H; Chen, LY; Lee, YP
Triple-band perfect metamaterial absorption, based on single cut-wire bar
APPLIED PHYSICS LETTERS, 106 (7):10.1063/1.4913243 FEB 16 2015
81. Wang, Zhiping; Zhen, Shenglai; Yu, Benli
Controlling optical bistability of acceptor and donor quantum dots embedded in a nonlinear photonic crystal
LASER PHYSICS LETTERS, 12 (4):10.1088/1612-2011/12/4/046004 APR 2015
80. Hu, Miao; Wang, Faqiang; Liang, Ruisheng; Zhou, Shiwei; Xiao, Liping
Plasmonic-induced transparency based on plasmonic asymmetric dual side-coupled cavities
PHYSICS LETTERS A, 379 (6):581-584; 10.1016/j.physleta.2014.12.011 MAR 6 2015
79. Hu, Sen; Yang, Helin; Han, Song; Huang, Xiaojun; Xiao, Boxun
Tailoring dual-band electromagnetically induced transparency in planar metamaterials
JOURNAL OF APPLIED PHYSICS, 117 (4):10.1063/1.4906853 JAN 28 2015
78. Ding Chun-Feng; Zhang Ya-Ting; Yao Jian-Quan; Sun Chong-Ling; Xu De-Gang; Zhang Gui-Zhong
Reflection-type electromagnetically induced transparency analogue in terahertz metamaterials
CHINESE PHYSICS B, 23 (12):10.1088/1674-1056/23/12/124203 DEC 2014
77. Rodriguez, SRK; Chen, YT; Steinbusch, TP; Verschuuren, MA; Koenderink, AF; Rivas, JG
From weak to strong coupling of localized surface plasmons to guided modes in a luminescent slab
PHYSICAL REVIEW B, 90 (23):10.1103/PhysRevB.90.235406 DEC 2 2014
76. Wan, Ming Li; Sun, Xiao Jun; Song, Yue Li; Li, Yong; Zhou, Feng Qun
Plasmonic analogue of electromagnetically induced transparency in a T-shaped metallic nanohole array and its sensing performance
MODERN PHYSICS LETTERS B, 28 (29):10.1142/S0217984914502315 NOV 20 2014
75. Wang, Zhiping; Yu, Benli
Optical bistability and multistability in polaritonic materials doped with nanoparticles
LASER PHYSICS LETTERS, 11 (11):10.1088/1612-2011/11/11/115903 NOV 2014
74. Yao, Jie; Ye, Yonghong
Dual-band plasmon induced transparency controlled by the polarization of the incident wave
OPTIK, 125 (20):6113-6116; 10.1016/j.ijleo.2014.06.108 2014
73. Sadeghi, SM; Patty, KD
Investigation of coherent molecular resonances in quantum dot-metallic nanoparticle systems using their spontaneous emission
JOURNAL OF LUMINESCENCE, 155 351-358; 10.1016/j.jlumin.2014.06.060 NOV 2014
72. Shao, Jian; Li, Jie; Wang, Ying-Hua; Li, Jia-Qi; Chen, Qian; Dong, Zheng-Gao
Polarization conversions of linearly and circularly polarized lights through a plasmon-induced transparent metasurface
JOURNAL OF APPLIED PHYSICS, 115 (24):10.1063/1.4885769 JUN 28 2014
71. Chai, Zhen; Hu, Xiaoyong; Zhu, Yu; Sun, Sibai; Yang, Hong; Gong, Qihuang
Ultracompact Chip-Integrated Electromagnetically Induced Transparency in a Single Plasmonic Composite Nanocavity
ADVANCED OPTICAL MATERIALS, 2 (4):320-325; 10.1002/adom.201300497 APR 2014
70. Wang, Wudeng; Li, Yudong; Peng, Jingyang; Chen, Zongqiang; Qian, Jun; Chen, Jing; Xu, Jingjun; Sun, Qian
Polarization dependent Fano resonance in a metallic triangle embedded in split ring plasmonic nanostructures
JOURNAL OF OPTICS, 16 (3):10.1088/2040-8978/16/3/035002 MAR 2014
69. Miyamaru, Fumiaki; Morita, Hiroki; Nishiyama, Yohei; Nishida, Tsubasa; Nakanishi, Toshihiro; Kitano, Masao; Takeda, Mitsuo W.
Ultrafast optical control of group delay of narrow-band terahertz waves
SCIENTIFIC REPORTS, 4 10.1038/srep04346 MAR 11 2014
68. Dastmalchi, Babak; Tassin, Philippe; Koschny, Thomas; Soukoulis, Costas M.
Strong group-velocity dispersion compensation with phase-engineered sheet metamaterials
PHYSICAL REVIEW B, 89 (11):10.1103/PhysRevB.89.115123 MAR 21 2014
67. Liu, Jian-Qiang; He, Meng-Dong; Wang, Dian-Yuan; Tang, Xia-Mei; Zhang, Xue-Jin; Zhu, Yong-Yuan
Sharp plasmonic resonances based on coupling of high order localized resonance and lattice surface mode in meta-molecules
JOURNAL OF PHYSICS D-APPLIED PHYSICS, 47 (4):10.1088/0022-3727/47/4/045303 JAN 29 2014
66. Yoo, Young Joon; Kim, Young Joo; Pham Van Tuong; Rhee, Joo Yull; Kim, Ki Won; Jang, Won Ho; Kim, Y. H.; Cheong, H.; Lee, YoungPak
Polarization-independent dual-band perfect absorber utilizing multiple magnetic resonances
OPTICS EXPRESS, 21 (26):32484-32490; 10.1364/OE.21.032484 DEC 30 2013
65. Dhoubi, Abdallah; Burokur, Shah Nawaz; Lupu, Anatole; de Lustrac, Andre; Priou, Alain
Excitation of trapped modes from a metasurface composed of only Z-shaped meta-atoms
APPLIED PHYSICS LETTERS, 103 (18):10.1063/1.4827880 OCT 28 2013
64. Cheng, Hua; Chen, Shuqi; Yu, Ping; Duan, Xiaoyang; Xie, Boyang; Tian, Jianguo

- Dynamically tunable plasmonically induced transparency in periodically patterned graphene nanostrips
APPLIED PHYSICS LETTERS, 103 (20):10.1063/1.4831776 NOV 11 2013
63. Jin, Xing Ri; Zhang, Ying Qiao; Zhang, Shou; Lee, YoungPak; Rhee, Joo Yull
Polarization-independent electromagnetically induced transparency-like effects in stacked metamaterials based on Fabry-Perot resonance
JOURNAL OF OPTICS, 15 (12):10.1088/2040-8978/15/12/125104 DEC 2013
62. Shao Jian; Li Jie; Li Jia-Qi; Wang Yu-Kun; Dong Zheng-Gao; Lu Wei-Bing; Zhai Ya
The metamaterial analogue of electromagnetically induced transparency by dual-mode excitation of a symmetric resonator
CHINESE PHYSICS B, 22 (10):10.1088/1674-1056/22/10/107804 OCT 2013
61. Wang, Junqiao; Yuan, Baohe; Fan, Chunzhen; He, Jinna; Ding, Pei; Xue, Qianzhong; Liang, Erjun
A novel planar metamaterial design for electromagnetically induced transparency and slow light
OPTICS EXPRESS, 21 (21):25159-25166; 10.1364/OE.21.025159 OCT 21 2013
60. Shahmansouri, Afsaneh; Rashidian, Bizhan
Behavior of plasmonic nanoparticle array in near- and far-field coupling regimes for transverse electric and transverse magnetic polarizations
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30 (8):2286-2291; 10.1364/JOSAB.30.002286 AUG 2013
59. Yin, Xiaogang; Feng, Tianhua; Yip, Senpo; Liang, Zixian; Hui, Alvin; Ho, Johnny C.; Li, Jensen
Tailoring electromagnetically induced transparency for terahertz metamaterials: From diatomic to triatomic structural molecules
APPLIED PHYSICS LETTERS, 103 (2):10.1063/1.4813553 JUL 8 2013
58. Chai, Zhen; Hu, Xiaoyong; Zhu, Yu; et al.
Low-power and ultrafast all-optical tunable plasmon-induced transparency in plasmonic nanostructures
APPLIED PHYSICS LETTERS Volume: 102 Issue: 20 Article Number: 201119 DOI: 10.1063/1.4807765 Published: MAY 20 2013
57. Liu, Jietao; Xu, Binzong; Hu, Haifeng; Zhang, Jing; Wei, Xin; Xu, Yun; Song, Guofeng
Tunable coupling-induced transparency band due to coupled localized electric resonance and quasiguided photonic mode in hybrid plasmonic system
OPTICS EXPRESS, 21 (11):13386-13393; 10.1364/OE.21.013386 JUN 3 2013
56. Li, Xiaoli; Yang, Zicai; Shang, Yaxuan
Transient behaviour of EIT and EIA in an optical-radio two-photon coupling configuration
QUANTUM AND NONLINEAR OPTICS II, 8554 10.1117/12.2001281 2012
55. Jin, Xing Ri; Park, Jinwoo; Zheng, Haiyu; Lee, Youngpak; Rhee, Joo Yull; Kim, Ki Won; Jang, Won Ho
CLASSICAL ELECTROMAGNETICALLY-INDUCED TRANSPARENCY-LIKE SWITCHING CONTROLLED BY POLARIZATION IN METAMATERIALS
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (1):10.1142/S0218863513500045 MAR 2013
54. Zhang, Xueqian; Li, Quan; Cao, Wei; Gu, Jianqiang; Singh, Ranjan; Tian, Zhen; Han, Jiaguang; Zhang, Weili
Polarization-Independent Plasmon-Induced Transparency in a Fourfold Symmetric Terahertz Metamaterial
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, 19 (1):10.1109/JSTQE.2012.2200656 JAN-FEB 2013
53. Li Xiao-Li; Shang Ya-Xuan; Sun Jiang
Splitting of electromagnetically induced transparency window and appearing of gain due to radio frequency field
ACTA PHYSICA SINICA, 62 (6):10.7498/aps.62.064202 MAR 2013
52. Liu, Hailong; Li, Bing; Zheng, Longjiang; Xu, Chenxi; Zhang, Guangbiao; Wu, Xijun; Xiang, Ning
Multispectral plasmon-induced transparency in triangle and nanorod(s) hybrid nanostructures
OPTICS LETTERS, 38 (6):977-979; MAR 15 2013
51. Feng, Shengfei; Zhang, Xinping; Li, Jingjuan; Klar, Peter J.
Coupling between the plasmonic and photonic resonance modes in wave-guided metallic photonic crystals
JOURNAL OF NANOPHOTONICS, 6 10.1117/1.JNP.6.063513 JUL 3 2012
50. Ullrich, Simon; Scheeler, Sebastian P.; Pacholski, Claudia; et al.
Formation of Large 2D Arrays of Shape-Controlled Colloidal Nanoparticles at Variable Interparticle Distances
PARTICLE & PARTICLE SYSTEMS CHARACTERIZATION Volume: 30 Issue: 1 Pages: 102-108 DOI: 10.1002/ppsc.201200065 Published: JAN 2013
49. He, Xun-jun; Wang, Jian-min; Tian, Xiao-hua; et al.
Dual-spectral plasmon electromagnetically induced transparency in planar metamaterials based on bright-dark coupling
OPTICS COMMUNICATIONS Volume: 291 Pages: 371-375 DOI: 10.1016/j.optcom.2012.11.019 Published: MAR 15 2013
48. Shao, Jian; Li, Jiaqi; Li, Jie; Wang, Yu-Kun; Dong, Zheng-Gao; Chen, Ping; Wu, Rui-Xin; Zhai, Ya
Analogue of electromagnetically induced transparency by doubly degenerate modes in a U-shaped metamaterial
APPLIED PHYSICS LETTERS, 102 (3):10.1063/1.4789432 JAN 21 2013
47. Zhang, G. P.; George, Thomas F.
Proposed Coherent Trapping of a Population of Electrons in a C-60 Molecule Induced by Laser Excitation
PHYSICAL REVIEW LETTERS, 109 (25):10.1103/PhysRevLett.109.257401 DEC 19 2012
46. Guo, Yinghui; Yan, Lianshan; Pan, Wei; Luo, Bin; Wen, Kunhua; Guo, Zhen; Luo, Xiangang
Electromagnetically induced transparency (EIT)-like transmission in side-coupled complementary split-ring resonators
OPTICS EXPRESS, 20 (22):24348-24355; OCT 22 2012
45. Rodriguez, S. R. K.; Murai, S.; Verschuuren, M. A.; Rivas, J. Gomez
Light-Emitting Waveguide-Plasmon Polaritons
PHYSICAL REVIEW LETTERS, 109 (16):10.1103/PhysRevLett.109.166803 OCT 17 2012
44. Duan, Xiaoyang; Chen, Shuqi; Yang, Haifang; Cheng, Hua; Li, Junjie; Liu, Wenwei; Gu, Changzhi; Tian, Jianguo
Polarization-insensitive and wide-angle plasmonically induced transparency by planar metamaterials
APPLIED PHYSICS LETTERS, 101 (14):10.1063/1.4756944 OCT 1 2012
43. Li, Jian-Bo; Yu, Ying; Peng, Xiao-Niu; Yang, Zhong-Jian; Zhou, Zhang-Kai; Zhou, Li
Controlled growth and multi-photon luminescence of hexagonal arrays of Au nanoparticles on anodic aluminum oxide templates
JOURNAL OF APPLIED PHYSICS, 111 (12):10.1063/1.4730629 JUN 15 2012
42. Jin, Xing-Ri; Lu, Yuehui; Park, Jinwoo; Zheng, Haiyu; Gao, Feng; Lee, YoungPak; Rhee, Joo Yull; Kim, Ki Won; Cheong, H.; Jang, Won Ho
Manipulation of electromagnetically-induced transparency in planar metamaterials based on phase coupling
JOURNAL OF APPLIED PHYSICS, 111 (7):10.1063/1.3699197 APR 1 2012
41. Ding, Pei; Fan, Chunzhen; Cheng, Yongguang; Liang, Erjun; Xue, Qianzhong
Plasmon-induced transparency by detuned magnetic atoms in trirod metamaterials
APPLIED OPTICS, 51 (12):1879-1885; APR 20 2012
40. Dong, Zheng-Gao; Ni, Pei-Gen; Zhu, Jie; Zhang, X.
Transparency window for the absorptive dipole resonance in a symmetry-reduced grating structure
OPTICS EXPRESS, 20 (7):7206-7211; MAR 26 2012
39. Brenier, R
Enhancement of Light Transmission through Silver Nanoparticles
JOURNAL OF PHYSICAL CHEMISTRY C, 116 (9):5358-5366; 10.1021/jp210374j MAR 8 2012
38. Tamayama, Yasuhiro; Nakanishi, Toshihiro; Kitano, Masao
Variable group delay in a metamaterial with field-gradient-induced transparency
PHYSICAL REVIEW B, 85 (7):10.1103/PhysRevB.85.073102 FEB 3 2012
37. Toroghi, Seyfollah; Kik, Pieter G.
Cascaded plasmonic metamaterials for phase-controlled enhancement of nonlinear absorption and refraction
PHYSICAL REVIEW B, 85 (4):10.1103/PhysRevB.85.045432 JAN 19 2012
36. Ma, Yingfang; Li, Zhongyang; Yang, Yuanmu; Huang, Ran; Singh, Ranjan; Zhang, Shuang; Gu, Jianqiang; Tian, Zhen; Han, Jiaguang; Zhang, Weili
Plasmon-induced transparency in twisted Fano terahertz metamaterials
OPTICAL MATERIALS EXPRESS, 1 (3):391-399; JUL 1 2011

35. Liu, Shao-Ding; Yang, Zhi; Liu, Rui-Ping; Li, Xiu-Yan
High Sensitivity Localized Surface Plasmon Resonance Sensing Using a Double Split NanoRing Cavity
JOURNAL OF PHYSICAL CHEMISTRY C, 115 (50):24469-24477;
10.1021/jp209754m DEC 22 2011
34. Singh, Ranjan; Al-Naib, Ibraheem A. I.; Yang, Yuping; Chowdhury, Dibakar Roy; Cao, Wei; Rockstuhl, Carsten; Ozaki, Tsuneyuki; Morandotti, Roberto; Zhang, Weili
Observing metamaterial induced transparency in individual Fano resonators with broken symmetry
APPLIED PHYSICS LETTERS, 99 (20):10.1063/1.3659494 NOV 14 2011
33. Jin, Xing-Ri; Park, Jinwoo; Zheng, Haiyu; Lee, Seongjae; Lee, YoungPak; Rhee, Joo Yull; Kim, Ki Won; Cheong, H. S.; Jang, Won Ho
Highly-dispersive transparency at optical frequencies in planar metamaterials based on two-bright-mode coupling
OPTICS EXPRESS 19 (22): 21652-21657 OCT 24 2011
32. Yang, Wen-Xing; Chen, Ai-Xi; Lee, Ray-Kuang; Wu, Ying
Matched slow optical soliton pairs via biexciton coherence in quantum dots
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013835 JUL 28 2011
31. Ooi, Kazufumi; Okada, Takanori; Tanaka, Koichiro
Mimicking electromagnetically induced transparency by spoof surface plasmons
PHYSICAL REVIEW B 84 (11): 10.1103/PhysRevB.84.115405 SEP 9 2011
30. Li Xiao-li; Zhang Lian-shui; Sun Jiang; Guo Shu-qing
Mollow Profile with Seven Peaks under Double Coupling Fields
SPECTROSCOPY AND SPECTRAL ANALYSIS 31 (8): 2027-2031 10.3964/j.issn.1000-0593(2011)08-2027-05 AUG 2011
29. Jin, Xing-Ri; Lu, Yuehui; Zheng, Haiyu; Lee, YoungPak; Rhee, Joo Yull; Kim, Ki Won; Jang, Won Ho
Plasmonic electromagnetically-induced transparency in metamaterial based on second-order plasmonic resonance
OPTICS COMMUNICATIONS 284 (19): 4766-4768 10.1016/j.optcom.2011.05.052 SEP 1 2011
28. Liu, Shao-Ding; Yang, Zhi; Liu, Rui-Ping; Li, Xiu-Yan
Plasmonic-induced optical transparency in the near-infrared and visible range with double split nanoring cavity
OPTICS EXPRESS 19 (16): 15363-15370 AUG 1 2011
27. Chen, Zhihong; Dai, Lei; Jiang, Chun
Polarization-independent plasmon-induced transparency for plasmonic sensing
JOURNAL OF PHYSICS D-APPLIED PHYSICS 44 (32): 10.1088/0022-3727/44/32/325106 AUG 17 2011
26. Chiam, Sher-Yi; Singh, Ranjan; Rockstuhl, Carsten; Lederer, Falk; Zhang, Weili; Bettiol, Andrew A.
Electromagnetically induced transparency in a terahertz metamaterial
2010 CONFERENCE ON LASERS AND ELECTRO-OPTICS (CLEO) AND QUANTUM ELECTRONICS AND LASER SCIENCE CONFERENCE (QELS) : - 2010
25. Sun, Yong; Jiang, Haitao; Yang, Yaping; Zhang, Yewen; Chen, Hong; Zhu, Shiyao
Electromagnetically induced transparency in metamaterials: Influence of intrinsic loss and dynamic evolution
PHYSICAL REVIEW B 83 (19): Art. No. 195140 MAY 31 2011
24. Gong, Yongkang; Li, Zhiyuan; Fu, Jinxin; Chen, Yuhui; Wang, Guoxi; Lu, Hua; Wang, Leirang; Liu, Xueming
Highly flexible all-optical metamaterial absorption switching assisted by Kerr-nonlinear effect
OPTICS EXPRESS 19 (11): 10193-10198 MAY 23 2011
23. Li, Zhongyang; Ma, Yingfang; Huang, Ran; Singh, Ranjan; Gu, Jianqiang; Tian, Zhen; Han, Jiaguang; Zhang, Weili
Manipulating the plasmon-induced transparency in terahertz metamaterials
OPTICS EXPRESS 19 (9): 8912-8919 APR 25 2011
22. Jin, XR; Lu, YH; Zheng, HY; Lee, YP; Rhee, JY; Jang, WH
Electromagnetically-induced Transparency in Metamaterials Based on the Second-order Magnetic Plasmon Resonance
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 58 (4): 973-976 Part 2 Sp. Iss. SI APR 2011
21. Singh, Ranjan; Al-Naib, Ibraheem A. I.; Koch, Martin; Zhang, Weili
Sharp Fano resonances in THz metamaterials
OPTICS EXPRESS 19 (7): 6320-6327 MAR 28 2011
20. Utikal, Tobias; Zentgraf, Thomas; Paul, Thomas; Rockstuhl, Carsten; Lederer, Falk; Lippitz, Markus; Giessen, Harald
Towards the Origin of the Nonlinear Response in Hybrid Plasmonic Systems
PHYSICAL REVIEW LETTERS 106 (13): Art. No. 133901 MAR 31 2011
19. Panahpour, Ali; Latifi, Hamid
Electromagnetic transparency and slow light in an isotropic 3D optical metamaterial, due to Fano-like coupling of Mie resonances in excitonic nano-sphere inclusions
OPTICS COMMUNICATIONS 284 (6): 1701-1710 MAR 15 2011
18. Dong, Zheng-Gao; Liu, Hui; Li, Tao; Xu, Ming-Xiang; Lu, Wei-Bing; Zhu, Shi-Ning
Fast roll-off and sensitivity of a transparency window with dual magnetic resonant modes from a split double-ring metamaterial
PHYSICS LETTERS A 375 (7): 1148-1151 FEB 14 2011
17. Dai, Lei; Liu, Yang; Jiang, Chun
Plasmonic-dielectric compound grating with high group-index and transmission
OPTICS EXPRESS 19 (2): 1461-1469 JAN 17 2011
16. Tang, Bin; Dai, Lei; Jiang, Chun
Electromagnetically induced transparency in hybrid plasmonic-dielectric system
OPTICS EXPRESS 19 (2): 628-637 JAN 17 2011
15. Lu, Yuehui; Xu, Hua; Rhee, Joo Yull; Jang, Won Ho; Ham, Byoung Seung; Lee, YoungPak
Magnetic plasmon resonance: Underlying route to plasmonic electromagnetically induced transparency in metamaterials
PHYSICAL REVIEW B 82 (19): Art. No. 195112 NOV 10 2010
14. Dong, Zheng-Gao; Liu, Hui; Xu, Ming-Xiang; Li, Tao; Wang, Shu-Ming; Cao, Jing-Xiao; Zhu, Shi-Ning; Zhang, X.
Role of asymmetric environment on the dark mode excitation in metamaterial analogue of electromagnetically-induced transparency
OPTICS EXPRESS 18 (21): 22412-22417 OCT 11 2010
13. Lu, Yuehui; Rhee, Joo Yull; Jang, Won Ho; Lee, Young Pak
Active manipulation of plasmonic electromagnetically-induced transparency based on magnetic plasmon resonance
OPTICS EXPRESS 18 (20): 20912-20917 SEP 27 2010
12. Tang, Bin; Dai, Lei; Jiang, Chun
Transmission enhancement of slow light by a subwavelength plasmon-dielectric system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 27 (11): 2433-2437 NOV 2010
11. Tamayama, Yasuhiro; Nakanishi, Toshihiro; Wakasa, Yasuhiro; Kanazawa, Tetsuo; Sugiyama, Kazuhiko; Kitano, Masao
Electromagnetic response of a metamaterial with field-gradient-induced transparency
PHYSICAL REVIEW B 82 (16): Art. No. 165130 OCT 28 2010
10. Li Xiao-Li; Zhang Lian-Shui; Yang Bao-Zhu; Yang Li-Jun
Electromagnetically induced absorption and transparency in a closed lambda-shaped four-level system
ACTA PHYSICA SINICA 59 (10): 7008-7014 OCT 2010
9. Zhang, Jing; Cai, Likang; Bai, Wenli; Song, Guofeng
Hybrid waveguide-plasmon resonances in gold pillar arrays on top of a dielectric waveguide
OPTICS LETTERS 35 (20): 3408-3410 OCT 15 2010
8. Dong, Zheng-Gao; Liu, Hui; Cao, Jing-Xiao; Li, Tao; Wang, Shu-Ming; Zhu, Shi-Ning; Zhang, X.
Enhanced sensing performance by the plasmonic analog of electromagnetically induced transparency in active metamaterials
APPLIED PHYSICS LETTERS 97 (11): Art. No. 114101 SEP 13 2010
7. Dong, Zheng-Gao; Liu, Hui; Xu, Ming-Xiang; Li, Tao; Wang, Shu-Ming; Zhu, Shi-Ning; Zhang, X.
Plasmonically induced transparent magnetic resonance in a metallic metamaterial composed of asymmetric double bars
OPTICS EXPRESS 18 (17): 18229-18234 AUG 16 2010
6. Liu, Fengming; Ke, Manzhu; Zhang, Anqi; Wen, Weijia; Shi, Jing; Liu, Zhengyou; Sheng, Ping
Acoustic analog of electromagnetically induced transparency in periodic arrays of

square rods
PHYSICAL REVIEW E 82 (2): Art. No. 026601 Part 1 AUG 2 2010

5. Jin X, Lu Y, Zheng H, et al.
Plasmonic electromagnetically-induced transparency in symmetric structures
OPTICS EXPRESS Volume: 18 Issue: 13 Pages: 13396-13401 Published: JUN 21 2010

4. Hatef, Ali; Singh, Mahi R.
Plasmonic effect on quantum coherence and interference in metallic photonic crystals doped with quantum dots
PHYSICAL REVIEW A 81 (6): Art. No. 063816 JUN 21 2010

3. Ooi, C. H. Raymond; Kam, C. H.
Controlling quantum resonances in photonic crystals and thin films with electromagnetically induced transparency
PHYSICAL REVIEW B 81 (19): Art. No. 195119 MAY 15 2010

2. Ruan, Zhichao; Fan, Shanhu
Temporal Coupled-Mode Theory for Fano Resonance in Light Scattering by a Single Obstacle
JOURNAL OF PHYSICAL CHEMISTRY C 114 (16): 7324-7329 APR 29 2010

1. Sher-Yi Chiam, Ranjan Singh, Carsten Rockstuhl, Falk Lederer, Weili Zhang, and Andrew A. Bettiol
Analogue of electromagnetically induced transparency in a terahertz metamaterial
Phys. Rev. B 80, 153103 (2009)

=====

102. V. Yannopoulos and N. V. Vitanov
Degree of polarization of the thermal near field generated by arrays of metallic nanoparticles
Phys. Rev. B 80, 035410(4) (2009)

6. Sadeghi, Seyed M.; Mao, Chuanbin
Quantum sensing using coherent control of near-field polarization of quantum dot-metallic nanoparticle molecules
JOURNAL OF APPLIED PHYSICS, 121 (1):10.1063/1.4973678 JAN 7 2017

5. Phan, Anh D.; The-Long Phan; Woods, Lilia M.
Near-field heat transfer between gold nanoparticle arrays
JOURNAL OF APPLIED PHYSICS, 114 (21):10.1063/1.4838875 DEC 7 2013

4. Davy, Matthieu; Fink, Mathias; de Rosny, Julien
Green's Function Retrieval and Passive Imaging from Correlations of Wideband Thermal Radiations
PHYSICAL REVIEW LETTERS, 110 (20):10.1103/PhysRevLett.110.203901 MAY 13 2013

3. Li, Jia; Gao, Xiumin; Chen, Yanru
Tight focusing of J(0)-correlated Gaussian Schell-model beam through high numerical aperture
OPTICS COMMUNICATIONS, 285 (16):3403-3411; SI 10.1016/j.optcom.2012.04.009 JUL 15 2012

2. Chen Ying-Ming; Wang Bing-Zhong
Seeing time-reversal transmission characteristics through kinetic anti-ferromagnetic Ising chain
CHINESE PHYSICS B, 21 (2):10.1088/1674-1056/21/2/026401 FEB 2012

1. Ghiu, Iulia; Bjoerk, Gunnar; Marian, Paulina; Marian, Tudor A.
Probing light polarization with the quantum Chernoff bound
PHYSICAL REVIEW A 82 (2): Art. No. 023803 AUG 6 2010

=====

103. G. S. Vasilev, A. Kuhn, and N. V. Vitanov
Optimum pulse shapes for stimulated Raman adiabatic passage
Phys. Rev. A 80, 013417(7) (2009)

66. Saha, Arindam; Sarma, Amarendra K.
Transitionless phonon assisted photon-qubit quantum state transfer in a hybrid optomechanical system
PHYSICS LETTERS A Volume: 393 Article Number: 127176 Published: MAR 26 2021

65. Zhang, Hao; Qin, Guo-Qing; Song, Xue-Ke; Long, Gui-Lu
Color-detuning-dynamics-based quantum sensing with dressed states driving

OPTICS EXPRESS Volume: 29 Issue: 4 Pages: 5358-5366 Published: FEB 15 2021

64. Li, Danyu; Zheng, Wen; Chu, Ji; Yang, Xiaopei; Song, Shuqing; Han, Zhikun; Dong, Yuqian; Wang, Zhimin; Yu, Xiangmin; Lan, Dong; Zhao, Jie; Li, Shaoxiong; Tan, Xinsheng; Yu, Yang
Coherent state transfer between superconducting qubits via stimulated Raman adiabatic passage
APPLIED PHYSICS LETTERS Volume: 118 Issue: 10 Article Number: 104003 Published: MAR 8 2021

63. Santos, Alan C.; Villas-Boas, C. J.; Bachelard, R.
Quantum adiabatic brachistochrone for open systems
PHYSICAL REVIEW A Volume: 103 Issue: 1 Article Number: 012206 Published: JAN 11 2021

62. Liu, Bao-Jie; Yung, Man-Hong
Coherent control with user-defined passage
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 025002 Published: APR 2021

61. Dogra, Shruti; Vepsalainen, Antti; Paraoanu, G. S.
Majorana representation of adiabatic and superadiabatic processes in three-level systems
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 4 Article Number: 043079 Published: OCT 15 2020

60. Wang, Rui; Ren, Feng-Hua; Gu, Yong-Jian; Wang, Zhao-Ming
Adiabatic speedup in cutting a spin chain by pulse control in a laboratory frame
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 9 Article Number: 280 Published: AUG 24 2020

59. Beterov, I. I.; Tret'yakov, D. B.; Entin, V. M.; Yakshina, E. A.; Ryabtsev, I. I.; Saffman, M.; Bergamini, S.
Application of adiabatic passage in Rydberg atomic ensembles for quantum information processing
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 18 Article Number: 182001 Published: SEP 28 2020

58. Chang, H-S; Zhong, Y. P.; Bienfait, A.; Chou, M-H; Conner, C. R.; Dumur, E.; Grebel, J.; Peairs, G. A.; Povey, R. G.; Satzinger, K. J.; Cleland, A. N.
Remote Entanglement via Adiabatic Passage Using a Tunably Dissipative Quantum Communication System
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 24 Article Number: 240502 Published: JUN 17 2020

57. M. Saffman, I. I. Beterov, A. Dalal, E. J. Pěez, and B. C. Sanders
Symmetric Rydberg controlled-Z gates with adiabatic pulses
PHYSICAL REVIEW A Volume: 101 Issue: 6 Article Number: 062309 Published: JUN 3 2020

56. Subhankar, S; Bienias, P; Titum, P; Tsui, TC; Wang, Y; Gorshkov, AV; Rolston, SL; Porto, JV
Floquet engineering of optical lattices with spatial features and periodicity below the diffraction limit
NEW JOURNAL OF PHYSICS Volume: 21 Issue: 11 Article Number: 113058 Published: NOV 2019

55. Fukushima, Kenji; Shimazaki, Takuya
Lefschetz-thimble inspired analysis of the Dykhne-Davis-Pechukas method and an application for the Schwinger Mechanism
ANNALS OF PHYSICS Volume: 415 Article Number: 168111 Published: APR 2020

54. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019

53. Yan, Ying; Li, Yichao; Kinos, Adam; Walther, Andreas; Shi, Chunyan; Rippe, Lars; Moser, Joel; Kroll, Stefan; Chen, Xi
Inverse engineering of shortcut pulses for high fidelity initialization on qubits closely spaced in frequency
OPTICS EXPRESS, 27 (6):8267-8282; 10.1364/OE.27.008267 MAR 18 2019

52. Kolbl, J; Barfuss, A; Kasperczyk, MS; Thiel, L; Clerk, AA; Ribeiro, H; Maletinsky, P
Initialization of Single Spin Dressed States using Shortcuts to Adiabaticity
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.090502 MAR 5 2019

51. Zhang, Hao; Song, Xue-Ke; Ai, Qing; Wang, Haibo; Yang, Guo-Jian; Deng, Fu-Guo
Fast and robust quantum control for multimode interactions using shortcuts to adiabaticity
OPTICS EXPRESS, 27 (5):7384-7392; 10.1364/OE.27.007384 MAR 4 2019
50. Leung, N; Lu, Y; Chakram, S; Naik, RK; Earnest, N; Ma, R; Jacobs, K; Cleland, AN; Schuster, DI
Deterministic bidirectional communication and remote entanglement generation between superconducting qubits
NPJ QUANTUM INFORMATION, 5 10.1038/s41534-019-0128-0 FEB 15 2019
49. Zhang, Li-Cheng; Ren, Feng-Hua; Chen, Yi-Fei; He, Run-Hong; Gu, Yong-Jian; Wang, Zhao-Ming
Adiabatic speedup via zero-energy-change control in a spin system
EPL, 125 (1):10.1209/0295-5075/125/10010 JAN 2019
48. Paspalakis, Emmanuel; Economou, Sophia E.; Carreno, Fernando
Adiabatically preparing quantum dot spin states in the Voigt geometry
JOURNAL OF APPLIED PHYSICS Volume: 125 Issue: 2 Article Number: 024305
Published: JAN 14 2019
47. Vepsalainen, A; Paraoanu, GS
Cross-coupling effects in circuit-QED stimulated Raman adiabatic passage
Journal of Physics Conference Series, 28th International Conference on Low Temperature Physics (LT28), Chalmers Univ Technol, Gothenburg, SWEDEN, 969 10.1088/1742-6596/969/1/012141 2018
46. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019
45. Zhao, Xinyu; Hu, Xuedong
Toward high-fidelity coherent electron spin transport in a GaAs double quantum dot
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-31879-4 SEP 18 2018
44. Zhang, Chun-Ling; Luo, Cheng-Li; Liu, Wen-Wu
Fast implementation of four-dimensional entangled state via transitionless quantum driving
OPTICS COMMUNICATIONS, 427 497-504; 10.1016/j.optcom.2018.06.080 NOV 15 2018
43. Zhang, Chun-Ling; Liu, Wen-Wu
Fast Implementation of Quantum Phase Gates and Creation of Cluster States via Transitionless Quantum Driving
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (8):2373-2387; 10.1007/s10773-018-3760-0 AUG 2018
42. Wang, Zhao-Ming; Byrd, Mark S.; Jing, Jun; Wu, Lian-Ao
Adiabatic leakage elimination operator in an experimental framework
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062312 JUN 8 2018
41. Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Invariant-based inverse engineering for fluctuation transfer between membranes in an optomechanical cavity system
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.023841 FEB 26 2018
40. Wang, Ying-Dan; Zhang, Rong; Yan, Xiao-Bo; Chesil, Stefano
Optimization of STIRAP-based state transfer under dissipation
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa7f5d SEP 28 2017
39. Zhang, Feng-Yang; Yang, Chui-Ping
Tunable coupling of spin ensembles
OPTICS LETTERS, 43 (3):466-469; 10.1364/OL.43.000466 FEB 1 2018
38. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017
37. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
36. Baksic, Alexandre; Belyansky, Ron; Ribeiro, Hugo; Clerk, Aashish A.
Shortcuts to adiabaticity in the presence of a continuum: Applications to itinerant quantum state transfer
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.021801 AUG 31 2017
35. Liu, Bao-Jie; Huang, Zhen-Hua; Xue, Zheng-Yuan; Zhang, Xin-Ding
Superadiabatic holonomic quantum computation in cavity QED
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.062308 JUN 5 2017
34. Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan; Zheng, Shi-Biao
Optimal shortcut approach based on an easily obtained intermediate Hamiltonian
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.062319 JUN 12 2017
33. Yang, Rong-Can; Ye, Li-Xiang; Lin, Xiu; Liu, Hong-Yu
Adiabatic Generation of N-quNit Singlet States with Cavity QED
SCIENTIFIC REPORTS, 7 10.1038/srep45756 APR 3 2017
32. Zhou, Brian B.; Baksic, Alexandre; Ribeiro, Hugo; Yale, Christopher G.; Heremans, F. Joseph; Jerger, Paul C.; Auer, Adrian; Burkard, Guido; Clerk, Aashish A.; Awschalom, David D.
Accelerated quantum control using superadiabatic dynamics in a solid-state lambda system
NATURE PHYSICS, 13 (4):330-334; 10.1038/NPHYS3967 APR 2017
31. Ribeiro, Hugo; Baksic, Alexandre; Clerk, Aashish A.
Systematic Magnus-Based Approach for Suppressing Leakage and Nonadiabatic Errors in Quantum Dynamics
PHYSICAL REVIEW X, 7 (1):10.1103/PhysRevX.7.011021 FEB 22 2017
30. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016
29. Thomasen, Andreas M. D.; Mukai, Tetsuya; Byrnes, Tim
Ultrafast coherent control of spinor Bose-Einstein condensates using stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.053636 NOV 30 2016
28. Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Xia, Yan; Song, Jie
Reverse engineering of a Hamiltonian by designing the evolution operators
SCIENTIFIC REPORTS, 6 10.1038/srep30151 JUL 22 2016
27. Ye, Li-Xiang; Lin, Xiu; Chen, Xiang; He, Juan; Yang, Rong-Can; Liu, Hong-Yu
Generation of GHZ states with invariant-based shortcuts
QUANTUM INFORMATION PROCESSING, 15 (7):2785-2796; 10.1007/s11128-016-1303-2 JUL 2016
26. Baksic, Alexandre; Ribeiro, Hugo; Clerk, Aashish A.
Speeding up Adiabatic Quantum State Transfer by Using Dressed States
PHYSICAL REVIEW LETTERS, 116 (23):10.1103/PhysRevLett.116.230503 JUN 9 2016
25. Beterov, Il; Saffman, M; Yakshina, EA; Tretyakov, DB; Entin, VM; Hamzina, GN; Ryabtsev, II
Simulated quantum process tomography of quantum gates with Rydberg superatoms
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 49 (11):10.1088/0953-4075/49/11/114007 JUN 14 2016
24. Xu, H. K.; Song, C.; Liu, W. Y.; Xue, G. M.; Su, F. F.; Deng, H.; Tian, Ye; Zheng, D. N.; Han, Siyuan; Zhong, Y. P.; Wang, H.; Liu, Yu-Xi; Zhao, S. P.
Coherent population transfer between uncoupled or weakly coupled states in ladder-type superconducting qutrits
NATURE COMMUNICATIONS, 7 10.1038/ncomms11018 MAR 2016
23. Kumar, KS; Vepsalainen, A; Danilin, S; Paraoanu, GS
Stimulated Raman adiabatic passage in a three-level superconducting circuit
NATURE COMMUNICATIONS, 7 10.1038/ncomms10628 FEB 2016
22. Dong, Daoyi; Mabrok, Mohamed A.; Petersen, Ian R.; Qi, Bo; Chen, Chunlin; Rabitz, Herschel
Sampling-Based Learning Control for Quantum Systems With Uncertainties
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY, 23 (6):2155-2166; 10.1109/TCST.2015.2404292 NOV 2015
21. Sun, Yuan; Metcalf, Harold
Nonadiabaticity in stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033408 SEP 10 2014
20. Bruschi, David Edward; Barlow, Thomas M.; Razavi, Mohsen; Beige, Almut
Repeat-until-success quantum repeaters

19. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

18. Zhang Wen-Jing; Xie Xiao-Tao; Jin Lu-Ling; Bai Jin-Tao
Ultrafast population transfer in a Lambda-configuration level system driven by few-cycle laser pulses
CHINESE PHYSICS B, 22 (11):10.1088/1674-1056/22/11/114210 NOV 2013

17. Torrontegui, Erik; Ibanez, Sara; Martinez-Garaot, Sofia; Modugno, Michele; del Campo, Adolfo; Guery-Odelin, David; Ruschhaupt, Andreas; Chen, Xi; Gonzalo Muga, Juan
Shortcuts to Adiabaticity
Editor(s): Arimondo E; Berman PR; Lin CC
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 62, 62 117-169; 10.1016/B978-0-12-408090-4.00002-5 2013

16. Kamsap, MR; Ekogo, TB; Pedregosa-Gutierrez, J; Hagel, G; Houssin, M; Morizot, O; Knoop, M; Champenois, C
Coherent internal state transfer by a three-photon STIRAP-like scheme for many-atom samples
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (14):10.1088/0953-4075/46/14/145502 JUL 28 2013

15. Buecker, Robert; Berrada, Tarik; van Frank, Sandrine; Schaff, Jean-Francois; Schumm, Thorsten; Schmiedmayer, Joerg; Jaeger, Georg; Grond, Julian; Hohenester, Ulrich
Vibrational state inversion of a Bose-Einstein condensate: optimal control and state tomography
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (10):SI 10.1088/0953-4075/46/10/104012 MAY 28 2013

14. Tseng, Shuo-Yen; Chen, Xi
Engineering of fast mode conversion in multimode waveguides
OPTICS LETTERS, 37 (24):5118-5120; DEC 15 2012

13. Wang, Ying-Dan ; Clerk, Aashish A.
Using dark modes for high-fidelity optomechanical quantum state transfer
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/10/105010 OCT 10 2012

12. Lin, Tzung-Yi; Hsiao, Fu-Chen; Jhang, Yao-Wun; et al.
Mode conversion using optical analogy of shortcut to adiabatic passage in engineered multimode waveguides
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 24085-24092 Published: OCT 8 2012

11. Porat, Gil; Arie, Ady
Efficient two-process frequency conversion through a dark intermediate state
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (10):2901-2909; OCT 2012

10. Chen, Xi; Muga, J. G.
Engineering of fast population transfer in three-level systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033405 SEP 6 2012

9. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012

8. Torrontegui, E; Martinez-Garaot, S; Ruschhaupt, A; Muga, JG
Shortcuts to adiabaticity: Fast-forward approach
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.013601 JUL 3 2012

7. Dridi, G; Guerin, S
Adiabatic passage for a lossy two-level quantum system by a complex time method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (18):10.1088/1751-8113/45/18/185303 MAY 11 2012

6. Schaff, Jean-Francois; Capuzzi, Pablo; Labeyrie, Guillaume; Vignolo, Patrizia
Shortcuts to adiabaticity for trapped ultracold gases
NEW JOURNAL OF PHYSICS, 13 10.1088/1367-2630/13/11/113017 NOV 11 2011

5. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness

4. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)

3. Schaff, JF; Song, XL; Capuzzi, P; Vignolo, P; Labeyrie, G
Shortcut to adiabaticity for an interacting Bose-Einstein condensate
EPL 93 (2): Art. No. 23001 JAN 2011

2. Ginzburg, P; Shalyt, M; Hayat, A; Orenstein, M
Photon-energy qubit generation by spontaneous emission in a V-type system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 43 (10): Art. No. 105502 MAY 28 2010

1. Dridi, G; Guerin, S; Hakobyan, V; Jauslin, HR; Eleuch, H
Ultrafast Raman parallel adiabatic passage by shaped pulses
PHYSICAL REVIEW A 80 (4): Art. No. 043408 OCT 2009

=====

104. V. Yannopoulos, E. Paspalakis and N. V. Vitanov
Plasmon-Induced Enhancement of Quantum Interference Near Metallic Nanostructures
Phys. Rev. Lett. 103, 063602(4) (2009)

83. Vafafard, A., Sahrai, M., Asadpour, S.H., Faizabadi, E.
Tunable magneto-optical Faraday rotation with a five-level atomic system near the plasmonic nanostructure Journal of the Optical Society of America B: Optical Physics 38(6), pp. 1892-18 (2021)

82. Crispin, H. B.
Simulating quantum interference effects in the fluorescence of a V-system with perpendicular dipole moments
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 7 Article Number: 075402 Published: APR 7 2021

81. Zhuo, Zhiyao; Chen, Hao; Huang, Junhui; Li, Shulun; Wang, Jian; Ding, Kun; Ni, Haiqiao; Niu, Zhichuan; Jiang, Desheng; Dou, Xiuming; Sun, Baoquan
Self-Induced Dark States in Two-Dimensional Excitons
JOURNAL OF PHYSICAL CHEMISTRY LETTERS Volume: 12 Issue: 14 Pages: 3485-3489 Published: APR 15 2021

80. Li, Jiahua; Shen, Shuting; Ding, Chunling; Wu, Ying
Magnetically induced optical transparency in a plasmon-exciton system
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053706 Published: MAY 12 2021

79. Chen, L., Li, Z., Cheng, H., Tian, J., Chen, S.
Progress of Metasurface-Enabled Preparation and Manipulation of Quantum States
Guangxue Xuebao/Acta Optica Sinica 41(8), 0823016 (2021)

78. Vafafard, Azar; Sahrai, Mostafa; Siahpoush, Vahid; Hamed, Hamid Reza; Asadpour, Seyyed Hossein
Optically induced diffraction gratings based on periodic modulation of linear and nonlinear effects for atom-light coupling quantum systems near plasmonic nanostructures
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 16684 Published: OCT 7 2020

77. Kh Gainutdinov, R., Garifullin, A.I., Khamadeev, M.A., Kh Salakhov, M.
Quantum interference via nonradiative transitions between energy levels of atoms in one-dimensional photonic crystals
Journal of Physics: Conference Series 1628(1), 012006 (2020)

76. Zhang, Qi; Hao, He; Ren, Juanjuan; Zhang, Fan; Gong, Qihuang; Gu, Ying
A quantum phase gate capable of effectively collecting photons based on a gap plasmon structure
NANOSCALE Volume: 12 Issue: 18 Pages: 10082-10089 Published: MAY 14 2020

75. Abad, Mohsen Ghaderi Goran; Mahmoudi, Mohammad
Atom-photon entanglement near a plasmonic nanostructure
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 135 Issue: 4 Article Number: 352 Published: APR 7 2020

74. Yildiz, Bilge Can; Bek, Alpan; Tasgin, Mehmet Emre
Plasmon lifetime enhancement in a bright-dark mode coupled system
PHYSICAL REVIEW B Volume: 101 Issue: 3 Article Number: 035416

Published: JAN 16 2020

73. Lassalle, Emmanuel; Lalanne, Philippe; Aljunid, Syed; Genevet, Patrice; Stout, Brian; Durt, Thomas; Wilkowsky, David
Long-lifetime coherence in a quantum emitter induced by a metasurface
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 013837
Published: JAN 31 2020

72. Sahu, Partha Pratim
A Compact Surface Plasmonics Polariton Quantum Entanglement Device
PLASMONICS, 14 (4):875-879; 10.1007/s11468-018-0869-1 AUG 2019

71. Zeng, Xiaodong; Li, Zhenghong; Ge, Guo-Qin; Zubairy, M. Suhail
Quantum interference near graphene layers: Observing the surface plasmons with transverse electric polarization
PHYSICAL REVIEW A, 99 (4):10.1103/PhysRevA.99.043811 APR 10 2019

70. Ranjbar, Amir Hossein; Mortezaipoor, Aei
Electromagnetically induced gain-phase grating in a double V-type quantum system
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, 36 (4):549-555; 10.1364/JOSAA.36.000549 APR 1 2019

69. Szychowski, Brian; Pelton, Matthew; Daniel, Marie-Christine
Preparation and properties of plasmonic-excitonic nanoparticle assemblies
NANOPHOTONICS, 8 (4):517-547; SI 10.1515/nanoph-2018-0168 APR 2019

68. Varguet, H; Rousseaux, B; Dzsotjan, D; Jauslin, HR; Guerin, S; des Francs, GC
Non-hermitian Hamiltonian description for quantum plasmonics: from dissipative dressed atom picture to Fano states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52 (5):10.1088/1361-6455/ab008e MAR 14 2019

67. Miscuglio, Mario; Mehrabian, Armin; Hu, Zibo; Azzam, Shaimaa, I; George, Jonathan; Kildishev, Alexander, V; Pelton, Matthew; Sorger, Volker J.
All-optical nonlinear activation function for photonic neural networks
OPTICAL MATERIALS EXPRESS, 8 (12):3851-3863; 10.1364/OME.8.003851 DEC 1 2018

66. Asadpour, S. Hossein; Panahpour, Ali; Jafari, Mahmoud
Phase-dependent electromagnetically induced grating in a four-level quantum system near a plasmonic nanostructure
EUROPEAN PHYSICAL JOURNAL PLUS, 133 (10):10.1140/epjp/i2018-12221-9 OCT 12 2018

65. Talkhabi, Hamid; Mortezaipoor, Ali
Gain-Assisted Magneto-Optical Rotation in a Four-Level Quantum System Near a Plasmonic Nanostructure
PLASMONICS, 13 (4):1243-1253; 10.1007/s11468-017-0626-x AUG 2018

64. Ren, X., Jha, P.K., Wang, Y., Zhang, X.
Nonconventional metasurfaces: From non-Hermitian coupling, quantum interactions, to skin cloak
Nanophotonics 7(6), pp. 1233-1243 (2018)

63. Asadpour, Seyyed Hossein; Jafari, Mahmoud
Plasmon-induced phase grating via nonlinear modulation
OPTICS COMMUNICATIONS, 421 125-133; 10.1016/j.optcom.2018.03.055 AUG 15 2018

62. Neuman, Tomas; Esteban, Ruben; Casanova, David; Garcia-Vidal, Francisco J.; Aizpurua, Javier
Coupling of Molecular Emitters and Plasmonic Cavities beyond the Point-Dipole Approximation
NANO LETTERS, 18 (4):2358-2364; 10.1021/acs.nanolett.7b05297 APR 2018

61. Souza, LC; Silva, ACA; Dantas, NO; Morais, PC; da Silva, SW
Plasmonic-excitonic multi-hybrid glass-based nanocomposites incorporating Ag plus core-shell CdSe/CdS and alloyed CdSxSe1-x nanoparticles
CERAMICS INTERNATIONAL, 44 (1):208-215; 10.1016/j.ceramint.2017.09.160 JAN 2018

60. Chen, Hongyi; Zhang, Fan; Zhao, Dongxing; Zhang, Junxiang; Xu, Jingping; He, Qiongyi; Gong, Qihuang; Gu, Ying
Surface-plasmon-enhanced quantum field entanglement through anisotropic Purcell factors
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043865 OCT 30 2017

59. Li Ming; Chen Yang; Guo Guang-Can; Ren Xi-Feng
Recent progress of the application of surface plasmon polariton in quantum

information processing
ACTA PHYSICA SINICA, 66 (14):SI 10.7498/aps.66.144202 JUL 20 2017

58. Zhao, S.-C., Li, X., Yang, P., Wu, Q.-X.
Dual peaks evolving into a single-peak for sub-wavelength 2-D atom localization in a V-type atomic system
Chinese Journal of Physics 55(3), pp. 1055-1061 (2017)

57. Shiri, Jalil; Malakzadeh, Abdollah
Controlling the optical properties of a laser pulse at $\lambda=1.55 \mu\text{m}$ in InGaAs/InP double coupled quantum well nanostructure
JOURNAL OF THE EUROPEAN OPTICAL SOCIETY-RAPID PUBLICATIONS, 13 10.1186/s41476-017-0047-7 AUG 14 2017

56. Harouni, M. Bagheri; Abadi, M. Rafieian Najaf
Photon Statistics of a Hybrid Quantum Dot-Metal Nanoparticle Cluster
PLASMONICS, 12 (1):1-8; 10.1007/s11468-016-0221-6 FEB 2017

55. Yang, Hong; Zhang, Ting-gui; Zhang, Yan
Probe gain via four-wave mixing based on spontaneously generated coherence
CHINESE PHYSICS B, 26 (2):10.1088/1674-1056/26/2/024204 FEB 2017

54. Solookinejad, Gh; Jabbari, M.; Panahi, M.; et al.
Slow and fast light propagation in a defect slab doped with polaritonic materials and nanoparticles
LASER PHYSICS Volume: 26 Issue: 12 Article Number: 125201 Published: DEC 2016

53. Harouni, M. Bagheri; Abadi, M. Rafieian Najaf
Photon Statistics of a Hybrid Quantum Dot-Metal Nanoparticle Cluster
PLASMONICS, 12 (1):1-8; 10.1007/s11468-016-0221-6 FEB 2017

52. Shiri, J; Malakzadeh, A
Phase controllable terahertz switch in a Landau-quantized graphene nanostructure
LASER PHYSICS, 27 (1):10.1088/1555-6611/aa4f89 JAN 2017

51. Solookinejad, Gh.; Panahi, M.; Sangachin, E. Ahmadi; Asadpour, Seyyed Hossein
Plasmonic structure induced giant Goos-Hanchen shifts in a four-level quantum system
CHINESE JOURNAL OF PHYSICS, 54 (5):651-658; 10.1016/j.cjph.2016.07.013 OCT 2016

50. Solookinejad, G.; Panahi, M.; Sangachin, E. Ahmadi; Asadpour, Seyyed Hossein
Plasmonic nanostructure induced simultaneous slow and fast light propagation in a slab doped by four-level quantum dots
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 25 (3):10.1142/S0218863516500314 SEP 2016

49. Ren, Juanjuan; Chen, Hongyi; Gu, Ying; Zhao, Dongxing; Zhou, Haitao; Zhang, Junxiang; Gong, Qihuang
Plasmon-enhanced Kerr nonlinearity via subwavelength-confined anisotropic Purcell factors
NANOTECHNOLOGY, 27 (42):10.1088/0957-4484/27/42/425205 OCT 21 2016

48. Zhang, Yan; Liu, Yi-Mou; Zheng, Tai-Yu; Wu, Jin-Hui
Light reflector, amplifier, and splitter based on gain-assisted photonic band gaps
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013836 JUL 19 2016

47. Bao, C., Qi, Y., Niu, Y., Gong, S.
Surface plasmon-assisted optical bistability in the quantum dot-metal nanoparticle hybrid system
Journal of Modern Optics 63(13), pp. 1280-1285 (2016)

46. Zhu, Pengyu; Tian, Wenying; Cheng, Nan; Huang, Kunlun; Luo, Yunbo; Xu, Wentao
Ultra-sensitive "turn-on" detection method for Hg²⁺ based on mispairing biosensor and emulsion PCR
TALANTA, 155 168-174; 10.1016/j.talanta.2016.04.026 AUG 1 2016

45. Sun, Lu; Jiang, Chun
Quantum interference in a single anisotropic quantum dot near hyperbolic metamaterials
OPTICS EXPRESS, 24 (7):7719-7727; 10.1364/OE.24.007719 APR 4 2016

44. Jabbari, M
Goos-Hanchen shifts in a four-level quantum system near plasmonic nanostructure
PHYSICA B-CONDENSED MATTER, 488 13-18; 10.1016/j.physb.2016.02.016 MAY 1

- 2016
43. Asadpour, Seyyed Hossein; Soleimani, H. Rahimpour
Phase dependence of optical bistability and multistability in a four-level quantum system near a plasmonic nanostructure
JOURNAL OF APPLIED PHYSICS, 119 (2):10.1063/1.4939776 JAN 14 2016
42. Xu, Jingping; Chang, Shenglong; Yang, Yaping; Al-amri, M.
Casimir-Polder force on a V-type three-level atom near a structure containing left-handed materials
PHYSICAL REVIEW A, 93 (1):10.1103/PhysRevA.93.012514 JAN 21 2016
41. Fang, Wei; Yang, Zi-xin; Li, Gao-xiang
Quantum properties of an atom in a cavity constructed by topological insulators
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (24):10.1088/0953-4075/48/24/245504 DEC 28 2015
40. Asadpour, Seyyed Hossein; Soleimani, H. Rahimpour
Optical bistability and multistability in a four-level quantum system in the presence of plasmonic nanostructure
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, 75 112-117; 10.1016/j.physe.2015.09.011 JAN 2016
39. Zhao, Dongxing; Gu, Ying; Chen, Hongyi; Ren, Juanjuan; Zhang, Tiancai; Gong, Qihuang
Quantum statistics control with a plasmonic nanocavity: Multimode-enhanced interferences
PHYSICAL REVIEW A, 92 (3):10.1103/PhysRevA.92.033836 SEP 18 2015
38. Jha, Pankaj K.; Ni, Xingjie; Wu, Chihhui; Wang, Yuan; Zhang, Xiang
Metasurface-Enabled Remote Quantum Interference
PHYSICAL REVIEW LETTERS, 115 (2):10.1103/PhysRevLett.115.025501 JUL 6 2015
37. Itoh, Tamitake
Experimental Demonstration of Electromagnetic Mechanism of SERS and Quantitative Analysis of SERS Fluctuation Based on the Mechanism
FRONTIERS OF SURFACE-ENHANCED RAMAN SCATTERING: SINGLE NANOPARTICLES AND SINGLE CELLS, 59-87; 2014 Edited by: Ozaki Y; Kneipp K; Aroca R
36. Asadpour, Seyyed Hossein; Hamed, H. R.; Soleimani, H. Rahimpour
Role of incoherent pumping field on absorption-dispersion properties of probe pulse in a graphene nanostructure under external magnetic field
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, 71 123-129; 10.1016/j.physe.2015.03.014 JUL 2015
35. Zhao, Dongxing; Wu, Jiarui; Gu, Ying; Gong, Qihuang
Tailoring double Fano profiles with plasmon-assisted quantum interference in hybrid exciton-plasmon system
APPLIED PHYSICS LETTERS, 105 (11):10.1063/1.4896294 SEP 15 2014
34. Xu, Jingping; Alamri, M.; Yang, Yaping; Zhu, Shi-Yao; Zubairy, M. Suhail
Casimir-Polder force on a two-level atom in a structure containing metamaterials
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053831 MAY 27 2014
33. Song, Ge; Xu, Jingping; Yang, Yaping
Quantum interference between Zeeman levels near structures made of left-handed materials and matched zero-index metamaterials
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053830 MAY 27 2014
32. Hakami, Jabir; Wang, Ligang; Zubairy, M. Suhail
Spectral properties of a strongly coupled quantum-dot-metal-nanoparticle system
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053835 MAY 28 2014
31. Itoh, Tamitake; Yamamoto, Yuko S.; Tamaru, Hiroharu; Biju, Vasudevanpillai; Murase, Norio; Ozaki, Yukihiro
Excitation laser energy dependence of surface-enhanced fluorescence showing plasmon-induced ultrafast electronic dynamics in dye molecules
PHYSICAL REVIEW B, 87 (23):10.1103/PhysRevB.87.235408 JUN 10 2013
30. Agarwal, Girish S.
Coherent control of the optical properties
QUANTUM OPTICS, 385-412; 2013
29. Tame, MS; McEnery, KR; Ozdemir, SK; Lee, J; Maier, SA; Kim, MS
Quantum plasmonics
NATURE PHYSICS, 9 (6):329-340; 10.1038/NPHYS2615 JUN 2013
28. Mortezaipour, A; Saleh, A; Mahmoudi, M
Birefringence enhancement via quantum interference in the presence of a static magnetic field
LASER PHYSICS, 23 (6):10.1088/1054-660X/23/6/065201 JUN 2013
27. Singh, Mahi R.
Enhancement of the second-harmonic generation in a quantum dot-metallic nanoparticle hybrid system
NANOTECHNOLOGY Volume: 24 Issue: 12 Article Number: 125701 DOI: 10.1088/0957-4484/24/12/125701 Published: MAR 29 2013
26. Chen LuZhou; Huang YongGang; Jin ChongJun; Wang XueHua
Dynamic and steady control of quantum coherence in photonic crystals via the Zeeman effect
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 55 (12):2300-2304; 10.1007/s11433-012-4935-y DEC 2012
25. Dutta, Bibhas Kumar; Panchadhyayee, Pradipta; Mahapatra, Prasanta Kumar
Phase coherence and Rabi frequency induced ultranarrow spectral line
PHYSICS LETTERS A, 376 (45):3439-3444; 10.1016/j.physleta.2012.08.018 OCT 1 2012
24. Cox, J.D., Singh, M.R., Gumbs, G., Anton, M.A., Carreno, F.
Dipole-dipole interaction between a quantum dot and a graphene nanodisk
Physical Review B - Condensed Matter and Materials Physics 86(12),125452 (2012)
23. Liu, Z.-b., Tong, D.-m., Fan, X.-j.
Effect of SGC on transient evolution of GWI in a Doppler broadened quasi Lambda-type four-level system
Optoelectronics Letters 8(5), pp. 393-396 (2012)
22. Singh, Mahi R.; Racknor, Chris; Schindel, Daniel
Controlling the photoluminescence of acceptor and donor quantum dots embedded in a nonlinear photonic crystal
APPLIED PHYSICS LETTERS, 101 (5):10.1063/1.4742197 JUL 30 2012
21. Tian Si-Cong; Wang Chun-Liang; Kang Zhi-Hui; Yang Xiu-Bin; Wan Ren-Gang; Zhang Xiao-Jun; Zhang Hang; Jiang Yun; Cui Hai-Ning; Gao Jin-Yue
Observation of linewidth narrowing due to a spontaneously generated coherence effect
CHINESE PHYSICS B, 21 (6):10.1088/1674-1056/21/6/064206 JUN 2012
20. Gu, Ying; Wang, Luojia; Ren, Pan; Zhang, Junxiang; Zhang, Tiancai; Martin, Olivier J. F.; Gong, Qihuang
Surface-Plasmon-Induced Modification on the Spontaneous Emission Spectrum via Subwavelength-Confined Anisotropic Purcell Factor
NANO LETTERS, 12 (5):2488-2493; 10.1021/nl300655n MAY 2012
19. Tian, Si-Cong; Wan, Ren-Gang; Kang, Zhi-Hui; Zhang, Hang; Jiang, Yun; Cui, Hai-Ning; Gao, Jin-Yue
Gain spectrum of a laser-driven tripod-type atom dynamically induced in the presence of spontaneously generated coherence
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 29 (5):881-890; MAY 1 2012
18. Wang, Chun-Liang; Meng, Yan-Li
Effects of spontaneously generated coherence on resonance fluorescence in a microwave-driven four-level atomic system
OPTICS COMMUNICATIONS, 285 (10-11):2632-2637; 10.1016/j.optcom.2012.02.010 MAY 15 2012
17. Gu, Ying; Wang, Luojia; Ren, Pan; Zhang, Junxiang; Zhang, Tiancai; Xu, Jing-Ping; Zhu, Shi-Yao; Gong, Qihuang
Intrinsic Quantum Beats of Atomic Populations and Their Nanoscale Realization Through Resonant Plasmonic Antenna
PLASMONICS, 7 (1):33-38; 10.1007/s11468-011-9272-x MAR 2012
16. Sanchez-Munoz, C; Gonzalez-Tudela, A; Tejedor, C
Plasmon-polariton emission from a coherently p-excited quantum dot near a metal interface
PHYSICAL REVIEW B, 85 (12):10.1103/PhysRevB.85.125301 MAR 6 2012
15. Xu, Jun; Yang, Shuai; Hu, Xiang-ming; Zubairy, M. Suhail
Coherent control of spontaneous emission: Effect of counter-rotating terms
PHYSICS LETTERS A, 376 (4):297-304; 10.1016/j.physleta.2011.10.052 JAN 9 2012
14. Hatef, Ali; Sadeghi, Seyed M.; Singh, Mahi R.
Plasmonic electromagnetically induced transparency in metallic nanoparticle-quantum dot hybrid systems
NANOTECHNOLOGY, 23 (6):10.1088/0957-4484/23/6/065701 FEB 12 2012
13. Zhao ShunCai

Negative refraction with absorption suppressed by electromagnetically induced transparency in a left-handed atomic system
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 55 (2):213-218;
10.1007/s11433-011-4622-4 FEB 2012

12. Tian, Si-Cong; Kang, Zhi-Hui; Wang, Chun-Liang; Wan, Ren-Gang; Kou, Jun; Zhang, Hang; Jiang, Yun; Cui, Hai-Ning; Gao, Jin-Yue
Observation of spontaneously generated coherence on absorption in rubidium atomic beam
OPTICS COMMUNICATIONS, 285 (3):294-299; 10.1016/j.optcom.2011.09.031 FEB 1 2012

11. Tserkezis, C., Stefanou, N.
Negative refraction in plasmonic crystals of metallic nanoshells
Metamaterials 5(4), pp. 169-177 (2011)

10. Singh, Mahi R.; Schindel, Daniel G.; Hatef, Ali
Dipole-dipole interaction in a quantum dot and metallic nanorod hybrid system
APPLIED PHYSICS LETTERS 99 (18): 10.1063/1.3658395 OCT 31 2011

9. Zeng, Xiaodong; Xu, Jingping; Yang, Yaping
Spontaneous emission interference enhancement with a mu-negative metamaterial slab
PHYSICAL REVIEW A 84 (3): 10.1103/PhysRevA.84.033834 SEP 19 2011

8. Gao, Jin-Wei; Bao, Qian-Qian; Wan, Ren-Gang; Cui, Cui-Li; Wu, Jin-Hui
Triple photonic band-gap structure dynamically induced in the presence of spontaneously generated coherence
PHYSICAL REVIEW A 83 (5): Art. No. 053815 MAY 10 2011

7. Li, Zheng-Hong; Wang, Da-Wei; Zheng, Hang; Zhu, Shi-Yao; Zubairy, M. Suhail
Quantum interference due to energy shifts and its effect on spontaneous emission
PHYSICAL REVIEW A 82 (5): Art. No. 050501 NOV 3 2010

6. Gonzalez-Tudela, A; Rodriguez, FJ; Quiroga, L; Tejedor, C
Dissipative dynamics of a solid-state qubit coupled to surface plasmons: From non-Markov to Markov regimes
PHYSICAL REVIEW B 82 (11): Art. No. 115334 SEP 30 2010

5. Zhao, S.-C., Liu, Z.-D., Wu, Q.-X.
Negative refraction without absorption via both coherent and incoherent fields in a four-level left-handed atomic system
Optics Communications 283(17), pp. 3301-3304 (2010)

4. Das, Sumanta; Agarwal, G. S.
Protecting bipartite entanglement by quantum interferences
PHYSICAL REVIEW A 81 (5): Art. No. 052341 MAY 2010

3. Gao, Jin-Wei; Zhang, Yan; Ba, Nuo; Cui, Cui-Li; Wu, Jin-Hui
Dynamically induced double photonic bandgaps in the presence of spontaneously generated coherence
OPTICS LETTERS 35 (5): 709-711 MAR 1 2010

2. Kiffner, M.; Macovei, M.; Evers, J.; et al.
Vacuum-Induced Processes in Multilevel Atoms
PROGRESS IN OPTICS, VOL 55 Edited by: Wolf, E Book Series: Progress in Optics Volume: 55 Pages: 85-197 Published: 2010

1. Wang, C.-L.
Investigation on spontaneously generated coherence
Chinese Optics 3(1), pp. 11-26 (1020)

=====

105. B. T. Torosov and N. V. Vitanov
Design of quantum Fourier transforms and quantum algorithms by using circulant Hamiltonians
Phys. Rev. A 80, 022329(5) (2009)

4. Mohammadbagherpoor, Hamed; Oh, Young-Hyun; Dreher, Patrick; Singh, Anand; Yu, Xianqing; Rindos, Andy J.
An Improved Implementation Approach for Quantum Phase Estimation on Quantum Computers
PROCEEDINGS OF THE 2019 FOURTH IEEE INTERNATIONAL CONFERENCE ON REBOOTING COMPUTING (ICRC) Pages: 54-62 Published: 2019

3. Chapeau-Blondeau, Francois; Belin, Etienne
Fourier-transform quantum phase estimation with quantum phase noise
SIGNAL PROCESSING Volume: 170 Article Number: UNSP 107441 Published:

MAY 2020

2. Jamiolkowski, Andrzej; Kamizawa, Takeo; Pastuszak, Grzegorz
On Invariant Subspace in Quantum Control Systems and Some Concepts of Integrable Quantum Systems
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 54 (8):2662-2674;
10.1007/s10773-014-2498-6 AUG 2015

1. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

=====

106. V. Yannopoulos and N. V. Vitanov
First-Principles Study of Casimir Repulsion in Metamaterials
Phys. Rev. Lett. 103, 120401(4) (2009)

49. Zhu, Tao; Antezza, Mauro; Wang, Jian-Sheng
Dynamical polarizability of graphene with spatial dispersion
PHYSICAL REVIEW B Volume: 103 Issue: 12 Article Number: 125421
Published: MAR 22 2021

48. Gong, Tao; Corrado, Matthew R.; Mahbub, Ahmed R.; Shelden, Calum; Munday, Jeremy N.
Recent progress in engineering the Casimir effect - applications to nanophotonics, nanomechanics, and chemistry
NANOPHOTONICS Volume: 10 Issue: 1 Special Issue: SI Pages: 523-536
Published: JAN 2021

47. Chen, Liang; Chang, Kai
Chiral-Anomaly-Driven Casimir-Lifshitz Torque between Weyl Semimetals
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 4 Article Number: 047402
Published: JUL 24 2020

46. Zhang, Hao-Zhe; Zhu, Xing-Feng
An acoustic invisible medium: A first-principles study
INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 34 Issue: 12
Article Number: 2050126 Published: MAY 10 2020

45. Jiang, Qing-Dong; Wilczek, Frank
Chiral Casimir forces: Repulsive, enhanced, tunable
PHYSICAL REVIEW B, 99 (12):10.1103/PhysRevB.99.125403 MAR 4 2019

44. Song, Ge; Zeng, Ran; Al-Amri, M.; Xu, Jingping; Zhu, Chengjie; He, Pengfei; Yang, Yaping
Repulsive Casimir force between hyperbolic metamaterials
OPTICS EXPRESS, 26 (26):34461-34473; 10.1364/OE.26.034461 DEC 24 2018

43. Abrantes, PP; Franca, Y; da Rosa, FSS; Farina, C; Souza, RDE
Repulsive van der Waals interaction between a quantum particle and a conducting toroid
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.012511 JUL 27 2018

42. Silveirinha, Mario G.; Gangaraj, S. Ali Hassani; Hanson, George W.; Antezza, Mauro
Fluctuation-induced forces on an atom near a photonic topological material
PHYSICAL REVIEW A, 97 (2):10.1103/PhysRevA.97.022509 FEB 20 2018

41. Hu, Qian; Ye, Yingqi; Zhao, Qian; Meng, Yonggang
Casimir repulsion in superparamagnetic metamaterial constructed by non-monodisperse nanoparticles
JOURNAL OF PHYSICS-CONDENSED MATTER, 30 (8):10.1088/1361-648X/aaa6a5 FEB 28 2018

40. Zhu, XingFeng; Wei, Qi; Cheng, Ying; Wu, Dalian; Liu, XiaoJun
Perfect monochromatic acoustic anti-reflection: A first-principles study
JOURNAL OF APPLIED PHYSICS, 121 (9):10.1063/1.4977847 MAR 7 2017

39. Song, Ge; Xu, Jingping; Zhu, Chengjie; He, Pengfei; Yang, Yaping; Zhu, Shi-Yao
Casimir force between hyperbolic metamaterials
PHYSICAL REVIEW A, 95 (2):10.1103/PhysRevA.95.023814 FEB 7 2017

38. Woods, LM; Dalvit, DAR; Tkatchenko, A; Rodriguez-Lopez, P; Rodriguez, AW; Podgornik, R
Materials perspective on Casimir and van der Waals interactions
REVIEWS OF MODERN PHYSICS, 88 (4):10.1103/RevModPhys.88.045003 NOV 2 2016

37. Morgado, Tiago A.; Silveirinha, Mario G.
Single-interface Casimir torque
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/10/103030 OCT 19 2016
36. Keil, Mark; Amit, Omer; Zhou, Shuyu; Groswasser, David; Japha, Yonathan; Folman, Ron
Fifteen years of coldmatter on the atom chip: promise, realizations, and prospects
JOURNAL OF MODERN OPTICS, 63 (18):1840-1885; SI 10.1080/09500340.2016.1178820 2016
35. Rohde, Ulrich L.; Poddar, Ajay K.
Mobius Metamaterial Strips: Opportunity, Trends, Challenges and Future
MICROWAVE JOURNAL, 59 (7):62-+; JUL 2016
34. Yuan, Qi-Zhang
Repulsive Casimir-Polder potential by a negative reflecting surface
PHYSICAL REVIEW A, 92 (1):10.1103/PhysRevA.92.012522 JUL 28 2015
33. Inui, Norio
Leviton of a metallic sphere near gas-liquid and liquid-liquid interfaces by the repulsive Casimir force
PHYSICAL REVIEW A, 89 (6):10.1103/PhysRevA.89.062506 JUN 12 2014
32. Pappakrishnan, Venkatesh K.; Mundru, Patabhiraju C.; Genov, Dentcho A.
Repulsive Casimir force in magnetodielectric plate configurations
PHYSICAL REVIEW B, 89 (4):10.1103/PhysRevB.89.045430 JAN 31 2014
31. Ma, Junming; Zhao, Qian; Meng, Yonggang
Magnetically controllable Casimir force based on a superparamagnetic metamaterial
PHYSICAL REVIEW B Volume: 89 Issue: 7 Article Number: 075421 Published: FEB 19 2014
30. Khoo, Y. Y.; Ooi, C. H. Raymond
Casimir Force Control with Optical Kerr Effect
SAINS MALAYSIANA, 42 (12):1799-1803; DEC 2013
29. Haakh, Harald R.; Intravaia, Francesco
Mode structure and polaritonic contributions to the Casimir effect in a magnetodielectric cavity
PHYSICAL REVIEW A, 88 (5):10.1103/PhysRevA.88.052503 NOV 8 2013
28. Morgado, Tiago A.; Maslovski, Stanislav I.; Silveirinha, Mario G.
Ultrahigh Casimir interaction torque in nanowire systems
OPTICS EXPRESS, 21 (12):14943-14955; 10.1364/OE.21.014943 JUN 17 2013
27. Inui, Norio
Asymptotic Behavior of the Casimir Force between Arrays of Planar Scatterers in the Large Separation Regime
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN, 82 (5):10.7566/JPSJ.82.054002 MAY 2013
26. Ooi, C. H. Raymond; Khoo, Y. Y.
Controlling the repulsive Casimir force with the optical Kerr effect
PHYSICAL REVIEW A, 86 (6):10.1103/PhysRevA.86.062509 DEC 17 2012
25. Cui, Song; Soh, Yeng Chai
Electrostatic calibration method for large-amplitude dynamic Casimir force measurements
PHYSICAL REVIEW A, 86 (4):10.1103/PhysRevA.86.042504 OCT 9 2012
24. Milton, Kimball A.; Abalo, E. K.; Parashar, Prachi; Pourtolami, Nima; Brevik, Iver; Ellingsen, Simen A.
Repulsive Casimir and Casimir-Polder forces
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45 (37):10.1088/1751-8113/45/37/374006 SEP 21 2012
23. Inui, Norio
Temperature dependence of the Casimir force between a superconductor and a magnetodielectric
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.022520 AUG 28 2012
22. Phan, Anh D.; Viet, N. A.
Repulsive Casimir force between silicon dioxide and superconductor
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, 6 (6):274-276; 10.1002/pssr.201206166 JUN 2012
21. Inui, Norio
Quantum levitation of a thin magnetodielectric plate on a metallic plate using the repulsive Casimir force
JOURNAL OF APPLIED PHYSICS, 111 (7):10.1063/1.3698619 APR 1 2012
20. Folman, Ron
Material science for quantum computing with atom chips
QUANTUM INFORMATION PROCESSING, 10 (6):995-1036; SI 10.1007/s11128-011-0311-5 DEC 2011
19. Drosdoff, D.; Woods, Lilia M.
Casimir interactions between graphene sheets and metamaterials
PHYSICAL REVIEW A, 84 (6):10.1103/PhysRevA.84.062501 DEC 2 2011
18. Inui, Norio
Thickness dependence of the Casimir force between a magnetodielectric plate and a diamagnetic plate
PHYSICAL REVIEW A 84 (5): 10.1103/PhysRevA.84.052505 NOV 7 2011
17. Maslovski, Stanislav I.
Casimir repulsion in moving media
PHYSICAL REVIEW A 84 (2): 10.1103/PhysRevA.84.022506 AUG 10 2011
16. Milton, Kimball A.; Abalo, E. K.; Parashar, Prachi; Pourtolami, Nima; Brevik, Iver; Ellingsen, Simen A.
Casimir-Polder repulsion near edges: Wedge apex and a screen with an aperture
PHYSICAL REVIEW A 83 (6): Art. No. 062507 JUN 13 2011
15. Esquivel-Sirvent, R.; Schatz, George C.
Mixing rules and the Casimir force between composite systems
PHYSICAL REVIEW A 83 (4): Art. No. 042512 APR 20 2011
14. Liu, Yongmin; Zhang, Xiang
Metamaterials: a new frontier of science and technology
CHEMICAL SOCIETY REVIEWS 40 (5): 2494-2507 2011
13. Xu, Jinying; Zhang, Xiangdong
Electromagnetic interactions in a cluster of cylinders
PHYSICS LETTERS A 375 (13): 1524-1527 MAR 28 2011
12. Inui, Norio
Diamagnetic effect on the Casimir force
PHYSICAL REVIEW A 83 (3): Art. No. 032513 MAR 28 2011
11. Zhao, R; Koschny, T; Economou, EN; Soukoulis, CM
Repulsive Casimir forces with finite-thickness slabs
PHYSICAL REVIEW B 83 (7): Art. No. 075108 FEB 9 2011
10. Silveirinha, Mario G.
Physical restrictions on the Casimir force between metal-dielectric metamaterials
METAMATERIALS: FUNDAMENTALS AND APPLICATIONS III 7754: Art. No. 77540S 2010
9. Cui, Song; Soh, Yeng Chai
Convergent conductivity corrections to the Casimir force via exponential basis functions
PHYSICAL REVIEW A 82 (6): Art. No. 062510 DEC 15 2010
8. Silveirinha, Mario G.; Maslovski, Stanislav I.
Physical restrictions on the Casimir interaction of metal-dielectric metamaterials: An effective-medium approach
PHYSICAL REVIEW A 82 (5): Art. No. 052508 NOV 10 2010
7. Inui, Norio; Miura, Kouji; Akamatsu, Kensuke; Ishikawa, Makoto
Numerical calculation of the Casimir forces between a gold sphere and a nanocomposite sheet
INTERNATIONAL CONFERENCE ON SCIENCE OF FRICTION 2010 (ICSF2010) Edited by: Miura, K; Matsukawa, H Book Series: Journal of Physics Conference Series Volume: 258 Article Number: 012002 Published: 2010
6. Azari, Arash; Miri, MirFaez; Golestanian, Ramin
Effect of the heterogeneity of metamaterials on the Casimir-Lifshitz interaction
PHYSICAL REVIEW A 82 (3): Art. No. 032512 SEP 24 2010
5. Maslovski, Stanislav I.; Silveirinha, Mario G.
Ultralong-range Casimir-Lifshitz forces mediated by nanowire materials
PHYSICAL REVIEW A 82 (2): Art. No. 022511 AUG 25 2010
4. Silveirinha, Mario G.
Casimir interaction between metal-dielectric metamaterial slabs: Attraction at all macroscopic distances

3. Zhao, R., Koschny, Th., Economou, E.N., Soukoulis, C.M.
Comparison of chiral metamaterial designs for repulsive Casimir force
Physical Review B - Condensed Matter and Materials Physics 81(23),235126
(2010)

2. Rodriguez, Alejandro W.; McCauley, Alexander P.; Joannopoulos, John D.;
Johnson, Steven G.
Theoretical ingredients of a Casimir analog computer
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES
OF AMERICA 107 (21): 9531-9536 MAY 25 2010

1. Salem, R; Japha, Y; Chabe, J; Hadad, B; Keil, M; Milton, KA; Folman, R
Nanowire atomchip traps for sub-micron atom-surface distances
NEW JOURNAL OF PHYSICS 12: Art. No. 023039 FEB 26 2010

=====
**107. M. Krug, T. Bayer, M. Wollenhaupt, C. Sarpe-Tudoran, T. Baumert, S. S.
Ivanov, N. V. Vitanov**
**Coherent strong-field control of multiple states by a single chirped femtosecond
laser pulse**
New J. Phys. 11, 105051(17) (2009)

51. Bunjac, A.; Popovic, D. B.; Simonovic, N. S.
On the selective multiphoton ionization of sodium by femtosecond laser pulses:
A partial-wave analysis
PHYSICS LETTERS A Volume: 394 Article Number: 127197 Published: APR 2
2021

50. Kaufman, Brian; Rozgonyi, Tamas; Marquetand, Philipp; Weinacht, Thomas
Competition between dynamic resonance and internal conversion in strong-field
molecular ionization with chirped ultrafast laser pulses
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023108
Published: FEB 15 2021

49. Chernyak, Vladimir Y.; Sinitsyn, Nikolai A.
Integrability in the multistate Landau-Zener model with time-quadratic
commuting operators
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 54 Issue:
11 Article Number: 115204 Published: MAR 19 2021

48. Kaufman, Brian; Rozgonyi, Tamas; Marquetand, Philipp; Weinacht, Thomas
Adiabatic elimination in strong-field light-matter coupling
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063117
Published: DEC 23 2020

47. Voznyuk, O.; Jochim, Bethany; Zohrabi, M.; Broin, Adam; Averin, R.; Carnes, K.
D.; Ben-Itzhak, I.; Wells, E.
Adaptive strong-field control of vibrational population in NO₂
JOURNAL OF CHEMICAL PHYSICS, 151 (12):10.1063/1.5115504 SEP 28 2019

46. Csehi, Andras
Control of the populations and phases of two-level quantum systems by a single
frequency-chirped laser pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52
(19):10.1088/1361-6455/ab3c05 OCT 14 2019

45. Hockett, Paul
Time-domain measurements with intra-pulse dynamics
QUANTUM METROLOGY WITH PHOTOELECTRONS, VOL 2: APPLICATIONS AND
ADVANCES, 10.1088/978-1-6817-4688-3ch10 2018

44. Hockett, Paul
Light and matter
QUANTUM METROLOGY WITH PHOTOELECTRONS, VOL 1: FOUNDATIONS,
10.1088/978-1-6817-4684-5ch7 2018

43. Saalman, Ulf; Giri, Sajal Kumar; Rost, Jan M.
Adiabatic Passage to the Continuum: Controlling Ionization with Chirped Laser
Pulses
PHYSICAL REVIEW LETTERS, 121 (15):10.1103/PhysRevLett.121.153203 OCT 11
2018

42. Wessels, Philipp; Ruff, Bernhard; Kroker, Tobias; Kazansky, Andrey K.;
Kabachnik, Nikolay M.; Sengstock, Klaus; Drescher, Markus; Simonet, Juliette
Absolute strong-field ionization probabilities of ultracold rubidium atoms
COMMUNICATIONS PHYSICS, 1 10.1038/s42005-018-0032-5 JUL 4 2018

41. Malinovskaya, Svetlana A.; Liu, Gengyuan
Adiabatic Passage Control Methods for Ultracold Alkali Atoms and Molecules via
Chirped Laser Pulses and Optical Frequency Combs
ADVANCES IN QUANTUM CHEMISTRY, VOL 77, 77 241-294;
10.1016/bs.aiq.2018.02.001 2018

40. Huang, Yunxia; Xu, Shuwu
Controlling population of the molecular rotational state and the alignment
theoretically by tailored femtosecond laser pulse
ROYAL SOCIETY OPEN SCIENCE, 5 (1):10.1098/rsos.171502 JAN 2018

39. Bunjac, Andrej; Popovic, Duska B.; Simonovic, Nenad S.
Calculations of photoelectron momentum distributions and energy spectra at
strong-field multiphoton ionization of sodium
EUROPEAN PHYSICAL JOURNAL D, 71 (8):10.1140/epjd/e2017-80276-5 AUG 2017

38. Bunjac, A; Popovic, DB; Simonovic, NS
Resonant dynamic Stark shift as a tool in strong-field quantum control:
calculation and application for selective multiphoton ionization of sodium
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 19 (30):19829-19836;
10.1039/c7cp02146a AUG 14 2017

37. Ding, Chunling; Yu, Rong; Hao, Xiangying; Zhang, Duo; Zu, Fengxia
Population dynamics of graphene driven by a few-cycle laser pulse
JOURNAL OF APPLIED PHYSICS, 121 (21):10.1063/1.4984313 JUN 7 2017

36. Wustelt, Philipp; Moeller, Max; Schoeffler, Markus S.; Xie, Xinhua; Hanus,
Vaclav; Saylor, A. Max; Baltuska, Andrius; Paulus, Gerhard G.; Kitzler, Markus
Numerical investigation of the sequential-double-ionization dynamics of helium
in different few-cycle-laser-field shapes
PHYSICAL REVIEW A, 95 (2):10.1103/PhysRevA.95.023411 FEB 14 2017

35. Hart, NA; Strohaber, J; Kolomenskii, AA; Paulus, GG; Bauer, D; Schuessler, HA
Selective strong-field enhancement and suppression of ionization with short laser
pulses
PHYSICAL REVIEW A, 93 (6):10.1103/PhysRevA.93.063426 JUN 28 2016

34. Wu, Y-S.
Gauging quantum groups: Yang-Baxter joining Yang-Mills
Modern Physics Letters B 30(6), 1630003 (2016)

33. Chen, HY; Huang, SJ; Song, Q; Wang, PX
Investigation on a field description of the chirped laser pulse
MODERN PHYSICS LETTERS B, 30 (6):10.1142/S0217984916500524 MAR 10 2016

32. Fushitani, M; Liu, CN; Matsuda, A; Endo, T; Toida, Y; Nagasono, M; Togashi, T;
Yabashi, M; Ishikawa, T; Hikosaka, Y; Morishita, T; Hishikawa, A
Femtosecond two-photon Rabi oscillations in excited He driven by ultrashort
intense laser fields
NATURE PHOTONICS, 10 (2):102-+; 10.1038/NPHOTON.2015.228 FEB 2016

31. Sandor, Peter; Tagliamonti, Vincent; Zhao, Arthur; Rozgonyi, Tamas;
Ruckenbauer, Matthias; Marquetand, Philipp; Weinacht, Thomas
Strong Field Molecular Ionization in the Impulsive Limit: Freezing Vibrations with
Short Pulses
PHYSICAL REVIEW LETTERS, 116 (6):10.1103/PhysRevLett.116.063002 FEB 9 2016

30. Liu, Gengyuan; Malinovskaya, Svetlana A.
Two-photon adiabatic passage in ultracold Rb interacting with a single
nanosecond, chirped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48
(19):10.1088/0953-4075/48/19/194001 OCT 14 2014

29. Ganeev, Rashid A.
Characterization of Plasma Harmonics
PLASMA HARMONICS, 181-241; (Jenny Stanford Publishing, 2014)

28. Rallis, C. E.; Burwitz, T. G.; Andrews, P. R.; Zohrabi, M.; Averin, R.; De, S.;
Bergues, B.; Jochim, Bethany; Voznyuk, A. V.; Gregerson, Neal; Gaire, B.;
Znakovskaya, I.; McKenna, J.; Carnes, K. D.; Kling, M. F.; Ben-Itzhak, I.; Wells, E.
Incorporating real time velocity map image reconstruction into closed-loop
coherent control
REVIEW OF SCIENTIFIC INSTRUMENTS, 85 (11):10.1063/1.4899267 NOV 2014

27. Liu, Ji-Cai; Zhang, Ye-Qi; Chen, Lei
Coherent control of nondegenerate two-photon absorption by femtosecond laser
pulses
JOURNAL OF MODERN OPTICS, 61 (10):781-786; SI
10.1080/09500340.2013.821534 2014

26. Gitzinger, Gregory; Lorient, Vincent; Banares, Luis; de Nalda, Rebeca
Pulse shaping control of CH3I multiphoton ionization at 540 nm
JOURNAL OF MODERN OPTICS, 61 (10):864-871; SI
10.1080/09500340.2013.861033 2014
25. Wang Chuan-Liang; Sun Ren-Ping; Chen Yong-Ju; Gong Cheng; Lai Xuan-Yang;
Kang Hui-Peng; Quan Wei; Liu Xiao-Jun
Above-Threshold Ionization of Xenon by Chirped Intense Laser Pulses
CHINESE PHYSICS LETTERS, 31 (6):10.1088/0256-307X/31/6/063202 JUN 2014
24. Aladi, Mark; Bakos, Jozsef; Barna, I. F.; Czitrovsky, Aladar; Djotyan, Gagik;
Dombi, Peter; Dzsotjan, David; Foeldes, Istvan; Hamar, Gergo; Ignacz, Peter;
Kedves, Miklos; Kerekes, Attila; Levai, Peter; Marton, Istvan; Nagy, Attila; Oszetzky,
Daniel; Pocsai, Mihaly; Racz, Peter; Raczkevi, Bela; Szigeti, Janos; Soerlei, Zsuzsa;
Szipoecs, Robert; Varga, Dezso; Varga-Umbrich, Karoly; Varro, Sandor; Vamos,
Lenard; Vesztergombi, Gyoergy
Pre-excitation studies for rubidium-plasma generation
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-
ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, 740
203-207; 10.1016/j.nima.2013.11.075 MAR 11 2014
23. Wells, E; Rallis, CE; Zohrabi, M; Siemering, R; Jochim, B; Andrews, PR; Ablikim,
U; Gaire, B; De, S; Carnes, KD; Bergues, B; de Vivie-Riedle, R; Kling, MF; Ben-
Itzhak, I
Adaptive strong-field control of chemical dynamics guided by three-dimensional
momentum imaging
NATURE COMMUNICATIONS, 4 10.1038/ncomms3895 DEC 2013
22. Lu Chen-Hui; Zhang Shi-An; Sun Zhen-Rong
Manipulation of Resonance-Enhanced Multiphoton-Ionization Photoelectron
Spectroscopy by Two Time-Delayed Femtosecond Laser Pulses
CHINESE PHYSICS LETTERS, 30 (11):10.1088/0256-307X/30/11/113302 NOV 2013
21. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Quantum control of femtosecond resonance-enhanced multiphoton-ionization
photoelectron spectroscopy
PHYSICAL REVIEW A, 88 (4):10.1103/PhysRevA.88.043437 OCT 31 2013
20. Skenderovic, Hrvoje; Vdovic, Silvije
Atomic wave-packet dynamics and third-harmonic generation in sodium
OPTICS LETTERS, 38 (19):3811-3814; 10.1364/OL.38.003811 OCT 1 2013
19. Ma, R; Motomura, K; Ishikawa, KL; Mondal, S; Fukuzawa, H; Yamada, A; Ueda,
K; Nagaya, K; Yase, S; Mizoguchi, Y; Yao, M; Rouze, A; Hundermark, A; Vrakking,
MJJ; Johnsson, P; Nagasono, M; Tono, K; Togashi, T; Senba, Y; Ohashi, H; Yabashi,
M; Ishikawa, T
Photoelectron angular distributions for the two-photon ionization of helium by
ultrashort extreme ultraviolet free-electron laser pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (16):SI
10.1088/0953-4075/46/16/164018 AUG 28 2013
18. Schuricke, Michael; Bartschat, Klaus; Grum-Grzhimailo, Alexei N.; Zhu,
Ganjun; Steinmann, Jochen; Moshhammer, Robert; Ullrich, Joachim; Dorn,
Alexander
Coherence in multistate resonance-enhanced four-photon ionization of lithium
atoms
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023427 AUG 30 2013
17. Huang, YX; Xu, SW; Ji, XM; Yang, XH
Resolution enhancement of photoelectron spectra by coherent phase control
INDIAN JOURNAL OF PHYSICS, 87 (6):587-591; 10.1007/s12648-013-0273-9 JUN
2013
16. Andreev, Anatoly V.; Ganeev, Rashid A.; Kuroda, Hiroto; Stremoukhov, Sergey
Yu; Shoutova, Olga A.
High-order harmonic cut-off frequency in atomic silver irradiated by femtosecond
laser pulses: theory and experiment
EUROPEAN PHYSICAL JOURNAL D, 67 (1):10.1140/epjd/e2012-30527-0 JAN 2013
15. Kumar, Parvendra; Sarma, Amarendra K.
Frequency-modulated few-cycle optical-pulse-train-induced controllable ultrafast
coherent population oscillations in two-level atomic systems
PHYSICAL REVIEW A, 87 (2):10.1103/PhysRevA.87.025401 FEB 1 2013
14. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Control of resonance enhanced multi-photon ionization photoelectron
spectroscopy by phase-shaped femtosecond laser pulse
JOURNAL OF CHEMICAL PHYSICS, 137 (17):10.1063/1.4762865 NOV 7 2012
13. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Selective excitation of resonance-enhanced multiphoton-ionization
photoelectron spectroscopy via a cubic phase modulation
PHYSICAL REVIEW A, 86 (4):10.1103/PhysRevA.86.043433 OCT 26 2012
12. Bitter, M; Shapiro, EA; Milner, V
Enhancing strong-field-induced molecular vibration with femtosecond pulse
shaping
PHYSICAL REVIEW A, 86 (4):10.1103/PhysRevA.86.043421 OCT 17 2012
11. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Sun, Zhenrong
Achieving high-resolution photoelectron spectroscopy from a broadband
femtosecond laser pulse
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012513 JUL 23 2012
10. Brif, Constantin; Chakrabarti, Raj; Rabitz, Herschel
CONTROL OF QUANTUM PHENOMENA
ADVANCES IN CHEMICAL PHYSICS, VOL 148, 148 1-76; 2012
9. Zhdanovich, S; Hepburn, JW; Milner, V
Strong-field effects in Rabi oscillations between a single state and a superposition
of states
PHYSICAL REVIEW A 84 (5): 10.1103/PhysRevA.84.053428 NOV 22 2011
8. Zhang Hui; Zhang Shi-An; Sun Zhen-Rong
Highly selective population of two excited states in nonresonant two-photon
absorption
CHINESE PHYSICS B 20 (8): 10.1088/1674-1056/20/8/083202 AUG 2011
7. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011
6. Jochim, Bethany; Averin, R.; Gregerson, Neal; McKenna, J.; De, S.; Ray, D.;
Zohrabi, M.; Bergues, B.; Carnes, K. D.; Kling, M. F.; Ben-Itzhak, I.; Wells, E.
Velocity map imaging as a tool for gaining mechanistic insight from closed-loop
control studies of molecular fragmentation
PHYSICAL REVIEW A 83 (4): Art. No. 043417 APR 27 2011
5. Konorov, SO; Hepburn, JW; Milner, V
Time- and frequency-resolved detection of atomic coherence in the regime of
strong-field interaction with intense femtosecond laser pulses
PHYSICAL REVIEW A 83 (3): Art. No. 033417 MAR 24 2011
4. Zhang, Shian; Shi, Junhui; Zhang, Hui; Jia, Tianqing; Wang, Zugeng; Sun,
Zhenrong
Precise control of state-selective excitation in stimulated Raman scattering
PHYSICAL REVIEW A 82 (4): Art. No. 043841 OCT 28 2010
3. Clow, Stephen; Weinacht, Thomas
Four-level atomic interferometer driven by shaped ultrafast laser pulses
PHYSICAL REVIEW A 82 (2): Art. No. 023411 AUG 12 2010
2. Brif, Constantin; Chakrabarti, Raj; Rabitz, Herschel
Control of quantum phenomena: past, present and future
NEW JOURNAL OF PHYSICS 12: Art. No. 075008 JUL 8 2010
1. Rabitz H
Focus on quantum control
NEW JOURNAL OF PHYSICS Volume: 11 Article Number: 105030 Published: OCT
30 2009
- =====
- 108. L. Praxmeyer, S. Stenholm and N. V. Vitanov**
Characteristics of a pure state ambiguity function
J. Phys. A: Math. Theor. 42, 495301(10pp) (2009)
- =====
- 109. P. A. Ivanov, S. S. Ivanov, N. V. Vitanov, A. Mehring, M. Fleischhauer, and K. Singer**
Simulation of a quantum phase transition of polaritons with trapped ions
Phys. Rev. A 80, R060301(4pp) (2009)
- =====
42. Curtis, Jonathan B.; Boettcher, Igor; Young, Jeremy T.; Maghrebi, Mohammad
F.; Carmichael, Howard; Gorshkov, Alexey, V; Foss-Feig, Michael
Critical theory for the breakdown of photon blockade
PHYSICAL REVIEW RESEARCH Volume: 3 Issue: 2 Article Number: 023062
Published: APR 21 2021

41. Tancara, Diego; Norambuena, Ariel; Pena, Ruben; Romero, Guillermo; Torres, Felipe; Coto, Raul
Steering interchange of polariton branches via coherent and incoherent dynamics
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053708
Published: MAY 18 2021
40. Ohira, R.; Kume, S.; Takahashi, H.; Toyoda, K.
Polariton blockade in the Jaynes-Cummings-Hubbard model with trapped ions
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 024015
Published: APR 2021
39. Ohira, Ryutarō; Kume, Shota; Takayama, Kyoichi; Muralidharan, Silpa; Takahashi, Hiroki; Toyoda, Kenji
Blockade of phonon hopping in trapped ions in the presence of multiple local phonons
PHYSICAL REVIEW A Volume: 103 Issue: 1 Article Number: 012612
Published: JAN 29 2021
38. Tamura, Masaya; Mukaiyama, Takashi; Toyoda, Kenji
Quantum Walks of a Phonon in Trapped Ions
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 20 Article Number: 200501
Published: MAY 19 2020
37. Pena, Ruben; Torres, Felipe; Romero, Guillermo
Dynamical dimerization phase in Jaynes-Cummings lattices
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 3 Article Number: 033034
Published: MAR 2020
36. Ohira, Ryutarō; Mukaiyama, Takashi; Toyoda, Kenji
Phonon-number-resolving detection of multiple local phonon modes in trapped ions
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 060301
Published: DEC 5 2019
35. Pedrosa-Rodríguez, Laura; Outerelo, D. A.; Gomez-Alcala, Rafael; de Vicente, Fernando I.; Diaz-Otero, Francisco J.
Design, development and testing of a helical resonator for trapping Sr⁺ ions for frequency standards and sensing applications
MEASUREMENT, 125 156-162; 10.1016/j.measurement.2018.04.086 SEP 2018
34. Schmidt, Sebastian; Blatter, Gianni
Phase Diagram and Excitations of the Jaynes-Cummings-Hubbard Model
QUANTUM SIMULATIONS WITH PHOTONS AND POLARITONS: MERGING QUANTUM OPTICS WITH CONDENSED MATTER PHYSICS, 23-41; 10.1007/978-3-319-52025-4_2 2017
33. Debnath, S; Linke, NM; Wang, ST; Figgatt, C; Landsman, KA; Duan, LM; Monroe, C
Observation of Hopping and Blockade of Bosons in a Trapped Ion Spin Chain
PHYSICAL REVIEW LETTERS, 120 (7):10.1103/PhysRevLett.120.073001 FEB 12 2018
32. Shen, Lituo; Chen, Rongxin; Wu, Huaizhi; Yang, Zhenbiao; Irish, E. K.; Zheng, Shibiao
Quantum Phase Transition of Polaritonic Excitations in a Multi-Excitation Coupled Array
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 56 (11):3667-3689; 10.1007/s10773-017-3532-2 NOV 2017
31. Gessner, Manuel
Dynamics and Characterization of Composite Quantum Systems, 1-68; 10.1007/978-3-319-44459-8_1 2017
Springer Theses-Recognizing Outstanding PhD Research
30. Siverns, JD; Li, X; Quraishi, Q
Ion-photon entanglement and quantum frequency conversion with trapped Ba⁺ ions
APPLIED OPTICS, 56 (3):B222-B230; 10.1364/AO.56.00B222 JAN 20 2017
29. Yang, Dayou; Giri, Gouri Shankar; Johanning, Michael; Wunderlich, Christof; Zoller, Peter; Hauke, Philipp
Analog quantum simulation of (1+1)-dimensional lattice QED with trapped ions
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.052321 NOV 16 2016
28. Urabe, Shinji; Toyoda, Kenji; Noguchi, Atsushi
Quantum Simulation with Trapped Ions-Experimental Realization of the Jaynes-Cummings-Hubbard Model
PRINCIPLES AND METHODS OF QUANTUM INFORMATION TECHNOLOGIES, 911 325-340; 10.1007/978-4-431-55756-2_15 2016
Lecture Notes in Physics, Edited by: Yamamoto Y; Semba K
27. Trautmann, N; Hauke, P
Quantum simulation of the dynamical Casimir effect with trapped ions
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/4/043029 APR 19 2016
26. Gessner, Manuel; Schlawin, Frank; Buchleitner, Andreas
Probing polariton dynamics in trapped ions with phase-coherent two-dimensional spectroscopy
JOURNAL OF CHEMICAL PHYSICS, 142 (21):10.1063/1.4919796 JUN 7 2015
25. Kurcz, A; Garcia-Ripoll, JJ; Bermudez, A
The interspersed spin boson lattice model
European Physical Journal-Special Topics, 224 (3):483-496; 10.1140/epjst/e2015-02378-x APR 2015
24. Krauth, FN; Alonso, J; Home, JP
Optimal electrode geometries for 2-dimensional ion arrays with bi-layer ion traps
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (1):10.1088/0953-4075/48/1/015001 JAN 14 2015
23. Ramm, Michael; Pruttivarasin, Thaned; Haeffner, Hartmut
Energy transport in trapped ion chains
NEW JOURNAL OF PHYSICS, 16 10.1088/1367-2630/16/6/063062 JUN 26 2014
22. Toyoda, K; Matsuno, Y; Noguchi, A; Haze, S; Urabe, S
Quantum Simulation of the Jaynes-Cummings-Hubbard Model Using Trapped Ions
IEEE, 10th Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR), JUN 30-JUL 04, 2013, Kyoto, JAPAN
21. Georgescu, I. M.; Ashhab, S.; Nori, Franco
Quantum simulation
REVIEWS OF MODERN PHYSICS, 86 (1):10.1103/RevModPhys.86.153 MAR 10 2014
20. Penna, V; Raffa, FA
Perturbative approach to the dynamics of a trapped ion interacting with a light field
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (7):10.1088/0953-4075/47/7/075501 APR 14 2014
19. Wang, Jing; Wu, Yunan; Jiang, Bo; Zhang, Hanzhuang
Dynamics of entanglement density in photonic crystals
OPTICS COMMUNICATIONS, 315 1-7; 10.1016/j.optcom.2013.10.076 MAR 15 2014
18. D'Souza, Adam G.; Sanders, Barry C.; Feder, David L.
Fermionized photons in the ground state of one-dimensional coupled cavities
PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.063801 DEC 2 2013
17. Schmidt, S; Blatter, G; Keeling, J
From the Jaynes-Cummings-Hubbard to the Dicke model
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 46 (22):10.1088/0953-4075/46/22/224020 NOV 28 2013
16. Toyoda, Kenji; Matsuno, Yuta; Noguchi, Atsushi; Haze, Shinsuke; Urabe, Shinji
Experimental Realization of a Quantum Phase Transition of Polaritonic Excitations
PHYSICAL REVIEW LETTERS, 111 (16):10.1103/PhysRevLett.111.160501 OCT 14 2013
15. Schmidt, Sebastian; Koch, Jens
Circuit QED lattices: Towards quantum simulation with superconducting circuits
ANNALEN DER PHYSIK, 525 (6):395-412; 10.1002/andp.201200261 JUN 2013
14. Bermudez, A; Almeida, J; Ott, K; Kaufmann, H; Ulm, S; Poschinger, U; Schmidt-Kaler, F; Retzker, A; Plenio, MB
Quantum magnetism of spin-ladder compounds with trapped-ion crystals
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/9/093042 SEP 25 2012
13. Siverns, JD; Simkins, LR; Weidt, S; Hensinger, WK
On the application of radio frequency voltages to ion traps via helical resonators
APPLIED PHYSICS B-LASERS AND OPTICS, 107 (4):921-934; 10.1007/s00340-011-4837-0 JUN 2012
12. Lee Patricia J.
Phonons in a Double-Well: Transverse Vibrations in a Pair of Trapped Ions
Conference on Quantum Information and Computation X Location: Baltimore, MD Date: APR 26-27, 2012
QUANTUM INFORMATION AND COMPUTATION X, Proceedings of SPIE, Editor(s): Donkor E; Pirich AR; Brandt HE, Volume: 8400, Article Number: 840007, 2012

11. Bermudez, Alejandro; Schaetz, Tobias; Porras, Diego
Photon-assisted-tunneling toolbox for quantum simulations in ion traps
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/5/053049 MAY 31 2012

10. Mascarenhas, Eduardo; Heaney, Libby; Aguiar, M. C. O.; Santos, Marcelo Franca
Equilibrium and disorder-induced behavior in quantum light-matter systems
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/4/043033 APR 25 2012

9. Haze, Shinsuke; Tateishi, Yusuke; Noguchi, Atsushi; Toyoda, Kenji; Urabe, Shinji
Observation of phonon hopping in radial vibrational modes of trapped ions
PHYSICAL REVIEW A, 85 (3):10.1103/PhysRevA.85.031401 MAR 2 2012

8. Schneider, Ch; Porras, Diego; Schaetz, Tobias
Experimental quantum simulations of many-body physics with trapped ions
REPORTS ON PROGRESS IN PHYSICS, 75 (2):10.1088/0034-4885/75/2/024401 FEB 2012

7. Hohenadler, M; Aichhorn, M; Pollet, L; Schmidt, S
Polariton Mott insulator with trapped ions or circuit QED
PHYSICAL REVIEW A, 85 (1):10.1103/PhysRevA.85.013810 JAN 9 2012

6. Hohenadler, M; Aichhorn, M; Schmidt, S; Pollet, L
Dynamical critical exponent of the Jaynes-Cummings-Hubbard model
PHYSICAL REVIEW A 84 (4): 10.1103/PhysRevA.84.041608 OCT 24 2011

5. Bermudez, A; Martin-Delgado, MA; Porras, D
The localization of phonons in ion traps with controlled quantum disorder
NEW JOURNAL OF PHYSICS 12: Art. No. 123016 DEC 9 2010

4. Brown, Katherine L.; Munro, William J.; Kendon, Vivien M.
Using Quantum Computers for Quantum Simulation
ENTROPY 12 (11): 2268-2307 NOV 2010

3. Schmidt, S; Blatter, G
Excitations of Strongly Correlated Lattice Polaritons
PHYSICAL REVIEW LETTERS 104 (21): Art. No. 216402 MAY 28 2010

2. Greentree, A.D., Hollenberg, L.C.L.
Quantum phase transitions in coupled atom-cavity systems
in Understanding Quantum Phase Transitions, edited by Lincoln Carr, pp. 647-672 (CRC Press, 2010)

1. James Quach, Melissa I. Makin, Chun-Hsu Su, Andrew D. Greentree, and Lloyd C. L. Hollenberg
Band structure, phase transitions, and semiconductor analogs in one-dimensional solid light systems
PHYSICAL REVIEW A Volume: 80 Issue: 6 Article Number: 063838 Published: DEC 2009

=====
110. V. Yannopapas and N. V. Vitanov
Neutralization of quantum stiction with interlocking arrays of gold nanopillars
Phys. Stat. Solidi – Rapid Res. Lett. 4, 19-21 (2010)

1. Phan, Anh D.; Viet, N. A.
Repulsive Casimir force between silicon dioxide and superconductor
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, 6 (6):274-276;
10.1002/pssr.201206166 JUN 2012

=====
111. B. W. Shore, A. A. Rangelov, and N. V. Vitanov
Stimulated Raman adiabatic passage with temporal pulselets
Opt. Commun. 283, 730–736 (2010)

1. Shi, Jian; Ma, Rui-Qiong; Duan, Zuo-Liang; Liang, Meng; Chai, Bao-Yu; Dong, Jun
Geometrical representation of coherent tunneling process in two-waveguide and three-waveguide coupler
CHINESE PHYSICS B, 26 (12):10.1088/1674-1056/26/12/124214 DEC 2017

=====
112. B. T. Torosov, G. S. Vasilev, and N. V. Vitanov
Symmetries and asymmetries in coherent atomic excitation by chirped laser pulses
Opt. Commun. 283, 1338-1345 (2010)

4. Shore, Bruce W.

Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

3. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

2. Sharaby, YA; Joshi, A; Hassan, SS
Coherent population transfer in V-type atomic system
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, 22 (4):10.1142/S0218863513500446 DEC 2013

1. Konar, Arkaprabha; Lozovoy, Vadim V.; Dantus, Marcos
Solvation Stokes-Shift Dynamics Studied by Chirped Femtosecond Laser Pulses
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 3 (17):2458-2464;
10.1021/jz300761x SEP 6 2012

=====
113. A. A. Rangelov, N. V. Vitanov, and B. W. Shore
Rapid adiabatic passage without level crossing
Opt. Commun. 283, 1346-1350 (2010)

2. Dutta, Shovan; Mueller, Erich J.
Coherent generation of photonic fractional quantum Hall states in a cavity and the search for anyonic quasiparticles
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033825 MAR 15 2018

1. Xu, Qianqian ; Yao, Duanzheng ; Liu, Xiaona ; et al.
Adiabatic self-induced transparency in GaN/AlN inhomogeneously broadened quantum-dot ensemble
OPTICS AND LASER TECHNOLOGY Volume: 45 Pages: 768-774 DOI: 10.1016/j.optlastec.2012.04.038 Published: FEB 2013

=====
114. V. Yannopapas and N. V. Vitanov
Casimir-Polder interaction between an atom and a periodic nanostructure
Phys. Rev. A 81, 042506(7) (2010)

5. Fang, Wei; Li, Gao-Xiang; Xu, Jingping; Yang, Yaping
Enhancement of long-distance Casimir-Polder interaction between an excited atom and a cavity made of metamaterials
OPTICS EXPRESS Volume: 27 Issue: 26 Pages: 37753-37770 Published: DEC 23 2019

4. Xu, Jingping; Chang, Shenglong; Yang, Yaping; Al-amri, M.
Casimir-Polder force on a V-type three-level atom near a structure containing left-handed materials
PHYSICAL REVIEW A, 93 (1):10.1103/PhysRevA.93.012514 JAN 21 2016

3. Xu, Jingping; Alamri, M.; Yang, Yaping; Zhu, Shi-Yao; Zubairy, M. Suhail
Casimir-Polder force on a two-level atom in a structure containing metamaterials
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053831 MAY 27 2014

2. Phan, Anh D.; Viet, N. A.
Repulsive Casimir force between silicon dioxide and superconductor
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, 6 (6):274-276;
10.1002/pssr.201206166 JUN 2012

1. Zhu, Zhiying; Yu, Hongwei
Position-dependent energy-level shifts of an accelerated atom in the presence of a boundary
PHYSICAL REVIEW A 82 (4): Art. No. 042108 OCT 19 2010

=====
115. S. S. Ivanov, P. A. Ivanov, I. E. Linington, and N. V. Vitanov
Scalable quantum search using trapped ions
Phys. Rev. A 81, 042328(6pp) (2010)

16. Sharma, A., Tulapurkar, A.A.
Preparation of spin eigenstates including the Dicke states with generalized all-coupled interaction in a spintronic quantum computing architecture
Quantum Information Processing 20(5),172 (2021)

15. Wang, Yulun; Krstic, Predrag S.
Prospect of using Grover's search in the noisy-intermediate-scale quantum-computer era

14. Li, Xinhui; Wang, Yukun; Han, Yunguang; Qin, Sujuan; Gao, Fei; Wen, Qiaoyan
Self-Testing of Symmetric Three-Qubit States
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS Volume: 38 Issue: 3
Pages: 589-597 Published: MAR 2020

13. Takeuchi, Yuki; Imoto, Nobuyuki; Tashima, Toshiyuki
Optimal nonlocal conversion of photonic four-partite entanglement from two Bell
pairs in quantum networks
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042341 APR 25 2018

12. A memory-efficient simulation method of grover's search algorithm
Tang, X., Xu, J., Duan, B.
Computers, Materials and Continua 57(2), pp. 307-319 (2018)

11. Meill, Alexander; Meyer, David A.
Symmetric three-qubit-state invariants
PHYSICAL REVIEW A, 96 (6):10.1103/PhysRevA.96.062310 DEC 8 2017

10. Jafarizadeh, Mohamad A.; Akhgar, Derakhshan; Mahmoudi, Payman; Sadeghi,
Parvin
Minimum error discrimination of equi-coherent bosonic states of n-qubit by
separable measurement
EUROPEAN PHYSICAL JOURNAL D, 70 (11):10.1140/epjd/e2016-70204-8 NOV 1
2016

9. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

8. Kobayashi, Toshiki; Ikuta, Rikizo; Oezdemir, Sahin Kaya; Tame, Mark; Yamamoto,
Takashi; Koashi, Masato; Imoto, Nobuyuki
Universal gates for transforming multipartite entangled Dicke states
NEW JOURNAL OF PHYSICS, 16 10.1088/1367-2630/16/2/023005 FEB 4 2014

7. Renes, J.M.
The physics of quantum information: complementarity, uncertainty, and
entanglement
International Journal of Quantum Information 11(8), 1350072 (2013)

6. Ashourisheikhi, Sakineh; Sirsi, Swarnamala
LOCAL UNITARY EQUIVALENT CLASSES OF SYMMETRIC N-QUBIT MIXED STATES
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 11
(8):10.1142/S021974991350072X DEC 2013

5. Aulbach, Martin
CLASSIFICATION OF ENTANGLEMENT IN SYMMETRIC STATES
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 10
(7):10.1142/S0219749912300045 OCT 2012

4. Zheng, Shi-Biao
Simplified construction and physical realization of n-qubit controlled phase gates
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012326 JUL 23 2012

3. Rezakhani, AT; Pimachev, AK; Lidar, DA
Accuracy versus run time in an adiabatic quantum search
PHYSICAL REVIEW A 82 (5): Art. No. 052305 NOV 9 2010

2. Mei, Feng; Yu, Ya-Fei; Feng, Xun-Li; Zhang, Zhi-Ming; Oh, C. H.
Quantum entanglement distribution with hybrid parity gate
PHYSICAL REVIEW A Volume: 82 Issue: 5 Article Number: 052315 Published:
NOV 16 2010

1. Huangjun Zhu, Lin Chen and Masahito Hayashi
Additivity and non-additivity of multipartite entanglement measures
New Journal of Physics 12 (2010) 083002 (41pp)

=====
116. I. I. Boradjiev and N. V. Vitanov
**Stimulated Raman adiabatic passage with unequal couplings: Beyond two-photon
resonance**
Phys. Rev. A 81, 053415(11pp) (2010)

14. Wu, X.; Han, Z.; Chow, J.; Ang, D. G.; Meisenhelder, C.; Panda, C. D.; West, E.
P.; Gabrielse, G.; Doyle, J. M.; DeMille, D.

The metastable Q (3)Delta(2) state of ThO: a new resource for the ACME electron
EDM search
New Journal Of Physics 22 023013 (2020)

13. Rubio, JL; Viscor, D; Mompert, J; Ahufinger, V
Atomic-frequency-comb quantum memory via piecewise adiabatic passage
PHYSICAL REVIEW A, 98 (4):10.1103/PhysRevA.98.043834 OCT 16 2018

12. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018

11. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-
wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017

10. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

9. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1
OCT 2016

8. Rubio, JL; Ahufinger, V; Busch, T; Mompert, J
Optimal conditions for spatial adiabatic passage of a Bose-Einstein condensate
PHYSICAL REVIEW A, 94 (5):10.1103/PhysRevA.94.053606 NOV 8 2016

7. Panda, CD; O'Leary, BR; West, AD; Baron, J; Hess, PW; Hoffman, C; Kirilov, E;
Overstreet, CB; West, EP; DeMille, D; Doyle, JM; Gabrielse, G
Stimulated Raman adiabatic passage preparation of a coherent superposition of
ThO H-3 Delta(1) states for an improved electron electric-dipole-moment
measurement
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052110 MAY 16 2016

6. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic
passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014

5. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

4. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

3. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian
High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013

2. Nakamura, Satoshi; Goto, Hayato; Ichimura, Kouichi
Quantum phase gate via stimulated Raman adiabatic passage with time-
dependent. two-photon detuning
OPTICS COMMUNICATIONS, 293 160-165; 10.1016/j.optcom.2012.11.001 APR 15
2013

1. Yang, Rong-Can; Li, Gang; Zhang, Tian-Cai
Robust atomic entanglement in two coupled cavities via virtual excitations and
quantum Zeno dynamics
QUANTUM INFORMATION PROCESSING, 12 (1):493-504; 10.1007/s11128-012-
0393-8 JAN 2013

=====
117. M. Scala, B. Militello, A. Messina, and N. V. Vitanov
**Stimulated Raman adiabatic passage in an open quantum system: Master
equation approach**
Phys. Rev. A 81, 053847(7pp) (2010)

14. Luca Giorgi, Gian; Saharyan, Astghik; Guerin, Stephane; Sugny, Dominique;
Bellomo, Bruno
Microscopic and phenomenological models of driven systems in structured

reservoirs

PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012122
Published: JAN 24 2020

13. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019

12. Mathisen, Thomas; Larson, Jonas
Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018

11. Wang, Ying-Dan; Zhang, Rong; Yan, Xiao-Bo; Chesj, Stefano
Optimization of STIRAP-based state transfer under dissipation
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa7f5d SEP 28 2017

10. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid
Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19;
10.1007/s10773-017-3535-z JAN 2018

9. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

8. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems:
Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016

7. Liu, Tong; Solntsev, Alexander S.; Boes, Andreas; Nguyen, Thach; Will, Christian;
Mitchell, Arnan; Neshev, Dragomir N.; Sukhorukov, Andrey A.
Experimental demonstration of bidirectional light transfer in adiabatic waveguide
structures
OPTICS LETTERS, 41 (22):5278-5281; 10.1364/OL.41.005278 NOV 15 2016

6. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under
dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31
(11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

5. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman
adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

4. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a
dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013

3. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakhchyan, L; Guerin, S;
Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of
unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT
2012

2. Wang, Heng; Liu, Yi-Mou; Gao, Jin-Wei; Yan, Dong; Wang, Rong; Wu, Jin-Hui
Adiabatic Raman passage via two-photon resonant transitions in a five-level
Lambda system
OPTICS COMMUNICATIONS, 285 (16):3498-3501; SI
10.1016/j.optcom.2012.03.013 JUL 15 2012

1. Dridi, G; Guerin, S
Adiabatic passage for a lossy two-level quantum system by a complex time
method
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 45
(18):10.1088/1751-8113/45/18/185303 MAY 11 2012

=====
118. M. Wollenhaupt, T. Bayer, N. V. Vitanov, and T. Baumert
Three-state selective population of dressed states via generalized spectral phase-
step modulation
Phys. Rev. A 81, 053422(9pp) (2010)

27. Stamm, J., Benel, J., Escoto, E., Steinmeyer, G., Dantus, M.
Milliradian precision ultrafast pulse control for spectral phase metrology
Optics Express 29(10), pp. 14314-14325 (2021)

26. Hockett, Paul
Light and matter
QUANTUM METROLOGY WITH PHOTOELECTRONS, VOL 1: FOUNDATIONS,
10.1088/978-1-6817-4684-5ch7 2018

25. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovskiy, Vladimir
S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256;
10.1016/bs.aamop.2018.02.003 2018

24. Song, Yunheung; Lee, Han-gyeol; Jo, Hanlae; Ahn, Jaewook
Selective excitation in a three-state system using a hybrid adiabatic-nonadiabatic
interaction
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.023412 AUG 18 2016

23. Konar, Arkaprabha; Lozovoy, Vadim V.; Dantus, Marcos
Stimulated Emission Enhancement Using Shaped Pulses
JOURNAL OF PHYSICAL CHEMISTRY A, 120 (12):2002-2008;
10.1021/acs.jpca.6b02010 MAR 31 2016

22. Chang, Bo Y.; Sola, Ignacio R.; Shin, Seokmin
Molecular events in the light of strong fields: A light-induced potential scenario
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, 116 (8):608-621; SI
10.1002/qua.25066 APR 15 2016

21. Lee, Han-gyeol; Song, Yunheung; Kim, Hyosub; Jo, Hanlae; Ahn, Jaewook
Quantum dynamics of a two-state system induced by a chirped zero-area pulse
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023423 FEB 23 2016

20. Sola, Ignacio R.; Gonzalez-Vazquez, Jesus; de Nalda, Rebeca; Banares, Luis
Strong field laser control of photochemistry
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 17 (20):13183-13200;
10.1039/c5cp00627a 2015

19. Yao, Yunhua; Zhang, Shian; Zhang, Hui; Ding, Jingxin; Jia, Tianqing; Qiu,
Jianrong; Sun, Zhenrong
Laser polarization and phase control of up-conversion fluorescence in rare-earth
ions
SCIENTIFIC REPORTS, 4 10.1038/srep07295 DEC 3 2014

18. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

17. Liu, Ji-Cai; Zhang, Ye-Qi; Chen, Lei
Coherent control of nondegenerate two-photon absorption by femtosecond laser
pulses
JOURNAL OF MODERN OPTICS, 61 (10):781-786; SI
10.1080/09500340.2013.821534 2014

16. Cheng, W.-J., Zhang, S.-A., Jia, T.-Q., Feng, D.-H., Sun, Z.-R.
High-resolution selective excitation of resonance-enhanced multiphoton-
ionization photoelectron spectroscopy by shaping femtosecond laser pulses
Chinese Physics Letters 31(5), 053301 (2014)

15. Xu, Shuwu; Ding, Jingxin; Lu, Chenhui; Jia, Tianqing; Zhang, Shian; Sun,
Zhenrong
Effect of laser spectral bandwidth on coherent control of resonance-enhanced
multiphoton-ionization photoelectron spectroscopy
JOURNAL OF CHEMICAL PHYSICS Volume: 140 Issue: 8 Article Number:
084312 Published: FEB 28 2014

14. Cheng, Wenjing; Jia, Tianqing; Shang, Xiaoying; Zhang, Shian; Ma, Jing; Feng,
Donghai; Sun, Zhenrong; Qiu, Jianrong
Coherent quantum control of green emission in Er³⁺-doped glass by pi-phase-
shaped ultrashort laser pulses
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.023401 FEB 3 2014

13. Huang, Yunxia; Xu, Shuwu; Yang, Xiaohua
HIGH-RESOLUTION PHOTOELECTRON SPECTROSCOPY BY SPECTRAL PHASE STEP
MODULATION

12. Zhang, Shian; Xu, Shuwu; Ding, Jingxin; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Single and two-photon fluorescence control of Er³⁺ ions by phase-shaped femtosecond laser pulse
APPLIED PHYSICS LETTERS, 104 (1):10.1063/1.4860995 JAN 6 2014

11. Lu Chen-Hui; Zhang Shi-An; Sun Zhen-Rong
Manipulation of Resonance-Enhanced Multiphoton-Ionization Photoelectron Spectroscopy by Two Time-Delayed Femtosecond Laser Pulses
CHINESE PHYSICS LETTERS, 30 (11):10.1088/0256-307X/30/11/113302 NOV 2013

10. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Coherent phase control of resonance-mediated two-photon absorption in rare-earth ions
APPLIED PHYSICS LETTERS, 103 (19):10.1063/1.4830224 NOV 4 2013

9. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Quantum control of femtosecond resonance-enhanced multiphoton-ionization photoelectron spectroscopy
PHYSICAL REVIEW A, 88 (4):10.1103/PhysRevA.88.043437 OCT 31 2013

8. Zhang, Shian; Zhu, Jichun; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
High-resolution resonance-enhanced multiphoton-ionization photoelectron spectroscopy of Rydberg states via spectral phase step shaping
RSC ADVANCES, 3 (30):12185-12189; 10.1039/c3ra41834k 2013

7. Huang, YX; Xu, SW; Ji, XM; Yang, XH
Resolution enhancement of photoelectron spectra by coherent phase control
INDIAN JOURNAL OF PHYSICS, 87 (6):587-591; 10.1007/s12648-013-0273-9 JUN 2013

6. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Resonance-enhanced multiphoton-ionization photoelectron spectroscopy by a rectangular amplitude modulation
PHYSICAL REVIEW A, 87 (3):10.1103/PhysRevA.87.035403 MAR 21 2013

5. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Control of resonance enhanced multi-photon ionization photoelectron spectroscopy by phase-shaped femtosecond laser pulse
JOURNAL OF CHEMICAL PHYSICS, 137 (17):10.1063/1.4762865 NOV 7 2012

4. Zhang, Shian ; Lu, Chenhui ; Jia, Tianqing ; et al.
Selective excitation of resonance-enhanced multiphoton-ionization photoelectron spectroscopy via a cubic phase modulation
PHYSICAL REVIEW A Volume: 86 Issue: 4 Article Number: 043433 DOI: 10.1103/PhysRevA.86.043433 Published: OCT 26 2012

3. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Sun, Zhenrong
Achieving high-resolution photoelectron spectroscopy from a broadband femtosecond laser pulse
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012513 JUL 23 2012

2. Zhdanovich, S; Hepburn, JW; Milner, V
Strong-field effects in Rabi oscillations between a single state and a superposition of states
PHYSICAL REVIEW A 84 (5): 10.1103/PhysRevA.84.053428 NOV 22 2011

1. B. W. Shore
Manipulating quantum structures using laser pulses (Cambridge University Press, 2011)

=====
119. B. D. Bruner, H. Suchowski, N. V. Vitanov, and Y. Silberberg
Strong-field spatiotemporal ultrafast coherent control in three-level atoms
Phys. Rev. A 81, 063410(5pp) (2010)

19. Stamm, Jacob; Benel, Jorge; Escoto, Esmerando; Steinmeyer, Gunter; Dantus, Marcos
Milliradian precision ultrafast pulse control for spectral phase metrology
OPTICS EXPRESS Volume: 29 Issue: 10 Pages: 14314-14325 Published: MAY 10 2021

18. Oliveira, HA; Delben, GJ
Control the relaxation properties of the diffuse bistable potential
CHINESE JOURNAL OF PHYSICS, 60 141-152; 10.1016/j.cjph.2019.02.013 AUG

17. Becquet, Vadim; Cavaletto, Stefano M.
Transient-absorption phases with strong probe and pump pulses
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (3):10.1088/1361-6455/aa8e6a FEB 14 2018

16. Cavaletto, Stefano M.; Harman, Zoltan; Pfeifer, Thomas; Keitel, Christoph H.
Deterministic strong-field quantum control
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.043413 APR 17 2017

15. Delben, GJ; da Luz, MGE
General tracking control of arbitrary N-level quantum systems using piecewise time-independent potentials
QUANTUM INFORMATION PROCESSING, 15 (5):1955-1978; 10.1007/s11128-016-1241-z MAY 2016

14. Konar, Arkaprabha; Lozovoy, Vadim V.; Dantus, Marcos
Stimulated Emission Enhancement Using Shaped Pulses
JOURNAL OF PHYSICAL CHEMISTRY A, 120 (12):2002-2008; 10.1021/acs.jpca.6b02010 MAR 31 2016

13. Demtroeder, W.
Laser Spectroscopy 2: Experimental Techniques, Fifth Edition pp. 1-757 (Springer, 2015)

12. Liu, Ji-Cai; Zhang, Ye-Qi; Chen, Lei
Coherent control of nondegenerate two-photon absorption by femtosecond laser pulses
JOURNAL OF MODERN OPTICS, 61 (10):781-786; SI 10.1080/09500340.2013.821534 2014

11. Glenn, Rachel; Mukamel, Shaul
Multidimensional spectroscopy with a single broadband phase-shaped laser pulse
JOURNAL OF CHEMICAL PHYSICS, 140 (14):10.1063/1.4869750 APR 14 2014

10. Lu Chen-Hui; Zhang Shi-An; Sun Zhen-Rong
Manipulation of Resonance-Enhanced Multiphoton-Ionization Photoelectron Spectroscopy by Two Time-Delayed Femtosecond Laser Pulses
CHINESE PHYSICS LETTERS, 30 (11):10.1088/0256-307X/30/11/113302 NOV 2013

9. Wang, Cong; Jiang, Lan; Li, Xin; Wang, Feng; Yuan, Yanping; Yuan, Lei; Qu, Liangti; Duan, Ji'an
Frequency dependence of electron dynamics during femtosecond laser resonant photoionization of Li-4 cluster
JOURNAL OF APPLIED PHYSICS, 114 (14):10.1063/1.4825059 OCT 14 2013

8. Gelin, Maxim F.; Belyaev, Andrey K.; Domcke, Wolfgang
Pump-probe spectroscopy with strong pulses as a tool to enhance weak electronic transitions
PHYSICAL REVIEW A, 87 (6):10.1103/PhysRevA.87.063416 JUN 17 2013

7. Huang, YX; Xu, SW; Ji, XM; Yang, XH
Resolution enhancement of photoelectron spectra by coherent phase control
INDIAN JOURNAL OF PHYSICS, 87 (6):587-591; 10.1007/s12648-013-0273-9 JUN 2013

6. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Qiu, Jianrong; Sun, Zhenrong
Resonance-enhanced multiphoton-ionization photoelectron spectroscopy by a rectangular amplitude modulation
PHYSICAL REVIEW A, 87 (3):10.1103/PhysRevA.87.035403 MAR 21 2013

5. Malik, DA; Kimel, AV; van der Zande, WJ
Coherent control of excited state populations in rubidium using Rabi oscillations
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (23):10.1088/0953-4075/45/23/235002 DEC 14 2012

4. Zhang, Shian; Lu, Chenhui; Jia, Tianqing; Sun, Zhenrong
Achieving high-resolution photoelectron spectroscopy from a broadband femtosecond laser pulse
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012513 JUL 23 2012

3. Goto, Haruka; Katsuki, Hiroyuki; Ibrahim, Heide; Chiba, Hisashi; Ohmori, Kenji
Strong-laser-induced quantum interference
NATURE PHYSICS 7 (5): 383-385 MAY 2011

2. Molecular quantum control landscapes in von Neumann time-frequency phase space
Ruetzel S, Stolzenberger C, Fechner S, et al.

1. Four-level atomic interferometer driven by shaped ultrafast laser pulses
Clow S, Weinacht T
PHYSICAL REVIEW A Volume: 82 Issue: 2 Article Number: 023411 Published:
AUG 12 2010

10. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019

9. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

=====
120. A. A. Rangelov, U. Gaubatz, and N. V. Vitanov
Broadband adiabatic conversion of light polarization
Opt. Commun. 283, 3891-4 (2010)

10. Aslanyan, L. S.; Hovakimyan, H. H.
Spatial resonance in an anisotropic medium with modulated gyrotropy
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37
Issue: 3 Pages: 847-851 Published: MAR 1 2020

8. Ran, Du; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Speeding up adiabatic passage by adding Lyapunov control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033803 SEP 1 2017

9. Aslanyan, L. S.; Hovakimyan, H. H.
Geometrical Optics of an Anisotropic Media with Space Modulated Gyrotropy
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES
Volume: 55 Issue: 1 Pages: 30-37 Published: JAN 2020

7. Chen, Zhen; Chen, Ye-Hong; Xia, Yan
Deterministic generation of singlet state of N atoms in coupled cavities via
adiabatic passage of a dark state
JOURNAL OF MODERN OPTICS, 63 (2):92-102; 10.1080/09500340.2015.1066460
2016

8. Liu, Xiaosong; Zhang, Wei; Song, Yunfei; Zheng, Zhaoyang; Lv, Zhe; Yang,
Yanqiang
Selective excitation of vibrational modes and probe for asymmetric
intramolecular energy redistribution
PHYSICA SCRIPTA, 94 (6):10.1088/1402-4896/ab08d6 JUN 2019

6. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

7. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

5. Zhang Wen-Jing; Xie Xiao-Tao; Jin Lu-Ling; Bai Jin-Tao
Ultrafast population transfer in a Lambda-configuration level system driven by
few-cycle laser pulses
CHINESE PHYSICS B, 22 (11):10.1088/1674-1056/22/11/114210 NOV 2013

6. Aslanyan, A. L.; Aslanyan, L. S.; Chilingaryan, Yu. S.
On the Jones matrix method in a twisted anisotropic medium
OPTICS AND SPECTROSCOPY Volume: 119 Issue: 5 Pages: 869-874 Published:
NOV 2015

4. Nakamura, Satoshi; Goto, Hayato; Ichimura, Kouichi
Quantum phase gate via stimulated Raman adiabatic passage with time-
dependent two-photon detuning
OPTICS COMMUNICATIONS, 293 160-165; 10.1016/j.optcom.2012.11.001 APR 15
2013

5. Chen, Xi; Wang, Hong-Wei; Ban, Yue; Tseng, Shuo-Yen
Short-length and robust polarization rotators in periodically poled lithium niobate
via shortcuts to adiabaticity
OPTICS EXPRESS, 22 (20):24169-24178; 10.1364/OE.22.024169 OCT 6 2014

3. Assemat, E; Sugny, D
Connection between optimal control theory and adiabatic-passage techniques in
quantum systems
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023406 AUG 6 2012

4. Aslanyan, LS; Aslanyan, AL; Chilingaryan, YS
Geometrical optics of a twist-oriented nematic liquid crystal
OPTICS AND SPECTROSCOPY, 116 (3):483-487; 10.1134/S0030400X14030035
MAR 2014

2. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of
amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45
(16):10.1088/0953-4075/45/16/165503 AUG 28 2012

3. Aslanyan, A. L.; Aslanyan, L. S.; Nazaryan, S. K.
Optical-Mechanical Analogy in Problems of Polarization Optics
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES
Volume: 1 Issue: 1 Pages: 23-28 DOI: 10.3103/S1068337212010057
Published: FEB 2012

1. Sandor, Nora; Bakos, Joseph S.; Soerlei, Zsuzsa; Djotyan, Gagik P.
Creation of coherent superposition states in inhomogeneously broadened media
with relaxation
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS 28 (11):
2785-2796 NOV 2011

2. Aslanyan, Ara L.; Aslanyan, Levon S.; Nazaryan, Stella K.
Polarization oscillations in a media with inhomogeneous anisotropy and
gyrotropy
PHOTONICS AND MICRO- AND NANO-STRUCTURED MATERIALS 2011, 8414
10.1117/12.923189 2012
Editor: Drampyan RRK, Proceedings of SPIE, Conference on Photonics and Micro
and Nano-structured Materials, JUN 28-30, 2011, Yerevan, ARMENIA

=====
122.I. I. Boradjiev and N. V. Vitanov

Transition time in the stimulated Raman adiabatic passage technique
Phys. Rev. A 82, 043407 (8pp) (2010)

1. Wu, Ming-Chan; Hsiao, Fu-Chen; Tseng, Shuo-Yen
Adiabatic Mode Conversion in Multimode Waveguides Using Chirped Computer-
Generated Planar Holograms
IEEE PHOTONICS TECHNOLOGY LETTERS 23 (12): 807-809 JUN 15 2011

11. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill,
Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033216
Published: AUG 7 2020

=====
121.C. Lazarou and N. V. Vitanov
Dephasing effects on stimulated Raman adiabatic passage in tripod
configurations
Phys. Rev. A 82, 033437(12pp) (2010)

11. Sun, Hui; Xu, Ning; Fan, Shuangli; Liu, Mingwei
Speeding up the creation of coherent superposition states by shortcut-to-
adiabaticity means
ANNALS OF PHYSICS Volume: 418 Article Number: 168200 Published: JUL

10. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Stimulated Raman adiabatic passage: Effects of system parameters on population
transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1
2020

9. Paspalakis, Emmanuel; Economou, Sophia E.; Carreno, Fernando
Adiabatically preparing quantum dot spin states in the Voigt geometry
JOURNAL OF APPLIED PHYSICS Volume: 125 Issue: 2 Article Number: 024305
Published: JAN 14 2019

8. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution

7. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018

6. Liu, Tong; Solntsev, Alexander S.; Boes, Andreas; Nguyen, Thach; Will, Christian; Mitchell, Arnan; Neshev, Dragomir N.; Sukhorukov, Andrey A.
Experimental demonstration of bidirectional light transfer in adiabatic waveguide structures
OPTICS LETTERS, 41 (22):5278-5281; 10.1364/OL.41.005278 NOV 15 2016

5. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

4. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014

3. Zhang Wen-Jing; Xie Xiao-Tao; Jin Lu-Ling; Bai Jin-Tao
Ultrafast population transfer in a Lambda-configuration level system driven by few-cycle laser pulses
CHINESE PHYSICS B, 22 (11):10.1088/1674-1056/22/11/114210 NOV 2013

2. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013

1. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakhchyan, L; Guerin, S; Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT 2012

=====

123. M. Scala, B. Militello, A. Messina, and N. V. Vitanov
Stimulated Raman adiabatic passage in a Lambda system in the presence of quantum noise
Phys. Rev. A 83, 012101(8pp) (2011)

19. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021

18. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410 Published: NOV 18 2019

17. Wang, Xiao-Lan; Ren, Yu-Kun; Zeng, Hao-Sheng
Dynamical control of population and entanglement for open Lambda-type atoms by engineering the environment
CHINESE PHYSICS B, 28 (3):10.1088/1674-1056/28/3/030301 MAR 2019

16. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019

15. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018

14. Shi, Xuan; Yuan, Hao; Zhao, Hong-Quan
Microscopic Description of Spontaneous Emission in Stark Chirped Rapid Adiabatic Passages
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 57 (1):9-19; 10.1007/s10773-017-3535-z JAN 2018

13. Coto, Raul; Jacques, Vincent; Hetet, Gabriel; Maze, Jeronimo R.
Stimulated Raman adiabatic control of a nuclear spin in diamond
PHYSICAL REVIEW B, 96 (8):10.1103/PhysRevB.96.085420 AUG 14 2017

12. Liu, Tong; Solntsev, Alexander S.; Boes, Andreas; Nguyen, Thach; Will, Christian; Mitchell, Arnan; Neshev, Dragomir N.; Sukhorukov, Andrey A.
Experimental demonstration of bidirectional light transfer in adiabatic waveguide structures
OPTICS LETTERS, 41 (22):5278-5281; 10.1364/OL.41.005278 NOV 15 2016

11. Mandani, Somayeh; Sarbishaei, Mohsen; Javidan, Kurosh
Dynamics of non-Markovianity in the presence of a driving field
PRAMANA-JOURNAL OF PHYSICS, 86 (3):503-514; 10.1007/s12043-015-1039-z MAR 2016

10. Chen, Zhen; Chen, Ye-Hong; Xia, Yan
Deterministic generation of singlet state of N atoms in coupled cavities via adiabatic passage of a dark state
JOURNAL OF MODERN OPTICS, 63 (2):92-102; 10.1080/09500340.2015.1066460 2016

9. Shore, Bruce W.
Pre-history of the concepts underlying stimulated raman adiabatic passage (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

8. Hou, Q.Z., Yang, W.L., Feng, M., Chen, C.-Y.
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
Physical Review A - Atomic, Molecular, and Optical Physics 88(1),013807 (2013)

7. Wang, Qiong; Nie, Jian-Jun; Zeng, Hao-Sheng
Roles of dephasing in the population transfer in stimulated Raman adiabatic process
EUROPEAN PHYSICAL JOURNAL D Volume: 67 Issue: 7 Article Number: 151 Published: JUL 2013

6. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014

5. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014

4. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014

3. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

2. Grigoryan, GG; Leroy, C; Pashayan-Leroy, Y; Chakhmakhchyan, L; Guerin, S; Jauslin, HR
Stimulated Raman adiabatic passage via bright state in Lambda medium of unequal oscillator strengths
EUROPEAN PHYSICAL JOURNAL D, 66 (10):10.1140/epjd/e2012-30216-0 OCT 2012

1. Chaltykyan, V; Gazazyan, E; Grigoryan, G; Hovhannisyanyan, A; Tikhova, O
Alternative techniques of population transfer in multilevel systems
INTERNATIONAL SYMPOSIUM ON OPTICS AND ITS APPLICATIONS (OPTICS-2011), 350 10.1088/1742-6596/350/1/012004 2012
Editors: Bhattacherjee AB; Calvo ML; Kazaryan EM; Papoyan AV; Sarkisyan HA
Journal of Physics Conference Series

=====

124. A. A. Rangelov, H. Suchowski, Y. Silberberg, and N. V. Vitanov
Wireless adiabatic power transfer
Annals Phys. 326, 626-33 (2011)

16. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Guo, Chu; Xiong, Xianming; Zhang, Wentao
Long-distance adiabatic wireless energy transfer via multiple coils coupling
RESULTS IN PHYSICS Volume: 19 Article Number: 103478 Published: DEC 2020
15. Fairouz, M., Kuwait, Saed, M.A.
Online spotlight: Wideband retrodirective arrays for wireless charging of portable devices
Microwave Journal 63(7) (2020)
14. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430
Published: DEC 30 2019
13. Paul, Koushik; Sarma, Amarendra K.
Fast and efficient wireless power transfer via transitionless quantum driving
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-22562-9 MAR 7 2018
12. Guo, Yunsheng; Li, Jiansheng; Hou, Xiaojuan; Lv, Xiaolong; Liang, Hao; Zhou, Ji; Wu, Hongya
Poynting vector analysis for wireless power transfer between magnetically coupled coils with different loads
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-00846-w APR 7 2017
11. Kenmoe, MB; Tchoubiap, SEM; Sadem, CK; Tchpadma, AB; Fai, LC
Non-adiabatic and adiabatic transitions at level crossing with decay: two- and three-level systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 48 (9):10.1088/1751-8113/48/9/095303 MAR 6 2015
10. Maso, Marco; Lakshminarayana, Subhash; Quek, Tony Q. S.; Poor, H. Vincent
A Composite Approach to Self-Sustainable Transmissions: Rethinking OFDM
IEEE TRANSACTIONS ON COMMUNICATIONS, 62 (11):3904-3917;
10.1109/TCOMM.2014.2361124 NOV 2014
9. Fairouz, M., Saed, M.
A retrodirective array with reduced surface waves for wireless power transfer applications
Progress In Electromagnetics Research C 55, pp. 179-186 (2014)
8. Longhi, Stefano
Coherent transfer by adiabatic passage in two-dimensional lattices
ANNALS OF PHYSICS, 348 161-175; 10.1016/j.aop.2014.05.020 SEP 2014
7. Olivares-Galvan, Juan C.; Campero-Littlewood, Eduardo; Magdaleno-Adame, Salvador; Maximov, Serguei; Xu, Wilsun
Wireless Power Transfer: Literature Survey
IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC), NOV 13-15, 2013, Morelia, MEXICO
6. Kouzaev, G.A.
Applications of advanced electromagnetics: Components and systems
Lecture Notes in Electrical Engineering 169, pp. 1-546 (2013)
5. Gao, Like; Hu, Wenshan; Xie, Xiongwei; Deng, Qijun; Wu, Zhiding; Zhou, Hong; Jiang, Yan
Optimum Design of Coil for Wireless Energy Transmission System Based on Resonant Coupling
2013 10TH IEEE INTERNATIONAL CONFERENCE ON CONTROL AND AUTOMATION (ICCA), 190-195; 2013
4. Kim, Sanghoek; Ho, John S.; Poon, Ada S. Y.
Midfield Wireless Powering of Subwavelength Autonomous Devices
PHYSICAL REVIEW LETTERS, 110 (20):10.1103/PhysRevLett.110.203905 MAY 17 2013
3. Kim, S., Yoo, S.
Comparison of planar type coils for efficient power supply to implantable devices
Biomedical Engineering Letters 2(3), pp. 179-185 (2012)
2. Salbani, M.F., Abdul Halim, M.A., Jahidin, A.H., Megat Ali, M.S.A.
Development of helical antenna prototype for wireless power transmission
Proceedings - IEEE International Conference on Control System, Computing and Engineering, ICCSCE 2011 6190584, pp. 536-539 (2011)
1. Salbani, M.F., Abdul Halim, M.A., Jahidin, A.H., Megat Ali, M.S.A.
Helical antenna design for wireless power transmission: A preliminary study
Proceedings - 2011 IEEE International Conference on System Engineering and Technology, ICSET 2011, art. no. 5993448, pp. 192-195
- =====
- 125. S. S. Ivanov and N. V. Vitanov**
High-fidelity local addressing of trapped ions and atoms by composite sequences of laser pulses
Opt. Lett. 36, 1275-7 (2011)
18. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021
17. Seck, Christopher M.; Meier, Adam M.; Merrill, J. True; Hayden, Harley T.; Sawyer, Brian C.; Volin, Curtis E.; Brown, Kenton R.
Single-ion addressing via trap potential modulation in global optical fields
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 5 Article Number: 053024
Published: MAY 2020
16. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019
15. Sanner, Christian; Huntemann, Nils; Lange, Richard; Tamm, Christian; Peik, Ekkehard
Autobalanced Ramsey Spectroscopy
PHYSICAL REVIEW LETTERS, 120 (5):10.1103/PhysRevLett.120.053602 JAN 30 2018
14. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
13. Liu, Yen-Huang; Tseng, Shuo-Yen
Robust coherent superposition of states using quasiadiabatic inverse engineering
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (20):10.1088/1361-6455/aa8b4e OCT 28 2017
12. Taylor, Richard L.; Bentley, Christopher D. B.; Pedernales, Julien S.; Lamata, Lucas; Solano, Enrique; Carvalho, Andre R. R.; Hope, Joseph J.
A Study on Fast Gates for Large-Scale Quantum Simulation with Trapped Ions
SCIENTIFIC REPORTS, 7 10.1038/srep46197 APR 12 2017
11. Hussain, Mahmood Irtiza; Petrasianas, Matthew Joseph; Bentley, Christopher D. B.; Taylor, Richard L.; Carvalho, Andre R. R.; Hope, Joseph J.; Streed, Erik W.; Lobino, Mirko; Kielpinski, David
Ultrafast, high repetition rate, ultraviolet, fiber-laser-based source: application towards Yb+ fast quantum-logic
OPTICS EXPRESS, 24 (15):16638-16648; 10.1364/OE.24.016638 JUL 25 2016
10. Bentley, CDB; Taylor, RL; Carvalho, ARR; Hope, JJ
Stability thresholds and calculation techniques for fast entangling gates on trapped ions
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.042342 APR 28 2016
9. Gebert, F.; Wan, Y.; Wolf, F.; Heip, Jan C.; Schmidt, Piet O.
Detection of motional ground state population of a trapped ion using delayed pulses
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/1/013037 JAN 14 2016
8. Ndong, Mamadou; Djoty, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI 10.1088/0953-4075/48/17/174007 SEP 14 2015
7. Merrill, J. True; Brown, Kenneth R.
PROGRESS IN COMPENSATING PULSE SEQUENCES FOR QUANTUM COMPUTATION
QUANTUM INFORMATION AND COMPUTATION FOR CHEMISTRY, 154 241-294; 2014
Advances in Chemical Physics, Edited by: Kais S
6. Merrill, J. True; Doret, S. Charles; Vittorini, Grahame; Addison, J. P.; Brown, Kenneth R.

Transformed composite sequences for improved qubit addressing
PHYSICAL REVIEW A, 90 (4):10.1103/PhysRevA.90.040301 OCT 2 2014

5. Thom, Joseph; Wilpers, Guido; Riis, Erling; Sinclair, Alastair G.
Accurate and agile digital control of optical phase, amplitude and frequency for coherent atomic manipulation of atomic systems
OPTICS EXPRESS, 21 (16):18712-18723; 10.1364/OE.21.018712 AUG 12 2013

4. Criger, Ben; Passante, Gina; Park, Daniel; Laflamme, Raymond
Recent advances in nuclear magnetic resonance quantum information processing
PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES, 370 (1976):4620-4635; SI 10.1098/rsta.2011.0352 OCT 13 2012

3. Pyragas, Viktoras; Juzeliunas, Gediminas
Stability of linear and nonlinear lambda and tripod systems in the presence of amplitude damping
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (16):10.1088/0953-4075/45/16/165503 AUG 28 2012

2. Kovachy, Tim; Chiow, Sheng-wei; Kasevich, Mark A.
Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012

1. Guerin, S; Hakobyan, V; Jauslin, HR
Optimal adiabatic passage by shaped pulses: Efficiency and robustness
PHYSICAL REVIEW A 84 (1): 10.1103/PhysRevA.84.013423 JUL 27 2011

=====
126. G.T. Genov, A. A. Rangelov, and N. V. Vitanov
Propagation of light polarization in a birefringent medium: Exact analytic models
Opt. Commun. 284, 2642-47 (2011)

3. Saha, Arijit; Bhattacharya, Kallol; Chakraborty, Ajoy Kumar
Depolarization of polarized polychromatic beam during propagation in a birefringent medium
OPTIK, 127 (15):5882-5886; 10.1016/j.ijleo.2016.04.001 2016

2. Siddons, Paul; Adams, Charles S.; Hughes, Ifan G.
Optical preparation and measurement of atomic coherence at gigahertz bandwidth
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (12):SI 10.1088/0953-4075/45/12/124009 JUN 28 2012

1. Aslanyan, Ara L.; Aslanyan, Levon S.; Nazaryan, Stella K.
Polarization oscillations in a media with inhomogeneous anisotropy and gyrotropy
PHOTONICS AND MICRO- AND NANO-STRUCTURED MATERIALS 2011, 8414 10.1117/12.923189 2012
Editor: Drampyan RRR, Proceedings of SPIE, Conference on Photonics and Micro and Nano-structured Materials, JUN 28-30, 2011, Yerevan, ARMENIA

=====
127. B. T. Torosov and N. V. Vitanov
Smooth composite pulses for high-fidelity quantum information processing
Phys. Rev. A 83, 053420(7) (2011)

39. Li, Bing-Jie; Liu, Shuai; Wang, Yu; Kang, Yi-Hao; Shi, Zhi-Cheng; Xia, Yan
Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS
[early access icon] Early Access: MAR 2021

38. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

37. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill, Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033216 Published: AUG 7 2020

36. Majumder, Swarnadeep; de Castro, Leonardo Andreta; Brown, Kenneth R.
Real-time calibration with spectator qubits
NPJ QUANTUM INFORMATION Volume: 6 Issue: 1 Article Number: 19

Published: FEB 7 2020

35. Kang, Yi-Hao; Xia, Yan
Entanglement Creations and Quantum Gate Implementations of Spin Qubits With Lyapunov Control
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 26 Issue: 3 Published: MAY-JUN 2020

34. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321 Published: JAN 15 2020

33. Zarantonello, G; Hahn, H; Morgner, J; Schulte, M; Bautista-Salvador, A; Werner, RF; Hammerer, K; Ospelkaus, C
Robust and Resource-Efficient Microwave Near-Field Entangling Be-9(+) Gate
PHYSICAL REVIEW LETTERS Volume: 123 Issue: 26 Article Number: 260503 Published: DEC 26 2019

32. Kyoseva, Elica; Greener, Hadar; Suchowski, Haim
Detuning-modulated composite pulses for high-fidelity robust quantum control
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.032333 SEP 25 2019

31. Wu, Jin-Lei; Wang, Yan; Song, Jie; Xia, Yan; Su, Shi-Lei; Jiang, Yong-Yuan
Robust and highly efficient discrimination of chiral molecules through three-mode parallel paths
PHYSICAL REVIEW A, 100 (4):10.1103/PhysRevA.100.043413 OCT 21 2019

30. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019

29. Genov, Genko T.; Aharon, Nati; Jelezko, Fedor; Retzker, Alex
Mixed dynamical decoupling
QUANTUM SCIENCE AND TECHNOLOGY, 4 (3):10.1088/2058-9565/ab2afd JUL 2019

28. Murphy, Daniel C.; Brown, Kenneth R.
Controlling error orientation to improve quantum algorithm success rates
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.032318 MAR 14 2019

27. Ventura-Velazquez, C.; Jaramillo Avila, Benjamin; Kyoseva, Elica; Rodriguez-Lara, B. M.
Robust optomechanical state transfer under composite phase driving
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-40492-y MAR 13 2019

26. Genov, Genko T.; Schraft, Daniel; Halfmann, Thomas
Rephasing efficiency of sequences of phased pulses in spin-echo and light-storage experiments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063836 DEC 26 2018

25. Ma, Ling-hui; Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Shortcuts to adiabatic for implementing controlled-not gate with superconducting quantum interference device qubits
QUANTUM INFORMATION PROCESSING, 17 (11):10.1007/s11128-018-2056-x NOV 2018

24. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Pulse design for multilevel systems by utilizing Lie transforms
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033407 MAR 19 2018

23. Greener, H.; Suchowski, H.
Composite pulses in N-level systems with SU(2) symmetry and their geometrical representation on the Majorana sphere
JOURNAL OF CHEMICAL PHYSICS, 148 (7):10.1063/1.5013672 FEB 21 2018

22. Sanner, Christian; Huntemann, Nils; Lange, Richard; Tamm, Christian; Peik, Ekkehard
Autobalanced Ramsey Spectroscopy
PHYSICAL REVIEW LETTERS, 120 (5):10.1103/PhysRevLett.120.053602 JAN 30 2018

21. Yushkov, Konstantin B.; Molchanov, Vladimir Ya.; Ovchinnikov, Andrey V.; Chefonov, Oleg V.
Acousto-optic replication of ultrashort laser pulses
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043866 OCT 30 2017

20. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial

19. Huang, Bi-Hua; Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Song, Jie; Xia, Yan
Fast quantum state engineering via universal SU(2) transformation
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022314 AUG 15 2017

18. Benseny, Albert; Kiely, Anthony; Zhang, Yongping; Busch, Thomas;
Ruschhaupt, Andreas
Spatial non-adiabatic passage using geometric phases
EPJ QUANTUM TECHNOLOGY, 4 10.1140/epjqt/s40507-017-0056-x MAR 28 2017

17. Taylor, Richard L.; Bentley, Christopher D. B.; Pedernales, Julien S.; Lamata,
Lucas; Solano, Enrique; Carvalho, Andre R. R.; Hope, Joseph J.
A Study on Fast Gates for Large-Scale Quantum Simulation with Trapped Ions
SCIENTIFIC REPORTS, 7 10.1038/srep46197 APR 12 2017

16. Low, Guang Hao; Yoder, Theodore J.; Chuang, Isaac L.
Methodology of Resonant Equiangular Composite Quantum Gates
PHYSICAL REVIEW X, 6 (4):10.1103/PhysRevX.6.041067 DEC 28 2016

15. Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Xia, Yan; Song, Jie
Reverse engineering of a Hamiltonian by designing the evolution operators
SCIENTIFIC REPORTS, 6 10.1038/srep30151 JUL 22 2016

14. Abovyan, Gor A.; Kryuchkian, Gagik Yu.
Multiphoton resonant manipulation of qubits by train of pulses
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (5):971-
979; 10.1364/JOSAB.33.000971 MAY 1 2016

13. Bentley, CDB; Taylor, RL; Carvalho, ARR; Hope, JJ
Stability thresholds and calculation techniques for fast entangling gates on
trapped ions
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.042342 APR 28 2016

12. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense,
inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

11. Chen, Jingwei; Wei, L. F.
Implementation speed of deterministic population passages compared to that of
Rabi pulses
PHYSICAL REVIEW A, 91 (2):10.1103/PhysRevA.91.023405 FEB 5 2015

10. Rangelov, Andon A.; Kyoseva, Elica
Broadband composite polarization rotator
OPTICS COMMUNICATIONS, 338 574-577; 10.1016/j.optcom.2014.11.037 MAR 1
2015

9. Cox, Kevin C.; Norcia, Matthew A.; Weiner, Joshua M.; Bohnet, Justin G.;
Thompson, James K.
Reducing collective quantum state rotation errors with reversible dephasing
APPLIED PHYSICS LETTERS, 105 (26):10.1063/1.4905148 DEC 29 2014

8. Dunning, Alexander; Gregory, Rachel; Bateman, James; Cooper, Nathan;
Himsworth, Matthew; Jones, Jonathan A.; Freegarde, Tim
Composite pulses for interferometry in a thermal cold atom cloud
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033608 SEP 8 2014

7. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman
adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

6. Daems, D; Ruschhaupt, A; Sugny, D; Guerin, S
Robust Quantum Control by a Single-Shot Shaped Pulse
PHYSICAL REVIEW LETTERS, 111 (5):10.1103/PhysRevLett.111.050404 JUL 31
2013

5. Husain, Sami; Kawamura, Minaru; Jones, Jonathan A.
Further analysis of some symmetric and antisymmetric composite pulses for
tackling pulse strength errors
JOURNAL OF MAGNETIC RESONANCE, 230 145-154; 10.1016/j.jmr.2013.02.007
MAY 2013

4. Rangelov, AA
Achromatic change of circular polarization handedness
OPTICS COMMUNICATIONS, 285 (21-22):4157-4160;
10.1016/j.optcom.2012.06.053 OCT 1 2012

3. Chen, Zilong; Bohnet, Justin G.; Weiner, Joshua M.; Thompson, James K.
General formalism for evaluating the impact of phase noise on Bloch vector
rotations
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.032313 SEP 13 2012

2. Chen, Xi; Muga, J. G.
Engineering of fast population transfer in three-level systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033405 SEP 6 2012

1. Kovachy, Tim; Chiow, Sheng-wei; Kasevich, Mark A.
Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012

=====

128. B. T. Torosov, S. Guerin, and N. V. Vitanov
High-Fidelity Adiabatic Passage by Composite Sequences of Chirped Pulses
Phys. Rev. Lett. 106, 233001(4pp) (2011)

71. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng,
Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

70. Kam, Chon-Fai; Chen, Yang
Analytical approximations to the dynamics of cubic level crossing model
ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK Volume: 72 Issue:
3 Article Number: 91 Published: JUN 2021

69. Ding, Yongcheng; Ban, Yue; Martin-Guerrero, Jose D.; Solano, Enrique;
Casanova, Jorge; Chen, Xi
Breaking adiabatic quantum control with deep learning
PHYSICAL REVIEW A Volume: 103 Issue: 4 Article Number: L040401
Published: APR 9 2021

68. Zhu, Jing-Jun; Chen, Xi
Fast-forward scaling of atom-molecule conversion in Bose-Einstein condensates
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023307
Published: FEB 4 2021

67. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaei-
Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic
passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR
2021

66. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill,
Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033216
Published: AUG 7 2020

65. Chang, H-S; Zhong, Y. P.; Bienfait, A.; Chou, M-H; Conner, C. R.; Dumur, E.;
Grebel, J.; Peairs, G. A.; Povey, R. G.; Satzinger, K. J.; Cleland, A. N.
Remote Entanglement via Adiabatic Passage Using a Tunably Dissipative Quantum
Communication System
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 24 Article Number: 240502
Published: JUN 17 2020

64. Stefanatos, Dionisis; Paspalakis, Emmanuel
Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue:
11 Article Number: 115304 Published: MAR 20 2020

63. Al-Mahmoud, Mouhamad; Rangelov, Andon A.; Coda, Virginie;
Montemezzani, Germano
Segmented Composite Optical Parametric Amplification
APPLIED SCIENCES-BASEL Volume: 10 Issue: 4 Article Number: 1220
Published: FEB 2020

62. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

61. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system

60. Kyoseva, Elica; Greener, Hadar; Suchowski, Haim
Detuning-modulated composite pulses for high-fidelity robust quantum control
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.032333 SEP 25 2019

59. Stefanatos, Dionisis; Paspalakis, Emmanuel
Resonant shortcuts for adiabatic rapid passage with only z-field control
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019

58. Genov, Genko T.; Aharon, Nati; Jelezko, Fedor; Retzker, Alex
Mixed dynamical decoupling
QUANTUM SCIENCE AND TECHNOLOGY, 4 (3):10.1088/2058-9565/ab2afd JUL 2019

57. Lopez-Saldivar, J.A., Castanos, O., Man'ko, M.A., Man'ko, V.I.
A new mechanism of open system evolution and its entropy using unitary transformations in noncomposite qudit systems
Entropy 21(8),736 (2019)

56. Medina, I; Semiao, FL
Pulse engineering for population control under dephasing and dissipation
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012103 JUL 2 2019

55. Yan, Ying; Li, Yichao; Kinos, Adam; Walther, Andreas; Shi, Chunyan; Rippe, Lars; Moser, Joel; Kroll, Stefan; Chen, Xi
Inverse engineering of shortcut pulses for high fidelity initialization on qubits closely spaced in frequency
OPTICS EXPRESS, 27 (6):8267-8282; 10.1364/OE.27.008267 MAR 18 2019

54. Ventura-Velazquez, C.; Jaramillo Avila, Benjamin; Kyoseva, Elica; Rodriguez-Lara, B. M.
Robust optomechanical state transfer under composite phase driving
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-40492-y MAR 13 2019

53. Mostafavi, Fatemeh; Yuan, Luqi; Ramezani, Hamidreza
Eigenstates Transition without Undergoing an Adiabatic Process
PHYSICAL REVIEW LETTERS, 122 (5):10.1103/PhysRevLett.122.050404 FEB 8 2019

52. Genov, Genko T.; Schraft, Daniel; Halfmann, Thomas
Rephasing efficiency of sequences of phased pulses in spin-echo and light-storage experiments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063836 DEC 26 2018

51. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

50. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018

49. Guo, Yu; Dong, Daoyi; Shu, Chuan-Cun
Optimal and robust control of quantum state transfer by shaping the spectral phase of ultrafast laser pulses
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 20 (14):9498-9506; 10.1039/c8cp00512e APR 14 2018

48. Wang, Tenghui; Zhang, Zhenxing; Xiang, Liang; Gong, Zhihao; Wu, Jianlan; Yin, Yi
Simulating a topological transition in a superconducting phase qubit by fast adiabatic trajectories
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 61 (4):10.1007/s11433-017-9156-1 APR 2018

47. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual Magnetic Monopole (Springer, 2018)

46. Yang, Guang; Li, Wei; Cen, Li-Xiang
Nonadiabatic Population Transfer in a Tangent-Pulse Driven Quantum Model
CHINESE PHYSICS LETTERS, 35 (1):10.1088/0256-307X/35/1/013201 JAN 2018

45. Zhao, Li-Chen; Xin, Guo-Guo; Yang, Zhan-Ying
Transition dynamics of a bright soliton in a binary Bose-Einstein condensate
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 34 (12):2569-2577; 10.1364/JOSAB.34.002569 DEC 1 2017

44. Wu, Chengzhi; Qi, Bo; Chen, Chunlin; Dong, Daoyi
Robust Learning Control Design for Quantum Unitary Transformations
IEEE TRANSACTIONS ON CYBERNETICS, 47 (12):4405-4417; 10.1109/TCYB.2016.2610979 DEC 2017

43. Zhang, Qi; Chen, Xi; Guery-Odelin, D.
Reverse engineering protocols for controlling spin dynamics
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017

42. Wu, Qi-Cheng; Huang, Bi-Hua; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Perfect quantum state engineering by the combination of the counterdiabatic driving and the reverse-engineering technique
ANNALS OF PHYSICS, 385 40-56; 10.1016/j.aop.2017.07.010 OCT 2017

41. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

40. Liu, Yen-Huang; Tseng, Shuo-Yen
Robust coherent superposition of states using quasiadiabatic inverse engineering
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (20):10.1088/1361-6455/aa8b4e OCT 28 2017

39. Dou, Fu-quan; Liu, Jie; Fu, Li-bin
High-fidelity superadiabatic population transfer of a two-level system with a linearly chirped Gaussian pulse
EPL, 116 (6):10.1209/0295-5075/116/60014 DEC 2016

38. Ran, Du; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Speeding up adiabatic passage by adding Lyapunov control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033803 SEP 1 2017

37. Zhang, Zhenxing; Wang, Tenghui; Xiang, Liang; Yao, Jiadong; Wu, Jianlan; Yin, Yi
Measuring the Berry phase in a superconducting phase qubit by a shortcut to adiabaticity
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.042345 APR 28 2017

36. Yang, Yu-Feng; Chen, Ye-Hong; Wu, Qi-Cheng; Kang, Yi-Hao; Huang, Bi-Hua; Xia, Yan
Rapid generation of a three-dimensional entangled state for two atoms trapped in a cavity via shortcuts to adiabatic passage
QUANTUM INFORMATION PROCESSING, 16 (1):10.1007/s11128-016-1453-2 JAN 2017

35. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016

34. Wu, Qi-Cheng; Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan; Zheng, Shi-Biao
Improving the stimulated Raman adiabatic passage via dissipative quantum dynamics
OPTICS EXPRESS, 24 (20):22847-22864; 10.1364/OE.24.022847 OCT 3 2016

33. Wang, Zhe; Xia, Yan; Chen, Ye-Hong; Song, Jie
Fast controlled preparation of two-atom maximally entangled state and N-atom W state in the direct coupled cavity systems via shortcuts to adiabatic passage
EUROPEAN PHYSICAL JOURNAL D, 70 (8):10.1140/epjd/e2016-60638-3 AUG 30 2016

32. Du, Yan-Xiong; Liang, Zhen-Tao; Li, Yi-Chao; Yue, Xian-Xian; Lv, Qing-Xian; Huang, Wei; Chen, Xi; Yan, Hui; Zhu, Shi-Liang
Experimental realization of stimulated Raman shortcut-to-adiabatic passage with cold atoms
NATURE COMMUNICATIONS, 7 10.1038/ncomms12479 AUG 2016

31. Song, Kun-Huang; Chen, Ming-Feng
Shortcuts to adiabatic passage for generation of W states of distant atoms
QUANTUM INFORMATION PROCESSING, 15 (8):3169-3188; 10.1007/s11128-016-1338-4 AUG 2016

30. Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Xia, Yan; Song, Jie
Reverse engineering of a Hamiltonian by designing the evolution operators
SCIENTIFIC REPORTS, 6 10.1038/srep30151 JUL 22 2016

29. Dou, F., Zheng, W.
High-fidelity population inversion of two-level system
Kexue Tongbao/Chinese Science Bulletin 61(20), pp. 2309-2315 (2016)
28. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016
27. Yang, Rong-Can; Lin, Xiu; Ye, Li-Xiang; Chen, Xiang; He, Juan; Liu, Hong-Yu
Generation of singlet states with Rydberg blockade mechanism and driven by adiabatic passage
QUANTUM INFORMATION PROCESSING, 15 (2):731-740; 10.1007/s11128-015-1188-5 FEB 2016
26. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense, inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016
25. Ibanez, S; Li, YC; Chen, X; Muga, JG
Pulse design without the rotating-wave approximation
PHYSICAL REVIEW A, 92 (6):10.1103/PhysRevA.92.062136 DEC 30 2015
24. Dong, Daoyi; Mabrok, Mohamed A.; Petersen, Ian R.; Qi, Bo; Chen, Chunlin; Rabitz, Herschel
Sampling-Based Learning Control for Quantum Systems With Uncertainties
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY, 23 (6):2155-2166; 10.1109/TCST.2015.2404292 NOV 2015
23. Wang, Zhendong; Ji, Rongfang; Xiao, Jing; Ma, Jianling; Liu, Tingting
Interference resonant propagation and spectral properties of double femtosecond chirped Gaussian pulses in three-level Lambda-type atomic medium
Proceedings of SPIE, Edited by: Gong Q; Guo GC; Ham BS, QUANTUM AND NONLINEAR OPTICS III, 9269 10.1117/12.2067981 2014
Conference on Quantum and Nonlinear Optics III, OCT 09-11, 2014, Beijing, PEOPLES R CHINA
22. Qian, Jing; Zhai, Jingjing; Zhang, Lu; Zhang, Weiping
Chirped multiphoton adiabatic passage for a four-level ladder-type Rydberg excitation
PHYSICAL REVIEW A, 91 (1):10.1103/PhysRevA.91.013411 JAN 23 2015
21. Rangelov, Andon A.; Kyoseva, Elica
Broadband composite polarization rotator
OPTICS COMMUNICATIONS, 338 574-577; 10.1016/j.optcom.2014.11.037 MAR 7 2015
20. Tseng, Shuo-Yen
Robust coupled-waveguide devices using shortcuts to adiabaticity
OPTICS LETTERS, 39 (23):6600-6603; 10.1364/OL.39.006600 DEC 1 2014
19. Chen, Ye-Hong; Xia, Yan; Chen, Qing-Qin; Song, Jie
Shortcuts to adiabatic passage for multiparticles in distant cavities: applications to fast and noise-resistant quantum population transfer, entangled states' preparation and transition
LASER PHYSICS LETTERS, 11 (11):10.1088/1612-2011/11/11/115201 NOV 2014
18. Saadati-Niari, M; Amnat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499; 10.1080/09500340.2014.942404 2014
17. Du, Yan-Xiong; Liang, Zheng-Tao; Huang, Wei; Yan, Hui; Zhu, Shi-Liang
Experimental observation of double coherent stimulated Raman adiabatic passages in three-level Lambda systems in a cold atomic ensemble
PHYSICAL REVIEW A, 90 (2):10.1103/PhysRevA.90.023821 AUG 13 2014
16. Ruschhaupt, A; Muga, JG
Shortcuts to adiabaticity in two-level systems: control and optimization
JOURNAL OF MODERN OPTICS, 61 (10):828-832; SI 10.1080/09500340.2013.846431 2014
15. Kiely, A; Ruschhaupt, A
Inhibiting unwanted transitions in population transfer in two- and three-level quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (11):10.1088/0953-4075/47/11/115501 JUN 14 2014
14. Tanamoto, Tetsufumi
Implementation of standard quantum error-correction codes for solid-state qubits
PHYSICAL REVIEW A, 88 (6):10.1103/PhysRevA.88.062334 DEC 26 2013
13. Tseng, Shuo-Yen
Counterdiabatic mode-evolution based coupled-waveguide devices
OPTICS EXPRESS, 21 (18):21224-21235; 10.1364/OE.21.021224 SEP 9 2013
12. Hu Jing-Yu ; Mao Teng-Fei ; Dou Fu-Quan ; et al.
Application of the composite adiabatic passage technique in the Landau-Zener model with harmonic interaction modulation
ACTA PHYSICA SINICA Volume: 62 Issue: 17 Article Number: 170303 DOI: 10.7498/aps.62.170303 Published: 2013
11. Torrontegui, Erik; Ibanez, Sara; Martinez-Garaot, Sofia; Modugno, Michele; del Campo, Adolfo; Guery-Odelin, David; Ruschhaupt, Andreas; Chen, Xi; Gonzalo Muga, Juan
Shortcuts to Adiabaticity
Editor(s): Arimondo E; Berman PR; Lin CC
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 62, 62 117-169; 10.1016/B978-0-12-408090-4.00002-5 2013
10. Vaitkus, Jesse A.; Greentree, Andrew D.
Digital three-state adiabatic passage
PHYSICAL REVIEW A, 87 (6):10.1103/PhysRevA.87.063820 JUN 13 2013
9. Zhang, Jingfu; Shim, Jeong Hyun; Niemeyer, Ingo; Taniguchi, T.; Teraji, T.; Abe, H.; Onoda, S.; Yamamoto, T.; Ohshima, T.; Isoya, J.; Suter, Dieter
Experimental Implementation of Assisted Quantum Adiabatic Passage in a Single Spin
PHYSICAL REVIEW LETTERS, 110 (24):10.1103/PhysRevLett.110.240501 JUN 11 2013
8. Ribeiro, Hugo; Burkard, Guido; Petta, J. R.; Lu, H.; Gossard, A. C.
Coherent Adiabatic Spin Control in the Presence of Charge Noise Using Tailored Pulses
PHYSICAL REVIEW LETTERS, 110 (8):10.1103/PhysRevLett.110.086804 FEB 21 2013
7. Ruschhaupt, A.; Chen, Xi; Alonso, D.; Muga, J. G.
Optimally robust shortcuts to population inversion in two-level quantum systems
NEW JOURNAL OF PHYSICS, 14 10.1088/1367-2630/14/9/093040 SEP 21 2012
6. Ibanez, S; Chen, X; Torrontegui, E; Muga, JG; Ruschhaupt, A
Multiple Schrodinger Pictures and Dynamics in Shortcuts to Adiabaticity
PHYSICAL REVIEW LETTERS, 109 (10):10.1103/PhysRevLett.109.100403 SEP 7 2012
5. Xu, QQ; Yao, DZ; Liu, XN; Zhou, Q; Xiong, GG
Solitary propagation effect of a well-defined chirped femtosecond laser pulse in a resonance-absorbing medium
PHYSICAL REVIEW A, 86 (2):10.1103/PhysRevA.86.023853 AUG 29 2012
4. Chen, Xi; Muga, J. G.
Engineering of fast population transfer in three-level systems
PHYSICAL REVIEW A, 86 (3):10.1103/PhysRevA.86.033405 SEP 6 2012
3. Kovachy, Tim; Chiow, Sheng-wey; Kasevich, Mark A.
Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012
2. Jia, Ning; Qian, Jing; Dong, Guangjiong; Zhang, Weiping
Stability, adiabaticity and transfer efficiency in a nonlinear Lambda-system
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 45 (1):10.1088/0953-4075/45/1/015301 JAN 14 2012
1. Zhdanovich, S; Hepburn, JW; Milner, V
Strong-field effects in Rabi oscillations between a single state and a superposition of states
PHYSICAL REVIEW A 84 (5): 10.1103/PhysRevA.84.053428 NOV 22 2011
- =====
- 129. S. S. Ivanov and N. V. Vitanov**
Scalable uniform construction of highly conditional quantum gates
Phys. Rev. A 84, 022319(5pp) (2011)
3. Chen, Hao; Tan, Jintao; Hai, Kuo; Zhang, Xili; Hai, Wenhua
Controlling instability and phase hops of a kicked two-level ion in Lamb-Dicke regime

2. Saeedi, Mehdi; Pedram, Massoud
Linear-depth quantum circuits for n-qubit Toffoli gates with no ancilla
PHYSICAL REVIEW A, 87 (6):10.1103/PhysRevA.87.062318 JUN 17 2013

1. Kovachy, Tim; Chiow, Sheng-wei; Kasevich, Mark A.
Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012

=====
130. M. Scala, B. Militello, A. Messina, and N. V. Vitanov
Microscopic description of dissipative dynamics of a level-crossing transition
Phys. Rev. A 84, 023416(5pp) (2011)

8. Huang, Wen-Zhi; He, Yu-Zhen; Chen, Bing
High-fidelity quantum state transfer through a dissipative quantum data bus*
COMMUNICATIONS IN THEORETICAL PHYSICS Volume: 72 Issue: 6 Article
Number: UNSP 065102 Published: JUN 1 2020

7. Rahaman, Sariful; Nath, Bikram; Mondal, Chandan Kumar
Thermal modulation in Zeno and anti-Zeno effects on quantum measurement
MOLECULAR PHYSICS, 115 (23):2961-2969; 10.1080/00268976.2017.1340681
2017

6. Wu, Shan; Li, Haichao; Zhang, Jiyang; Su, Chong; Fu, Cheng
Free dynamics and quantum Zeno effect of qubit coupled to a single mode field
in dissipation environment
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50
(6):10.1088/1361-6455/aa5db3 MAR 28 2017

5. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems:
Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016

4. Avishai, Y; Band, YB
Landau-Zener problem with decay and dephasing
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.032116 SEP 30 2014

3. Haikka, P; Molmer, K
Dissipative Landau-Zener level crossing subject to continuous measurement:
Excitation despite decay
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.052114 MAY 15 2014

2. Orth, Peter P; Imambekov, Adilet; Le Hur, Karyn
Nonperturbative stochastic method for driven spin-boson model
PHYSICAL REVIEW B, 87 (1):10.1103/PhysRevB.87.014305 JAN 25 2013

1. Pechen, Alexander; Il'in, Nikolay
Trap-free manipulation in the Landau-Zener system
PHYSICAL REVIEW A, 86 (5):10.1103/PhysRevA.86.052117 NOV 21 2012

=====
131. B. T. Torosov and N. V. Vitanov
Evolution of superpositions of quantum states through a level crossing
Phys. Rev. A 84, 063411 (5pp) (2011)

7. Fortin, Jean-Yves
Charge Oscillations in a Simple Model of Interacting Magnetic Orbits
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS Volume: 130 Issue: 6
Pages: 886-894 Published: JUN 2020

6. Kam, Chon-Fai; Chen, Yang
Analytical results for the dynamics of parabolic level-crossing model
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 2 Article Number: 023021
Published: FEB 2020

5. Dou, Fu-Quan; Yan, Zhi-Ming; Hu, Li-Na
Accurate control quantum transition in a nonlinear two-level system
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, 533
10.1016/j.physa.2019.121932 NOV 1 2019

4. Doll, Andrin; Jeschke, Gunnar
Wideband frequency-swept excitation in pulsed EPR spectroscopy
JOURNAL OF MAGNETIC RESONANCE, 280 46-62; SI 10.1016/j.jmr.2017.01.004
JUL 2017

3. Fortin, Jean-Yves; Audouard, Alain
Transmission and tunneling probability in two-band metals: Influence of magnetic
breakdown on the Onsager phase of quantum oscillations
LOW TEMPERATURE PHYSICS, 43 (2):173-185; 10.1063/1.4976631 FEB 2017

2. Lehto, JMS; Suominen, KA
Two-level parabolic model with phase-jump coupling
PHYSICAL REVIEW A, 94 (1):10.1103/PhysRevA.94.013404 JUL 5 2016

1. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

=====
132. G. T. Genov, B. T. Torosov, and N. V. Vitanov
Optimized control of multistate quantum systems by composite pulse sequences
Phys. Rev. A 84, 063413(10pp) (2011)

12. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng,
Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

11. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-
Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic
passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR
2021

10. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019

9. Jo, Hanlae; Song, Yunheung; Ahn, Jaewook
Qubit leakage suppression by ultrafast composite pulses
OPTICS EXPRESS, 27 (4):3944-3951; 10.1364/OE.27.003944 FEB 18 2019

8. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen;
Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-
waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

7. Padan, Alon; Suchowski, Haim
A quantum retrograde canon: complete population inversion in n(2)-state
systems
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aab320 APR 13 2018

6. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

5. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense,
inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

4. Rangelov, Andon A.; Kyoseva, Elica
Broadband composite polarization rotator
OPTICS COMMUNICATIONS, 338 574-577; 10.1016/j.optcom.2014.11.037 MAR 1
2015

3. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore
transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

2. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman
adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

1. Kovachy, Tim; Chiow, Sheng-wei; Kasevich, Mark A.
Adiabatic-rapid-passage multiphoton Bragg atom optics
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.011606 JUL 20 2012

=====

133. N. V. Vitanov
Arbitrarily accurate narrowband composite pulse sequences
Phys. Rev. A 84, 065404(4pp) (2011)

9. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao

Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

8. Majumder, Swarnadeep; de Castro, Leonardo Andreta; Brown, Kenneth R.
Real-time calibration with spectator qubits
NPJ QUANTUM INFORMATION Volume: 6 Issue: 1 Article Number: 19
Published: FEB 7 2020

7. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

6. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual
Magnetic Monopole (Springer, 2018)

5. McConnell, Robert; Low, Guang Hao; Yoder, Theodore J.; Bruzewicz, Colin D.;
Chuang, Isaac L.; Chiaverini, John; Sage, Jeremy M.
Heisenberg scaling of imaging resolution by coherent enhancement
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.051801 NOV 9 2017

4. Low, Guang Hao; Yoder, Theodore J.; Chuang, Isaac L.
Methodology of Resonant Equiangular Composite Quantum Gates
PHYSICAL REVIEW X, 6 (4):10.1103/PhysRevX.6.041067 DEC 28 2016

3. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

2. Low, Guang Hao; Yoder, Theodore J.; Chuang, Isaac L.
Quantum Imaging by Coherent Enhancement
PHYSICAL REVIEW LETTERS, 114 (10):10.1103/PhysRevLett.114.100801 MAR 11
2015

1. Low, Guang Hao; Yoder, Theodore J.; Chuang, Isaac L.
Optimal arbitrarily accurate composite pulse sequences
PHYSICAL REVIEW A, 89 (2):10.1103/PhysRevA.89.022341 FEB 28 2014

=====

134. S. S. Ivanov, A. A. Rangelov, N. V. Vitanov, T. Peters, and T. Halfmann
Highly efficient broadband conversion of light polarization by composite retarders
J. Opt. Soc. Am. A 29, 265-9 (2012)

17. Guo, Duan-Yi; Chang, Li-Min; Chen, Chun-Wei; Li, Cheng-Chang; Jau, Hung-
Chang; Wang, Chun-Ta; Kuo, Wen Sung; Lin, Tsung-Hsien
Electrotunable achromatic polarization rotator
OPTICA Volume: 8 Issue: 3 Pages: 364-371 Published: MAR 20 2021

16. Yu, Jicheng; Yue, Changxi; Li, Jun; Li, Dengyun; Li, He
Error Calculating and Compensating Method of All-Optical Fiber Current
Transformer in ± 10 kV DC Distribution Network
JOURNAL OF NANO-ELECTRONICS AND OPTOELECTRONICS, 14 (11):1606-1615;
10.1166/jno.2019.2680 NOV 2019

15. Xue, D; Pan, R; Wang, L; Deng, H; Lyu, Y; Xue, Q; Han, J
A numerical approach for designing multi-wavelength plate
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 20 (5-6):253-257;
MAY-JUN 2018

14. Messaadi, Abdelghafour; Sanchez-Lopez, Maria M.; Vargas, Asticio; Garcia-
Martinez, Pascuala; Moreno, Ignacio
Achromatic linear retarder with tunable retardance
OPTICS LETTERS, 43 (14):3277-3280; 10.1364/OL.43.003277 JUL 15 2018

13. Xie, Yuqing; Wang, Junjie; Xue, Dong

Study on Parallel Beam Splitting Polarizer with Matrix Method
PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE ON MANAGEMENT,
EDUCATION, INFORMATION AND CONTROL (MEICI 2017), 156 578-582; 2017
Shenyang, PEOPLES R CHINA Edited by: Xin N; ElHami K; Kun Z

12. Chen, Yu; Xie, Yuqing; Xue, Dong
Theoretical Analysis of Two-in-one Composite 1/4 Wave-plate
PROCEEDINGS OF THE 2017 7TH INTERNATIONAL CONFERENCE ON
MECHATRONICS, COMPUTER AND EDUCATION INFORMATIONIZATION (MCEI
2017), 75 762-765; 2017 Edited by: Kun Z; Wang Z; Miracle J

11. Xue, Dong; Xie, Yuqing; Wang, Junjie
Equivalence analysis of retarder compose of three wave plates
OPTIK, 154 261-266; 10.1016/j.ijleo.2017.10.042 2018

10. Aashna, Pragati; Thyagarajan, K.
Highly efficient broadband waveguide based adiabatic polarization converter with
apodization
Edited by: Piprek J; Poulton C; Steel M; DeSterke M
Book Series: 16th International Conference on Numerical Simulation of
Optoelectronic Devices (NUSOD), 177-178; 2016

9. Aashna, Pragati; Thyagarajan, K.
Highly Efficient Broadband Waveguide Adiabatic Polarization Converter With
Apodization
IEEE PHOTONICS TECHNOLOGY LETTERS, 28 (22):2609-2612;
10.1109/LPT.2016.2607234 NOV 15 2016

8. Huang, W., Kyoseva, E.
Application of quantum control techniques to design broadband and ultra-
broadband half-wave plates
Journal of Physics: Conference Series 752(1),012006 (2016)

7. Azzam, RMA
Stokes-vector and Mueller-matrix polarimetry [Invited]
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND
VISION, 33 (7):1396-1408; 10.1364/JOSAA.33.001396 JUL 1 2016

6. Hou, Zhibo; Zhu, Huangjun; Xiang, Guo-Yong; Li, Chuan-Feng; Guo, Guang-Can
Error-compensation measurements on polarization qubits
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33
(6):1256-1265; 10.1364/JOSAB.33.001256 JUN 1 2016

5. Halassi, Abde Rezzaq; Hamdi, Rachid; Bendimerad, Djalal Falih; Benkelfat, Badr-
Eddine
A novel synthesis approach for birefringent filters having arbitrarily amplitude
transmittances
OPTICS COMMUNICATIONS, 369 12-17; 10.1016/j.optcom.2016.02.016 JUN 15
2016

4. Chen, Xi; Wang, Hong-Wei; Ban, Yue; Tseng, Shuo-Yen
Short-length and robust polarization rotators in periodically poled lithium niobate
via shortcuts to adiabaticity
OPTICS EXPRESS, 22 (20):24169-24178; 10.1364/OE.22.024169 OCT 6 2014

3. Jones, Jonathan A.
Nested composite NOT gates for quantum computation
PHYSICS LETTERS A, 377 (40):2860-2862; 10.1016/j.physleta.2013.08.040 NOV 29
2013

2. Jones, Jonathan A.
Designing short robust NOT gates for quantum computation
PHYSICAL REVIEW A, 87 (5):10.1103/PhysRevA.87.052317 MAY 20 2013

1. Husain, Sami; Kawamura, Minaru; Jones, Jonathan A.
Further analysis of some symmetric and antisymmetric composite pulses for
tackling pulse strength errors
JOURNAL OF MAGNETIC RESONANCE, 230 145-154; 10.1016/j.jmr.2013.02.007
MAY 2013

=====

135. N. V. Vitanov
Synthesis of arbitrary SU(3) transformations of atomic qubits
Phys. Rev. A 85, 032331 (9pp) (2012)

25. Davis, Marc G.; Smith, Ethan; Tudor, Ana; Sen, Koushik; Siddiqi, Irfan; Iancu,
Costin
Towards Optimal Topology Aware Quantum Circuit Synthesis
Conference: IEEE International Conference on Quantum Computing and
Engineering (QCE) Location: ELECTR NETWORK Date: OCT 12-16, 2020

24. Cheng, Jian-jian; Zhang, Lin
Implementing conventional and unconventional nonadiabatic geometric quantum gates via SU(2) transformations
PHYSICAL REVIEW A Volume: 103 Issue: 3 Article Number: 032616
Published: MAR 29 2021
23. Jimenez, Omar; Solis-Prosser, Miguel Angel; Neves, Leonardo; Delgado, Aldo
Mutual Information and Quantum Discord in Quantum State Discrimination with a Fixed Rate of Inconclusive Outcomes
ENTROPY Volume: 23 Issue: 1 Article Number: 73 Published: JAN 2021
22. Yurtalan, M. A.; Shi, J.; Kononenko, M.; Lupascu, A.; Ashhab, S.
Implementation of a Walsh-Hadamard Gate in a Superconducting Qutrit
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 18 Article Number: 180504
Published: OCT 27 2020
21. Chen, Yejia; Lu, Zhiguo; Yan, Yiyang; Zheng, Hang
Plateau dynamics with quantized oscillations of a strongly driven qubit
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053703
Published: NOV 4 2020
20. Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Heralded atomic nonadiabatic holonomic quantum computation with Rydberg blockade
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 022617
Published: AUG 24 2020
19. Zheng, Ri-Hua; Kang, Yi-Hao; Su, S-L; Song, Jie; Xia, Yan
Robust and high-fidelity nondestructive Rydberg parity meter
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012609
Published: JUL 6 2020
18. Yi-Hao Kang, Zhi-Cheng Shi, Bi-Hua Huang, Jie Song, and Yan Xia
Flexible scheme for the implementation of nonadiabatic geometric quantum computation
Phys. Rev. A 101, 032322 – Published 16 March 2020; Erratum Phys. Rev. A 101, 049902 (2020)
17. Kang, Yi-Hao; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Deterministic conversions between Greenberger-Horne-Zeilinger states and W states of spin qubits via Lie-transform-based inverse Hamiltonian engineering
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012332 JUL 22 2019
16. Krylov, Georgiy; Lukac, Martin
Quantum Encoded Quantum Evolutionary Algorithm for the Design of Quantum Circuits
CF '19 - PROCEEDINGS OF THE 16TH ACM INTERNATIONAL CONFERENCE ON COMPUTING FRONTIERS, 220-225; 10.1145/3310273.3322826 2019 APR 30-MAY 02, 2019, Alghero, ITALY
15. Ghasemi, M; Tavassoly, MK
Quantum repeater using three-level atomic states in the presence of dissipation: stability of entanglement
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52 (8):10.1088/1361-6455/ab0f72 APR 28 2019
14. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
One-Step Implementation of N-Qubit Nonadiabatic Holonomic Quantum Gates with Superconducting Qubits via Inverse Hamiltonian Engineering
ANNALEN DER PHYSIK, 531 (7):10.1002/andp.201800427 JUL 2019
13. Vepsalainen, Antti; Danilin, Sergey; Paroanu, Gheorghe Sorin
Superadiabatic population transfer in a three-level superconducting circuit
SCIENCE ADVANCES, 5 (2):10.1126/sciadv.aau5999 FEB 2019
12. Ma, Ling-hui; Kang, Yi-Hao; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Shortcuts to adiabatic for implementing controlled phase gate with Cooper-pair box qubits in circuit quantum electrodynamics system
QUANTUM INFORMATION PROCESSING, 18 (3):10.1007/s11128-019-2184-y MAR 2019
11. Shirkhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
10. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018
9. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018
8. Huang, Bi-Hua; Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Song, Jie; Xia, Yan
Fast quantum state engineering via universal SU(2) transformation
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022314 AUG 15 2017
7. Muralidharan, Sreraman; Zou, Chang-Ling; Li, Linshu; Wen, Jianming; Jiang, Liang
Overcoming erasure errors with multilevel systems
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa573a JAN 20 2017
6. Landau, Ariel; Aharonov, Yakir; Cohen, Eliahu
Realization of qudits in coupled potential wells
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 14 (5):10.1142/S0219749916500295 AUG 2016
5. Amnat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
4. Fan, Fuyou; Yang, Guowu; Yang, Gang; Hung, William N. N.
A Synthesis Method of Quantum Reversible Logic Circuit Based on Elementary Qutrit Quantum Logic Gates
JOURNAL OF CIRCUITS SYSTEMS AND COMPUTERS, 24 (8):10.1142/S0218126615501212 SEP 2015
3. Shauro, Vitaly
Exact solutions for time-optimal control of spin I=1 by NMR
QUANTUM INFORMATION PROCESSING, 14 (7):2345-2355; 10.1007/s11128-015-0999-8 JUL 2015
2. Wang, Dong-Sheng; Sanders, Barry C.
Quantum circuit design for accurate simulation of qudit channels
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/4/043004 APR 2 2015
1. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014
- =====
- 136. A. A. Rangelov and N. V. Vitanov**
Complete population transfer in a three-state quantum system by a train of pairs of coincident pulses
Phys. Rev. A 85, 043407 (5pp) (2012)
26. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021
25. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020
24. Irani, N.; Saadati-Niari, M.; Amnat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
23. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020

22. Shirkhaghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
21. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
20. Shirkhaghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
19. Niu, Dong-Hua; Wang, Shuo; Zhan, Wei-Shen; Tao, Hong-Cai; Wang, Si-Qi
Steering population transfer of the Na-2 molecule by an ultrashort pulse train
LASER PHYSICS, 28 (5):10.1088/1555-6611/aaac6c MAY 2018
18. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017
17. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
16. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384;
10.1080/09500340.2017.1361478 2017
15. Vaitkus, Jesse A.; Steel, M. J.; Greentree, Andrew D.
Digital waveguide adiabatic passage part 1: theory
OPTICS EXPRESS, 25 (5):5466-5479; 10.1364/OE.25.005466 MAR 6 2017
14. Ng, Vincent; Vaitkus, Jesse A.; Chaboyer, Zachary J.; Thach Nguyen; Dawes, Judith M.; Withford, Michael J.; Greentree, Andrew D.; Steel, M. J.
Digital waveguide adiabatic passage part 2: experiment
OPTICS EXPRESS, 25 (3):2552-2559; 10.1364/OE.25.002552 FEB 6 2017
13. Cong, Shuang; Wen, Jie; Kuang, Sen; Meng, Fangfang
Global stabilization control of stochastic quantum systems
SCIENCE CHINA-INFORMATION SCIENCES, 59 (11):10.1007/s11432-015-0911-7 NOV 2016
12. Zai, Jing-Bo; Zhan, Wei-Shen; Wang, Shuo; Dang, Hai-Ping; Han, Xiao
Population transfer of a NaH molecule via stimulated Raman adiabatic passage
LASER PHYSICS, 26 (9):10.1088/1054-660X/26/9/096002 SEP 2016
11. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
10. Coherent control of population transfer in asymmetric double quantum wells
Wang, L., Meng, S., Tan, F., Xu, F., Qi, Y.
Guangxue Xuebao/Acta Optica Sinica 36(9), 0927002 (2016)
9. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
8. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
7. Jin, Kang; Du, Yingjie
Coherent population effect in a A-configuration atom driven by two trains of ultrashort pulses
MODERN PHYSICS LETTERS B, 29 (11):10.1142/S0217984915500487 APR 30 2015
6. Saadati-Niari, M; Amniat-Talab, M
Creation of coherent superposition of states in N-pod systems by a train of coincident pulses
JOURNAL OF MODERN OPTICS, 61 (18):1492-1499;
10.1080/09500340.2014.942404 2014
5. Amniat-Talab, M; Saadati-Niari, M
Superposition of states in multi-lambda systems via generalized pulse area method
JOURNAL OF MODERN OPTICS, 61 (10):877-886; SI
10.1080/09500340.2013.877164 2014
4. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014
3. Carreno, F.; Anton, M. A.; Melle, Sonia; Calderon, Oscar G.; Cabrera-Granado, E.; Cox, Joel; Singh, Mahi R.; Egatz-Gomez, A.
Plasmon-enhanced terahertz emission in self-assembled quantum dots by femtosecond pulses
JOURNAL OF APPLIED PHYSICS, 115 (6):10.1063/1.4863781 FEB 14 2014
2. Vaitkus, Jesse A.; Greentree, Andrew D.
Digital three-state adiabatic passage
PHYSICAL REVIEW A, 87 (6):10.1103/PhysRevA.87.063820 JUN 13 2013
1. Anton, M. A.; Carreno, F.; Melle, Sonia; Calderon, Oscar G.; Cabrera-Granado, E.; Cox, Joel; Singh, Mahi R.
Plasmonic effects in excitonic population transfer in a driven semiconductor-metal nanoparticle hybrid system
PHYSICAL REVIEW B, 86 (15):10.1103/PhysRevB.86.155305 OCT 5 2012
- =====
- 137. A. A. Rangelov and N. V. Vitanov**
Broadband sum-frequency generation using cascaded processes via chirped quasi-phase-matching
Phys. Rev. A 85, 045804 (4pp) (2012)
12. Wan, Ting; Wang, Tengfei; Zhou, Wenhui; Chen, Changshui
Coupling modulation for efficient wavelength conversion with the Stark-chirped rapid adiabatic passage
RESULTS IN PHYSICS Volume: 19 Article Number: 103387 Published: DEC 2020
11. Yeo, Joel; Ran, Qiandong; Tan, Alvin; Li, Hao
Heuristic model for sum frequency generation in chirped quasi-phase-matching gratings with application to selective, cascaded harmonic generation
OPTICS EXPRESS Volume: 28 Issue: 19 Pages: 28164-28177 Published: SEP 14 2020
10. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017
9. Wang, Kai; Shi, Yu; Solntsev, Alexander S.; Fan, Shanhui; Sukhorukov, Andrey A.; Neshev, Dragomir N.
Non-reciprocal geometric phase in nonlinear frequency conversion
OPTICS LETTERS, 42 (10):1990-1993; 10.1364/OL.42.001990 MAY 15 2017
8. Yachini, Michal; Malomed, Boris; Bahabad, Alon
Envelope Time Reversal of Optical Pulses Following Frequency Conversion with Accelerating Quasi-Phase-Matching
ACS PHOTONICS, 3 (11):2017-2021; 10.1021/acsp Photonics.6b00545 NOV 2016
7. Longhi, Stefano
Transparency in nonlinear frequency conversion
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043822 APR 12 2016
6. Suchowski, Haim; Bruner, Barry D.; Israel, Yonatan; Ganany-Padowicz, Ayelet; Arie, Ady; Silberberg, Yaron
Broadband photon pair generation at 3 omega/2
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (2):10.1007/s00340-015-6304-9 FEB 2016
5. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013
4. Suchowski, Haim; Porat, Gil; Arie, Ady
Adiabatic processes in frequency conversion

LASER & PHOTONICS REVIEWS, 8 (3):333-367; 10.1002/lpor.201300107 MAY 2014

3. Wei, Junxiong; Chen, Changshui; Jiang, He; Li, Wei; Han, Tian
High-efficiency cascaded wavelength conversion based on adiabatic evolution
PHYSICAL REVIEW A, 88 (2):10.1103/PhysRevA.88.023806 AUG 5 2013

2. Porat, Gil; Arie, Ady
Efficient broadband frequency conversion via simultaneous adiabatic three wave mixing processes
APPLIED PHYSICS LETTERS, 102 (15):10.1063/1.4802597 APR 15 2013

1. Porat, Gil; Arie, Ady
Efficient, broadband, and robust frequency conversion by fully nonlinear adiabatic three-wave mixing
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 30 (5):1342-1351; 10.1364/JOSAB.30.001342 MAY 2013

=====

138. A. A. Rangelov and N. V. Vitanov
Achromatic multiple beam splitting by adiabatic passage in optical waveguides
Phys. Rev. A 85, 055803 (4pp) (2012)

29. Chen, Jian; Deng, Li; Niu, Yueping; Gong, Shangqing
Double rapid adiabatic passage in three optical waveguides with longitudinally varying detunings
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053705
Published: MAY 11 2021

28. Huang, Wei; Chen, Yun; Qu, Xiaowei; Yin, Shan; Shi, Xintong; Xiong, Xianming; Zhang, Wentao; Qin, Zujun; Zhang, Yuting
Complete and robust light transfer in three-waveguide coupler by shortcut to adiabaticity
AIP ADVANCES Volume: 10 Issue: 9 Article Number: 095104 Published: SEP 1 2020

27. Kong, Qian; Ying, Huimin; Chen, Xi
Shortcuts to Adiabaticity for Optical Beam Propagation in Nonlinear Gradient Refractive-Index Media
ENTROPY Volume: 22 Issue: 6 Article Number: 673 Published: JUN 2020

26. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020

25. Dou, Fu-Quan; Yan, Zhi-Ming; Liu, Xuan-Qing; Wang, Wen-Yuan; Shu, Chuan-Cun
Accelerating adiabatic light transfer and split in three-waveguide couplers via dressed state
OPTIK Volume: 210 Article Number: UNSP 164516 Published: MAY 2020

24. Huang, Wei; Ang, Lay-Kee; Kyoseva, Elica
Shortcut to adiabatic light transfer in waveguide couplers with a sign flip in the phase mismatch
JOURNAL OF PHYSICS D-APPLIED PHYSICS Volume: 53 Issue: 3 Article Number: 035104 Published: JAN 16 2020

23. Du, Lei; Wu, Jin-Hui; Artoni, M.; La Rocca, G. C.
Phase-dependent topological interface state and spatial adiabatic passage in a generalized Su-Schrieffer-Heeger model
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012112 JUL 12 2019

22. Ghasemi, M; Tavassoly, MK
Quantum repeater using three-level atomic states in the presence of dissipation: stability of entanglement
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 52 (8):10.1088/1361-6455/ab0f72 APR 28 2019

21. Chen, Xi; Wen, Rui-Dan; Shi, Jie-Long; Tseng, Shuo-Yen
Compact beam splitters in coupled waveguides using shortcuts to adiabaticity
JOURNAL OF OPTICS, 20 (4):10.1088/2040-8986/aab02c APR 2018

20. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018

19. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial

ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

18. Kang, Yi-Hao; Chen, Ye-Hong; Huang, Bi-Hua; Song, Jie; Xia, Yan
Invariant-Based Pulse Design for Three-Level Systems Without the Rotating-Wave Approximation
ANNALEN DER PHYSIK, 529 (9):10.1002/andp.201700004 SEP 2017

17. Kang, Yi-Hao; Wu, Qi-Cheng; Chen, Ye-Hong; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Accelerating adiabatic quantum transfer for three-level Lambda-type structure systems via picture transformation
ANNALS OF PHYSICS, 379 102-111; 10.1016/j.aop.2017.02.015 APR 2017

16. Liu, Hongying; Wei, Lian-Fu
Simulative Implementations of Fast Single-Qubit Quantum Logic Operations With Waveguides Based on Invariant Engineering
JOURNAL OF LIGHTWAVE TECHNOLOGY, 35 (2):166-172; 10.1109/JLT.2016.2637572 JAN 15 2017

15. Kang, Yi-Hao; Huang, Bi-Hua; Lu, Pei-Min; Xia, Yan
Reverse engineering of a Hamiltonian for a three-level system via the Rodrigues' rotation formula
LASER PHYSICS LETTERS, 14 (2):10.1088/1612-202X/aa512d FEB 2017

14. Chen, Ye-Hong; Wu, Qi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Arbitrary quantum state engineering in three-state systems via Counterdiabatic driving
Scientific Reports, 6 10.1038/srep38484 DEC 5 2016

13. Liu, Tong; Solntsev, Alexander S.; Boes, Andreas; Nguyen, Thach; Will, Christian; Mitchell, Arnan; Neshev, Dragomir N.; Sukhorukov, Andrey A.
Experimental demonstration of bidirectional light transfer in adiabatic waveguide structures
OPTICS LETTERS, 41 (22):5278-5281; 10.1364/OL.41.005278 NOV 15 2016

12. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016

11. Hope, Anthony P.; Nguyen, Thach G.; Mitchell, Arnan; Greentree, Andrew D.
Adiabatic two-photon quantum gate operations using a long-range photonic bus
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (5):10.1088/0953-4075/48/5/055503 MAR 14 2015

10. Batey, C., Jeske, J., Greentree, A.D.
Dark state adiabatic passage with branched networks and high-spin systems: Spin separation and entanglement
Frontiers in ICT 2(SEP),19 (2015)

9. Longhi, Stefano
Coherent transfer by adiabatic passage in two-dimensional lattices
ANNALS OF PHYSICS, 348 161-175; 10.1016/j.aop.2014.05.020 SEP 2014

8. Greentree, Andrew D.; Koiller, Belita
Dark-state adiabatic passage with spin-one particles
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.012319 JUL 14 2014

7. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI 10.1080/09500340.2013.837205 2014

6. Martinez-Garaot, S; Torrontegui, E; Chen, X; Muga, JG
Shortcuts to adiabaticity in three-level systems using Lie transforms
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.053408 MAY 7 2014

5. Tseng, Shuo-Yen; Jhang, Yao-Wun
Fast and Robust Beam Coupling in a Three Waveguide Directional Coupler
IEEE PHOTONICS TECHNOLOGY LETTERS, 25 (24):2478-2481; 10.1109/LPT.2013.2287876 DEC 15 2013

4. Bratkovsky, Alexander M.; Khurgin, Jacob B.; Ponizovskaya, Ekaterina; Sorin, Wayne V.; Tan, Michael R. T.
Mode division multiplexed (MDM) waveguide link scheme with cascaded Y-junctions
OPTICS COMMUNICATIONS, 309 85-89; 10.1016/j.optcom.2013.06.060 NOV 15 2013

3. Tseng, Shuo-Yen; Chen, Xi
Engineering of fast mode conversion in multimode waveguides
OPTICS LETTERS, 37 (24):5118-5120; DEC 15 2012
2. Chung, Kelvin; Karle, Timothy J.; Rab, Masum; et al.
Broadband and robust optical waveguide devices using coherent tunnelling adiabatic passage
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 23108-23116 Published: OCT 8 2012
1. Lin, Tzung-Yi; Hsiao, Fu-Chen; Jhang, Yao-Wun; et al.
Mode conversion using optical analogy of shortcut to adiabatic passage in engineered multimode waveguides
OPTICS EXPRESS Volume: 20 Issue: 21 Pages: 24085-24092 Published: OCT 8 2012
- =====
- 139. B. T. Torosov and N. V. Vitanov**
Adiabatic elimination of a nearly resonant quantum state
J. Phys. B: At. Mol. Opt. Phys. 45, 135502(7pp) (2012).
5. Kaufman, Brian; Rozgonyi, Tamas; Marquetand, Philipp; Weinacht, Thomas
Adiabatic elimination in strong-field light-matter coupling
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063117
Published: DEC 23 2020
4. Haase, JF; Wang, ZY; Casanova, J; Plenio, MB
Soft Quantum Control for Highly Selective Interactions among Joint Quantum Systems
PHYSICAL REVIEW LETTERS, 121 (5):10.1103/PhysRevLett.121.050402 AUG 2 2018
3. Faoro, Riccardo; Pelle, Bruno; Zuliani, Alexandre
Few-body interactions in frozen Rydberg gases
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, 225 (15-16):2935-2956;
10.1140/epjst/e2015-50335-0 DEC 2016
2. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014
1. Paulisch, Vanessa; Rui, Han; Ng, Hui Khoon; Englert, Berthold-Georg
Beyond adiabatic elimination: A hierarchy of approximations for multi-photon processes
EUROPEAN PHYSICAL JOURNAL PLUS, 129 (1):10.1140/epjp/i2014-14012-8 JAN 28 2014
- =====
- 140. S. S. Ivanov, H. S. Tonchev, and N. V. Vitanov**
Time-efficient implementation of quantum search with qudits
Phys. Rev. A 85, 062321(5pp) (2012)
12. Pavlidis, Archimedes; Floratos, Emmanuel
Quantum-Fourier-transform-based quantum arithmetic with qudits
PHYSICAL REVIEW A Volume: 103 Issue: 3 Article Number: 032417
Published: MAR 16 2021
11. Chessa, Stefano; Giovannetti, Vittorio
Quantum capacity analysis of multi-level amplitude damping channels
COMMUNICATIONS PHYSICS Volume: 4 Issue: 1 Article Number: 22
Published: FEB 10 2021
10. Wang, Yuchen; Hu, Zixuan; Sanders, Barry C.; Kais, Sabre
Qudits and High-Dimensional Quantum Computing
FRONTIERS IN PHYSICS Volume: 8 Article Number: 589504 Published: NOV 10 2020
9. Gokhale, P., Javadi-Abhari, A., Earnest, N., Shi, Y., Chong, F.T.
Optimized quantum compilation for near-term algorithms with openpulse
Proceedings of the Annual International Symposium on Microarchitecture, MICRO 2020-October,9251970, pp. 186-200
8. Ding, Y., Chong, F.T.
Quantum Computer Systems: Research for Noisy Intermediate-Scale Quantum Computers
Synthesis Lectures on Computer Architecture 15(2), pp. 1-227 2020
7. Pranav Gokhale, Jonathan M. Baker, Casey Duckering, Natalie C. Brown, Kenneth R. Brown, Frederic T. Chong
Asymptotic Improvements to Quantum Circuits via Qutrits
PROCEEDINGS OF THE 2019 46TH INTERNATIONAL SYMPOSIUM ON COMPUTER ARCHITECTURE (ISCA '19) Pages: 554-566 Published: 2019
6. Kiktenko, EO; Nikolaeva, AS ; Xu, Peng; Shlyapnikov, GV; Fedorov, AK
Scalable quantum computing with qudits on a graph
PHYSICAL REVIEW A Volume: 101 Issue: 2 Article Number: 022304
Published: FEB 5 2020
5. Sawant, Rahul; Blackmore, Jacob A.; Gregory, Philip D.; Mur-Petit, Jordi; Jaksch, Dieter; Aldegunde, Jesus; Hutson, Jeremy M.; Tarbutt, M. R.; Cornish, Simon L.
Ultracold polar molecules as qudits
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 1 Article Number: 013027
Published: JAN 2020
4. Cafaro, Carlo
Geometric algebra and information geometry for quantum computational software
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: 470
Pages: 154-196 Published: MAR 15 2017
3. Beer, Kerstin; Dziemba, Friederike Anna
Phase-context decomposition of diagonal unitaries for higher-dimensional systems
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052333 MAY 25 2016
2. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014
1. Zheng, Shi-Biao
Simplified construction and physical realization of n-qubit controlled phase gates
PHYSICAL REVIEW A, 86 (1):10.1103/PhysRevA.86.012326 JUL 23 2012
- =====
- 141. A. A. Rangelov and N. V. Vitanov**
Mid-range adiabatic wireless energy transfer via a mediator coil
Annals Phys. 327, 2245-2250 (2012)
7. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Guo, Chu; Xiong, Xianming; Zhang, Wentao
Long-distance adiabatic wireless energy transfer via multiple coils coupling
RESULTS IN PHYSICS Volume: 19 Article Number: 103478 Published: DEC 2020
6. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020
5. Paul, Koushik; Sarma, Amarendra K.
Fast and efficient wireless power transfer via transitionless quantum driving
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-22562-9 MAR 7 2018
4. Sadzali, MN; Ali, A; Azizan, MM; Albream, MAM
The Security Energy Encryption In Wireless Power Transfer
3RD ELECTRONIC AND GREEN MATERIALS INTERNATIONAL CONFERENCE 2017 (EGM 2017), 1885 10.1063/1.5002436 2017, AIP Conference Proceedings, Edited by: Abdullah MMA; Ramli MM; AbdRahim SZ; Isa SSM; Saad MNM; Ismail RC; Ghazli MF, APR 29-30, 2017, Aonang Krabi, THAILAND
3. Tucker, C.A.
Power transfer in velocity-vortex acceleration
International Journal of Modelling, Identification and Control 21(4), pp. 429-438 (2014)
2. Longhi, Stefano
Coherent transfer by adiabatic passage in two-dimensional lattices
ANNALS OF PHYSICS, 348 161-175; 10.1016/j.aop.2014.05.020 SEP 2014
1. Fan, X., Mo, X., Zhang, X.
Research status and application of wireless power transfer via coupled magnetic resonances
Diangong Jishu Xuebao/Transactions of China Electrotechnical Society 28(12), pp.

=====

142. T. Peters, S. S. Ivanov, A. A. Rangelov, D. Englisch, N. V. Vitanov, and T. Halfmann
Variable ultrabroadband and narrowband composite polarization retarders
Appl. Optics **51**, 7466-74 (2012)

6. Nyman, Markus; Maurya, Somendu; Kaivola, Maui; Shevchenko, Andriy
 Optical wave retarder based on metal-nanostripe metamaterial
OPTICS LETTERS, 44 (12):3102-3105; 10.1364/OL.44.003102 JUN 15 2019

5. Messaadi, Abdelghafour; Sanchez-Lopez, Maria M.; Vargas, Asticio; Garcia-Martinez, Pascuala; Moreno, Ignacio
 Achromatic linear retarder with tunable retardance
OPTICS LETTERS, 43 (14):3277-3280; 10.1364/OL.43.003277 JUL 15 2018

4. Huang, Wei; Kyoseva, Elica
 Designing Broadband and Ultra Broadband Half Wave Plate by Composite Pulse Control
 Conference on Lasers and Electro-Optics Pacific Rim (CLEO-PR), 2017

3. Lascio, S., Ji, H.-F.
 Optical, Optoelectronic, and Photocatalytic Applications of Phosphorus Nanomaterials
 Yingxiang Kexue yu Guanghuaxue/Imaging Science and Photochemistry 35(5), pp. 587-602 (2017)

2. Huang, W., Kyoseva, E.
 Application of quantum control techniques to design broadband and ultra-broadband half-wave plates
Journal of Physics: Conference Series 752(1),012006 (2016)

1. Hou, Zhibo; Zhu, Huangjun; Xiang, Guo-Yong; Li, Chuan-Feng; Guo, Guang-Can
 Error-compensation measurements on polarization qubits
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (6):1256-1265; 10.1364/JOSAB.33.001256 JUN 1 2016

=====

143. T. G. Tenev and N. V. Vitanov
Relativistic effects for spin splitting of neutral particles: Upper bound and motional decrease
Phys. Rev. A **86**, 052114(4pp) (2012)

1. Alizadeh, Z; Panahi, H
 Quantum superintegrable systems with arbitrary spin: Exact solution with deformed oscillator formalism
EUROPEAN PHYSICAL JOURNAL PLUS, 129 (6):10.1140/epjp/i2014-14110-7 JUN 6 2014

=====

144. I. I. Boradjiev and N. V. Vitanov
Power narrowing in coherent atomic excitation by smoothly shaped pulsed fields
Opt. Commun. **288**, 91-96 (2013)

1. de Groote, RP; Verlinde, M; Sonnenschein, V; Flanagan, KT; Moore, I; Neyens, G
 Efficient, high-resolution resonance laser ionization spectroscopy using weak transitions to long-lived excited states
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.032502 MAR 7 2017

=====

145. M. Berent, A. A. Rangelov, and N. V. Vitanov
Broadband Faraday isolator
J. Opt. Soc. Am. A **30**, 149-153 (2013)

2. Kazemi, Amir Hossein; Mokhtari, Arash; Zamani, Mehdi
 Ultrafast tunable integrated Faraday isolator based on optical pumping in a graphene-InSb-graphene structure
APPLIED OPTICS Volume: 59 Issue: 26 Pages: 7745-7751 Published: SEP 10 2020

1. Chen, Sai; Fan, Fei; Wang, Xianghui; Wu, Pengfei; Zhang, Hui; Chang, Shengjiang
 Terahertz isolator based on nonreciprocal magneto-metamaterial
OPTICS EXPRESS, 23 (2):1015-1024; 10.1364/OE.23.001015 JAN 26 2015

=====

146. V. Yannopoulos and N. V. Vitanov
Spatiotemporal Control of Temperature in Nanostructures Heated by Coherent Laser Fields
Phys. Rev. Lett. **110**, 044302(5pp) (2013)

17. Tervo, E.J., Cola, B.A., Zhang, Z.M.
 Dipole approximations for near-field radiative heat transfer
Annual Review of Heat Transfer 23(1), pp. 131-166 (2020)

16. Philippe Ben-Abdallah
 Multitip Near-Field Scanning Thermal Microscopy
Phys. Rev. Lett. 123, 264301 – Published 30 December 2019

15. Zhang, Yong; Antezza, Mauro; Yi, Hong-Liang; Tan, He-Ping
 Metasurface-mediated anisotropic radiative heat transfer between nanoparticles
PHYSICAL REVIEW B, 100 (8):10.1103/PhysRevB.100.085426 AUG 16 2019

14. Messina, Riccardo; Biehs, Svend-Age; Ben-Abdallah, Philippe
 Surface-mode-assisted amplification of radiative heat transfer between nanoparticles
PHYSICAL REVIEW B, 97 (16):10.1103/PhysRevB.97.165437 APR 27 2018

13. Latella, Ivan; Biehs, Svend-Age; Messina, Riccardo; Rodriguez, Alejandro W.; Ben-Abdallah, Philippe
 Ballistic near-field heat transport in dense many-body systems
PHYSICAL REVIEW B, 97 (3):10.1103/PhysRevB.97.035423 JAN 17 2018

12. Dong, Jian; Zhao, Junming; Liu, Linhua
 Radiative heat transfer in many-body systems: Coupled electric and magnetic dipole approach
PHYSICAL REVIEW B, 95 (12):10.1103/PhysRevB.95.125411 MAR 8 2017

11. Sadeghi, Seyed M.; Mao, Chuanbin
 Quantum sensing using coherent control of near-field polarization of quantum dot-metallic nanoparticle molecules
JOURNAL OF APPLIED PHYSICS, 121 (1):10.1063/1.4973678 JAN 7 2017

10. Wang, Yanhong; Wu, Jingzhi
 Radiative heat transfer between nanoparticles enhanced by intermediate particle
AIP ADVANCES, 6 (2):10.1063/1.4941751 FEB 2016

9. Ben-Abdallah, P
 Photon Thermal Hall Effect
PHYSICAL REVIEW LETTERS, 116 (8):10.1103/PhysRevLett.116.084301 FEB 23 2016

8. Nikbakht, Moladad
 Radiative heat transfer in anisotropic many-body systems: Tuning and enhancement
JOURNAL OF APPLIED PHYSICS, 116 (9):10.1063/1.4894622 SEP 7 2014

7. Dyakov, SA; Dai, J; Yan, M; Qiu, M
 Thermal radiation dynamics in two parallel plates: The role of near field
PHYSICAL REVIEW B, 90 (4):10.1103/PhysRevB.90.045414 JUL 21 2014

6. Messina, Riccardo; Antezza, Mauro
 Three-body radiative heat transfer and Casimir-Lifshitz force out of thermal equilibrium for arbitrary bodies
PHYSICAL REVIEW A, 89 (5):10.1103/PhysRevA.89.052104 MAY 8 2014

5. Saaskilahti, K; Oksanen, J; Tulkki, J
 Quantum Langevin equation approach to electromagnetic energy transfer between dielectric bodies in an inhomogeneous environment
PHYSICAL REVIEW B, 89 (13):10.1103/PhysRevB.89.134301 APR 1 2014

4. Phan, Anh D.; Shen, Sheng; Woods, Lilia M.
 Radiative Exchange between Graphitic Nanostructures: A Microscopic Perspective
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, 4 (24):4196-4200; 10.1021/jz402337f DEC 19 2013

3. Phan, Anh D.; The-Long Phan; Woods, Lilia M.
 Near-field heat transfer between gold nanoparticle arrays
JOURNAL OF APPLIED PHYSICS, 114 (21):10.1063/1.4838875 DEC 7 2013

2. Ben-Abdallah, Philippe; Messina, Riccardo; Biehs, Svend-Age; Tschikin, Maria; Joulain, Karl; Henkel, Carsten
 Heat Superdiffusion in Plasmonic Nanostructure Networks
PHYSICAL REVIEW LETTERS, 111 (17):10.1103/PhysRevLett.111.174301 OCT 22 2013

1. Messina, Riccardo; Tschikin, Maria; Biehs, Svend-Age; Ben-Abdallah, Philippe
Fluctuation-electrodynamics theory and dynamics of heat transfer in systems of multiple dipoles
PHYSICAL REVIEW B, 88 (10):10.1103/PhysRevB.88.104307 SEP 30 2013

=====

147. T. G. Tenev and N. V. Vitanov
Zitterbewegung of neutral relativistic particles in static longitudinal fields
Phys. Rev. A 87, 012126(5pp) (2013)

1. Fan, Qi-Zhen; Cheng, Xiao-Hang; Chen, Xi
Counter-diabatic driving for Dirac dynamics
Edited by: Peng K; Pan J; Chu J YOUNG SCIENTISTS FORUM 2017, 10710
10.1117/12.2314712 2018 Proceedings of SPIE

=====

148. T. G. Tenev, P. A. Ivanov and N. V. Vitanov
Proposal for trapped-ion emulation of the electric dipole moment of neutral relativistic particles
Phys. Rev. A 87, 022103(5pp) (2013)

10. Bernardini, Alex E.
Phase-space elementary information content of confined Dirac spinors
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 135 Issue: 8 Article Number: 675 Published: AUG 25 2020

9. Fan, Qi-Zhen; Cheng, Xiao-Hang; Chen, Xi
Counter-diabatic driving for Dirac dynamics
Edited by: Peng K; Pan J; Chu J YOUNG SCIENTISTS FORUM 2017, 10710
10.1117/12.2314712 2018 Proceedings of SPIE

8. Bittencourt, Victor A. S. V.; Blasone, Massimo; Bernardini, Alex E.
Bilayer graphene lattice-layer entanglement in the presence of non-Markovian phase noise
PHYSICAL REVIEW B, 97 (12):10.1103/PhysRevB.97.125435 MAR 30 2018

7. Bittencourt, V.A.S.V., Bernardini, A.E.
Lattice-layer entanglement in Bernal-stacked bilayer graphene
Physical Review B 95(19), 195145 (2017)

6. Bittencourt, Victor A. S. V.; Bernardini, Alex E.
Dirac bi-spinor entanglement under local noise and its simulation by Jaynes-Cummings interactions
Journal of Physics Conference Series, 8th International Workshop on Decoherence, Information, Complexity and Entropy (DICE) - Spacetime - Matter - Quantum Mechanics 880 10.1088/1742-6596/880/1/012063 2017

5. Bittencourt, Victor A. S. V.; Bernardini, Alex E.
Schrodinger cat and Werner state disentanglement simulated by trapped ion systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (7):10.1088/1361-6455/aa60df APR 14 2017

4. Bittencourt, Victor A. S. V.; Bernardini, Alex E.; Blasone, Massimo
Quantum transitions and quantum entanglement from Dirac-like dynamics simulated by trapped ions
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.053823 MAY 17 2016

3. Wang, Z. S.; Cai, Xiaoya; Pan, Hui
Trapped ionic simulation of neutrino electromagnetic properties in neutrino oscillation
NUCLEAR PHYSICS B Volume: 900 Pages: 560-575 Published: NOV 2015

2. Zuniga-Segundo, A; Rodriguez-Lara, BM; Fernandez, DJ; Moya-Cessa, HM
Jacobi photonic lattices and their SUSY partners
OPTICS EXPRESS, 22 (1):987-994; 10.1364/OE.22.000987 JAN 13 2014

1. Jungmann, Klaus
Searching for electric dipole moments
ANNALEN DER PHYSIK, 525 (8-9):550-564; SI 10.1002/andp.201300071 SEP 2013

=====

149. S. S. Ivanov, N. V. Vitanov, and N. Korolkova
Creation of arbitrary Dicke and NOON states of trapped-ion qubits by global addressing with composite pulses
New J. Phys. 15, 023039(11pp) (2013)

10. Sharma, A., Tulapurkar, A.A.
Preparation of spin eigenstates including the Dicke states with generalized all-coupled interaction in a spintronic quantum computing architecture
Quantum Information Processing 20(5),172 (2021)

9. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

8. Hakoshima, Hideaki; Matsuzaki, Yuichiro
Efficient detection of inhomogeneous magnetic fields from a single spin with Dicke states
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 042610
Published: OCT 20 2020

7. Huang, Xin-Jie; Chen, Lei; Su, Wan-Jun; Zhong, Zhi-Rong
NOON state generation beyond the Lamb-Dicke limit in trapped-ion systems
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 11 Article Number: 406 Published: NOV 7 2020

6. Bartschi, A., Eidenbenz, S.
Deterministic Preparation of Dicke States
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 11651 LNCS, pp. 126-139 (2019)

5. Montenegro, Victor; Coto, Raul; Eremeev, Vitalie; Orszag, Miguel
Ground-state cooling of a nanomechanical oscillator with N spins
PHYSICAL REVIEW A, 98 (5):10.1103/PhysRevA.98.053837 NOV 21 2018

4. Zhang, Junhua; Um, Mark; Lv, Dingshun; Zhang, Jing-Ning; Duan, Lu-Ming; Kim, Kihwan
NOON States of Nine Quantized Vibrations in Two Radial Modes of a Trapped Ion
PHYSICAL REVIEW LETTERS, 121 (16):10.1103/PhysRevLett.121.160502 OCT 18 2018

3. Chen, Jingwei; Wei, L. F.
Deterministic generations of photonic NOON states in cavities via shortcuts to adiabaticity
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.033838 MAR 28 2017

2. Penna, V; Raffa, FA
Perturbative approach to the dynamics of a trapped ion interacting with a light field
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47 (7):10.1088/0953-4075/47/7/075501 APR 14 2014

1. Thom, Joseph; Wilpers, Guido; Riis, Erling; Sinclair, Alastair G.
Accurate and agile digital control of optical phase, amplitude and frequency for coherent atomic manipulation of atomic systems
OPTICS EXPRESS, 21 (16):18712-18723; 10.1364/OE.21.018712 AUG 12 2013

=====

150. B. Rousseaux, S. Guerin, and N. V. Vitanov
Arbitrary qudit gates by adiabatic passage
Phys. Rev. A 87, 032328 (4pp) (2013)

36. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Jie; Zhu, Xue-Feng
Acoustic topological adiabatic passage via a level crossing
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY Volume: 64 Issue: 4 Special Issue: SI Article Number: 244302 Published: APR 2021

35. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Stimulated Raman adiabatic passage: Effects of system parameters on population transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1 2020

34. Fu, Fenxiang; Li, Huayang; Xue, Shibe; Jiang, Min
Multi-hop nondestructive teleportation between terminal nodes equipped with limited technology
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 6 Pages: 1896-1905 Published: JUN 1 2020

33. Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Heralded atomic nonadiabatic holonomic quantum computation with Rydberg

- blockade
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 022617
Published: AUG 24 2020
32. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Xue-Feng
Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043
Published: JUL 15 2020
31. Petiziol, Francesco; Arimondo, Ennio; Giannelli, Luigi; Mintert, Florian; Wimberger, Sandro
Optimized three-level quantum transfers based on frequency-modulated optical excitations
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 2185 Published: FEB 10 2020
30. Yan, Run-Ying; Feng, Zhi-Bo
Generating microwave photon Fock states in a circuit QED via invariant-based shortcuts to adiabaticity
QUANTUM SCIENCE AND TECHNOLOGY Volume: 5 Issue: 4 Article Number: 045001 Published: OCT 2020
29. Zheng, Ri-Hua; Kang, Yi-Hao; Su, S-L; Song, Jie; Xia, Yan
Robust and high-fidelity nondestructive Rydberg parity meter
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012609
Published: JUL 6 2020
28. Shirikhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published: MAY-JUN 2020
27. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
26. Yi-Hao Kang, Zhi-Cheng Shi, Bi-Hua Huang, Jie Song, and Yan Xia
Flexible scheme for the implementation of nonadiabatic geometric quantum computation
Phys. Rev. A 101, 032322 – Published 16 March 2020; Erratum Phys. Rev. A 101, 049902 (2020)
25. Kang, Yi-Hao; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Deterministic conversions between Greenberger-Horne-Zeilinger states and W states of spin qubits via Lie-transform-based inverse Hamiltonian engineering
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012332 JUL 22 2019
24. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
One-Step Implementation of N-Qubit Nonadiabatic Holonomic Quantum Gates with Superconducting Qubits via Inverse Hamiltonian Engineering
ANNALEN DER PHYSIK, 531 (7):10.1002/andp.201800427 JUL 2019
23. Shen, Ya-Xi; Peng, Yu-Gui; Zhao, De-Gang; Chen, Xin-Cheng; Zhu, Jie; Zhu, Xue-Feng
One-Way Localized Adiabatic Passage in an Acoustic System
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.094501 MAR 8 2019
22. Hu, J., Wang, P., Zhang, Q.
Multiplex household reflection gate and its application in preparation of quantum state
IPPTA: Quarterly Journal of Indian Pulp and Paper Technical Association 30(1), pp. 233-241 (2018)
21. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018
20. Shirikhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
19. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Nonadiabatic holonomic quantum computation using Rydberg blockade
PHYSICAL REVIEW A, 97 (4):10.1103/PhysRevA.97.042336 APR 23 2018
18. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018
17. Chen, L.-B., Lu, H.
Remotely and Conclusively Mapping One Finite Set of Qudit States onto Another Assisted by Qubit Entanglements
International Journal of Theoretical Physics 55(5), pp. 2397-2404 (2016)
16. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
15. Song, Yunheung; Lee, Han-gyeol; Jo, Hanlae; Ahn, Jaewook
Selective excitation in a three-state system using a hybrid adiabatic-nonadiabatic interaction
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.023412 AUG 18 2016
14. Wang, Zhe; Xia, Yan; Chen, Ye-Hong; Song, Jie
Fast CNOT gate via shortcuts to adiabatic passage
JOURNAL OF MODERN OPTICS, 63 (19):1943-1951; 10.1080/09500340.2016.1181219 2016
13. Kang, Yi-Hao; Xia, Yan; Lu, Pei-Min; Song, Jie
Effective preparation of the N-dimension spin Greenberger-Horne-Zeilinger state with quantum dots embedded in microcavities
JOURNAL OF MODERN OPTICS, 63 (13):1313-1322; 10.1080/09500340.2016.1143050 2016
12. Dogra, Shruti; Dorai, Arvind; Dorai, Kavita
Implementation of the quantum Fourier transform on a hybrid qubit-qutrit NMR quantum emulator
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, 13 (7):10.1142/S0219749915500598 OCT 2015
11. Amniat-Talab, Mahdi; Saadati-Niari, Maghsoud
Synthesis of fast qudit gates by a train of coincident pulses
EUROPEAN PHYSICAL JOURNAL D, 69 (9):10.1140/epjd/e2015-60238-9 SEP 17 2015
10. Chen, Jingwei; Wei, L. F.
Deterministic implementations of quantum gates with circuit QEDs via Stark-chirped rapid adiabatic passages
PHYSICS LETTERS A, 379 (40-41):2549-2555; 10.1016/j.physleta.2015.05.035 OCT 23 2015
9. Dong, Dong; Zhang, Yan-Lei; Zou, Chang-Ling; Zou, Xu-Bo; Guo, Guang-Can
Quantum phase gate through the dispersive atom-field interaction with atoms trapped in optical cavity QED
PHYSICS LETTERS A, 379 (38):2291-2294; 10.1016/j.physleta.2015.07.020 OCT 9 2015
8. Qin Wei; Li Jun-Lin; Long Gui-Lu
High-dimensional quantum state transfer in a noisy network environment
CHINESE PHYSICS B, 24 (4):10.1088/1674-1056/24/4/040305 APR 2015
7. Liang, Yan; Wu, Qi-Cheng; Su, Shi-Lei; Ji, Xin; Zhang, Shou
Shortcuts to adiabatic passage for multiqubit controlled-phase gate
PHYSICAL REVIEW A, 91 (3):10.1103/PhysRevA.91.032304 MAR 11 2015
6. Hou, Qizhe; Yang, Wanli; Feng, Mang; Chen, Changyong
Preparation of photonic Fock state using bichromatic adiabatic passage under dissipative environment
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 31 (11):2671-2676; 10.1364/JOSAB.31.002671 NOV 2014
5. Luo MingXing; Wang XiaoJun
Universal quantum computation with qudits
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, 57 (9):1712-1717; 10.1007/s11433-014-5551-9 SEP 2014
4. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed

3. Kang, Yi-Hao; Xia, Yan; Lu, Pei-Min
Effective scheme for generation of N-dimension atomic Greenberger-Horne-Zeilinger states
QUANTUM INFORMATION PROCESSING, 13 (5):1255-1265; 10.1007/s11128-013-0727-1 MAY 2014

2. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

1. Hou, QZ; Yang, WL; Feng, M; Chen, CY
Quantum state transfer using stimulated Raman adiabatic passage under a dissipative environment
PHYSICAL REVIEW A, 88 (1):10.1103/PhysRevA.88.013807 JUL 8 2013

=====

151. G. T. Genov and N. V. Vitanov
Dynamical suppression of unwanted transitions in multistate quantum systems
Phys. Rev. Lett. 110, 133002(5pp) (2013)

17. Li, Bing-Jie; Liu, Shuai; Wang, Yu; Kang, Yi-Hao; Shi, Zhi-Cheng; Xia, Yan
Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS
[early access icon] Early Access: MAR 2021

16. Kang, Yi-Hao; Xia, Yan
Entanglement Creations and Quantum Gate Implementations of Spin Qubits With Lyapunov Control
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 26
Issue: 3 Published: MAY-JUN 2020

15. Jo, Hanlae; Song, Yunheung; Ahn, Jaewook
Qubit leakage suppression by ultrafast composite pulses
OPTICS EXPRESS, 27 (4):3944-3951; 10.1364/OE.27.003944 FEB 18 2019

14. Ma, Ling-hui; Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Shortcuts to adiabatic for implementing controlled-not gate with superconducting quantum interference device qubits
QUANTUM INFORMATION PROCESSING, 17 (11):10.1007/s11128-018-2056-x
NOV 2018

13. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018

12. Kang, Yi-Hao; Chen, Ye-Hong; Shi, Zhi-Cheng; Huang, Bi-Hua; Song, Jie; Xia, Yan
Pulse design for multilevel systems by utilizing Lie transforms
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033407 MAR 19 2018

11. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual Magnetic Monopole (Springer, 2018)

10. Zhang, Qi; Chen, Xi; Guery-Odelin, D.
Reverse engineering protocols for controlling spin dynamics
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017

9. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

8. Liu, Yen-Huang; Tseng, Shuo-Yen
Robust coherent superposition of states using quasiadiabatic inverse engineering
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50
(20):10.1088/1361-6455/aa8b4e OCT 28 2017

7. Huang, Bi-Hua; Kang, Yi-Hao; Chen, Ye-Hong; Wu, Qi-Cheng; Song, Jie; Xia, Yan
Fast quantum state engineering via universal SU(2) transformation
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022314 AUG 15 2017

6. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

5. Ndong, Mamadou; Djotyran, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI
10.1088/0953-4075/48/17/174007 SEP 14 2015

4. Shore, Bruce W.
Two-state behavior in N-state quantum systems: The Morris-Shore transformation reviewed
JOURNAL OF MODERN OPTICS, 61 (10):787-815; SI
10.1080/09500340.2013.837205 2014

3. Kiely, A; Ruschhaupt, A
Inhibiting unwanted transitions in population transfer in two- and three-level quantum systems
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 47
(11):10.1088/0953-4075/47/11/115501 JUN 14 2014

2. Rao, D. D. Bhaktavatsala; Molmer, Klaus
Robust Rydberg-interaction gates with adiabatic passage
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.030301 MAR 5 2014

1. Daems, D; Ruschhaupt, A; Sugny, D; Guerin, S
Robust Quantum Control by a Single-Shot Shaped Pulse
PHYSICAL REVIEW LETTERS, 111 (5):10.1103/PhysRevLett.111.050404 JUL 31
2013

=====

152. T. G. Tenev and N. V. Vitanov
Spin splitting of relativistic particles in three dimensions
J. Phys. B: At. Mol. Opt. Phys. 46, 095002(5pp) (2013)

=====

153. B. T. Torosov and N. V. Vitanov
Composite stimulated Raman adiabatic passage
Phys. Rev. A 87, 043418(5pp) (2013)

21. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaei-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

20. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020

19. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

18. Xu, Tian-Niu; Liu, Kaipeng; Chen, Xi; Guerin, Stephane
Invariant-based optimal composite stimulated Raman exact passage
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52
Issue: 23 Article Number: 235501 Published: DEC 14 2019

17. Kuang, Sen; Dong, Daoyi; Petersen, Ian R.
Lyapunov Control of Quantum Systems Based on Energy-Level Connectivity Graphs
IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY Volume: 27 Issue: 6
Pages: 2315-2329 Published: NOV 2019

16. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019

15. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019

14. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

13. Wang, Ying-Dan; Zhang, Rong; Yan, Xiao-Bo; Chesi, Stefano
Optimization of STIRAP-based state transfer under dissipation
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa7f5d SEP 28 2017

12. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual
Magnetic Monopole (Springer, 2018)

11. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.
Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-
wave approximation
OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017

10. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

9. Masuda, Shumpei; Rice, Stuart A.
Controlling Quantum Dynamics with Assisted Adiabatic Processes, Edited by:
Brumer P; Rice SA; Dinner AR
ADVANCES IN CHEMICAL PHYSICS, VOL 159, 159 51-135; 2016

8. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems:
Effective two-level problems and feasible counteradiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016

7. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

6. Kumar, KS; Vepsalainen, A; Danilin, S; Paraoanu, GS
Stimulated Raman adiabatic passage in a three-level superconducting circuit
NATURE COMMUNICATIONS, 7 10.1038/ncomms10628 FEB 2016

5. Masuda, Shumpei; Rice, Stuart A.
Selective Vibrational Population Transfer using Combined Stimulated Raman
Adiabatic Passage and Counter-Diabatic Fields
JOURNAL OF PHYSICAL CHEMISTRY C, 119 (26):14513-14523; SI
10.1021/jp507923s JUL 2 2015

4. Masuda, Shumpei; Rice, Stuart A.
Fast-Forward Assisted STIRAP
JOURNAL OF PHYSICAL CHEMISTRY A, 119 (14):3479-3487;
10.1021/acs.jpca.5b00525 APR 9 2015

3. Chen, Jingwei; Wei, L. F.
Implementation speed of deterministic population passages compared to that of
Rabi pulses
PHYSICAL REVIEW A, 91 (2):10.1103/PhysRevA.91.023405 FEB 5 2015

2. Giannelli, Luigi; Arimondo, Ennio
Three-level superadiabatic quantum driving
PHYSICAL REVIEW A, 89 (3):10.1103/PhysRevA.89.033419 MAR 17 2014

1. Yatsenko, LP; Shore, BW; Bergmann, K
Detrimental consequences of small rapid laser fluctuations on stimulated Raman
adiabatic passage
PHYSICAL REVIEW A, 89 (1):10.1103/PhysRevA.89.013831 JAN 23 2014

=====

154. I. I. Boradjiev and N. V. Vitanov
Control of qubits by shaped pulses of finite duration
Phys. Rev. A 88, 013402(9pp) (2013)

4. Joecker, Benjamin; Cerfontaine, Pascal; Haupt, Federica; Schreiber, Lars R.;
Kardynal, Beata E.; Bluhm, Hendrik
Transfer of a quantum state from a photonic qubit to a gate-defined quantum dot
PHYSICAL REVIEW B, 99 (20):10.1103/PhysRevB.99.205415 MAY 13 2019

3. Liu, Xiaosong; Zhang, Wei; Song, Yunfei; Zheng, Zhaoyang; Lv, Zhe; Yang,
Yanqiang
Selective excitation of vibrational modes and probe for asymmetric
intramolecular energy redistribution
PHYSICA SCRIPTA, 94 (6):10.1088/1402-4896/ab08d6 JUN 2019

2. Reichert, J; Nalbach, P; Thorwart, M

Dynamics of a quantum two-state system in a linearly driven quantum bath
PHYSICAL REVIEW A, 94 (3):10.1103/PhysRevA.94.032127 SEP 28 2016

1. Yoshida, Masataka; Ohtsuki, Yukiyo
Orienting CO molecules with an optimal combination of THz and laser pulses:
Optimal control simulation with specified pulse amplitude and fluence
PHYSICAL REVIEW A, 90 (1):10.1103/PhysRevA.90.013415 JUL 15 2014

=====

155. H. Hristova, A. A. Rangelov, S. Guerin and N. V. Vitanov
Adiabatic evolution of light in an array of parallel curved optical waveguides
Phys. Rev. A 88, 013808(5pp) (2013)

6. Dou, Fu-Quan; Yan, Zhi-Ming; Liu, Xuan-Qing; Wang, Wen-Yuan; Shu, Chuan-
Cun
Accelerating adiabatic light transfer and split in three-waveguide couplers via
dressed state
OPTIK Volume: 210 Article Number: UNSP 164516 Published: MAY 2020

5. Chen, Xi; Wen, Rui-Dan; Shi, Jie-Long; Tseng, Shuo-Yen
Compact beam splitters in coupled waveguides using shortcuts to adiabaticity
JOURNAL OF OPTICS, 20 (4):10.1088/2040-8986/aab02c APR 2018

4. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018

3. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

2. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T;
Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL
2016

1. Longhi, Stefano
Coherent transfer by adiabatic passage in two-dimensional lattices
ANNALS OF PHYSICS, 348 161-175; 10.1016/j.aop.2014.05.020 SEP 2014

=====

156. M. Berent, A. A. Rangelov, and N. V. Vitanov
Broadband optical isolator in fibre optics
J. Opt. 15, 085401 (5pp) (2013)

2. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen;
Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-
waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019

1. Coenning, Wolfgang; Caloz, Francois
Passive Devices
FIBRE OPTIC COMMUNICATION: KEY DEVICES, 2ND EDITION, 161 547-584;
10.1007/978-3-319-42367-8_11 2017, Edited by: Venghaus H; Grote N, Springer
Series in Optical Sciences

=====

157. E. Dimova, G. Popkirov, D. Comparat, A. A. Rangelov and N. V. Vitanov
Efficient broadband composite optical isolator
Appl. Opt. 52, 8528-8531 (2013)

2. Abdelrahman, Mohamed Ismail; Monticone, Francesco
Broadband and giant nonreciprocity at the subwavelength scale in
magnetoplasmonic materials
PHYSICAL REVIEW B Volume: 102 Issue: 15 Article Number: 155420
Published: OCT 22 2020

1. Dunning, Alexander; Gregory, Rachel; Bateman, James; Cooper, Nathan;
Himsworth, Matthew; Jones, Jonathan A.; Freearge, Tim
Composite pulses for interferometry in a thermal cold atom cloud
PHYSICAL REVIEW A, 90 (3):10.1103/PhysRevA.90.033608 SEP 8 2014

158. D. Schraft, T. Halfmann, G. T. Genov, and N. V. Vitanov
Experimental demonstration of composite adiabatic passage
Phys. Rev. A 88, 063406(9pp) (2013)

6. Al-Mahmoud, Mouhamad; Rangelov, Andon A.; Coda, Virginie; Montemezzani, Germano
Segmented Composite Optical Parametric Amplification
APPLIED SCIENCES-BASEL Volume: 10 Issue: 4 Article Number: 1220
Published: FEB 2020

5. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual Magnetic Monopole (Springer, 2018)

4. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

3. Dou, F., Zheng, W.
High-fidelity population inversion of two-level system
Kexue Tongbao/Chinese Science Bulletin 61(20), pp. 2309-2315 (2016)

2. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

1. Demeter, Gabor
Coherence rephasing combined with spin-wave storage using chirped control pulses
PHYSICAL REVIEW A, 89 (6):10.1103/PhysRevA.89.063806 JUN 11 2014

=====
159. E. Kyoseva and N. V. Vitanov
Arbitrarily accurate passband composite pulses for dynamical suppression of amplitude noise
Phys. Rev. A 88, 063410 (7pp) (2013)

6. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

5. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

4. Brezov, Danail S.; Mladenova, Clementina D.; Mladenov, Ivailo M.
From the Kinematics of Precession Motion to Generalized Rabi Cycles
ADVANCES IN MATHEMATICAL PHYSICS, 10.1155/2018/9256320 2018

3. Liu, J., Li, S.-C., Fu, L.-B., Ye, D.-F.
Nonlinear Adiabatic Evolution of Quantum Systems: Geometric Phase and Virtual Magnetic Monopole (Springer, 2018)

2. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

1. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense, inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

=====
160. L. S. Simeonov, P. A. Ivanov and N. V. Vitanov
Speeding up conditional quantum logic of trapped ion qubits with overlapping pulses
Phys. Rev. A 89, 012304(7pp) (2014)

3. Chen, Hao; Kong, Chao; Hai, Kuo; Hai, Wenhua
Implementing two-qubit phase gates by exchanging non-Abelian quasiparticles
QUANTUM INFORMATION PROCESSING Volume: 18 Issue: 12 Article Number: 379 Published: DEC 2019

2. Ge, Xiaozhen; Xi, Zairong

Two-qubit Entanglement Generation with Trapped Ions
PROCEEDINGS OF THE 35TH CHINESE CONTROL CONFERENCE 2016 Book Series: Chinese Control Conference Pages: 9145-9148 Published: 2016 Edited by: Chen, J; Zhao, Q

1. Palmero, M; Martinez-Garaot, S; Leibfried, D; Wineland, DJ; Muga, JG
Fast phase gates with trapped ions
PHYSICAL REVIEW A, 95 (2):10.1103/PhysRevA.95.022328 FEB 21 2017

=====
161. E. S. Dimova, S. S. Ivanov, G. S. Popkirov and N. V. Vitanov
Highly efficient broadband polarization retarders and tunable polarization filters made of composite stacks of ordinary wave plates
J. Opt. Soc. Am. A 31, 952-6 (2014)

4. Al-Mahmoud, Mouhamad; Coda, Virginie; Rangelov, Andon; Montemezzani, Germano
Broadband Polarization Rotator With Tunable Rotation Angle Composed of Three Wave Plates
PHYSICAL REVIEW APPLIED Volume: 13 Issue: 1 Article Number: 014048
Published: JAN 24 2020

3. Xue, D; Pan, R; Wang, L; Deng, H; Lyu, Y; Xue, Q; Han, J
A numerical approach for designing multi-wavelength plate
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 20 (5-6):253-257; MAY-JUN 2018

2. Huang, W., Kyoseva, E.
Application of quantum control techniques to design broadband and ultra-broadband half-wave plates
Journal of Physics: Conference Series 752(1), 012006 (2016)

1. Halassi, Abde Rezzaq; Hamdi, Rachid; Bendimerad, Djalal Falih; Benkelfat, Badr-Eddine
A novel synthesis approach for birefringent filters having arbitrarily amplitude transmittances
OPTICS COMMUNICATIONS, 369 12-17; 10.1016/j.optcom.2016.02.016 JUN 15 2016

=====
162. L. S. Simeonov and N. V. Vitanov
Exactly solvable two-state quantum model for a pulse of hyperbolic-tangent shape
Phys. Rev. A 89, 043411(7pp) (2014)

10. Anza, Fabio; Messina, Antonino; Militello, Benedetto
Resonant Transitions Due to Changing Boundaries
OPEN SYSTEMS & INFORMATION DYNAMICS, 26 (2):10.1142/S1230161219500069 JUN 2019

9. Yao Shao-Wu; Cao Hong; Cen Li-Xiang
Exact solution to a kind of multi-level Rosen-Zener models
ACTA PHYSICA SINICA, 68 (13):10.7498/aps.68.20190353 JUL 5 2019

8. Li, DX; Shao, XQ
Rapid population transfer of a two-level system by a polychromatic driving field
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-45558-5 JUN 21 2019

7. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019

6. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019

5. Mirza-Zadeh, S; Saadati-Niari, M; Amniat-Talab, M
Coherent superposition of states in N-pod systems by hyperbolic-tangent coincident pulses
LASER PHYSICS LETTERS, 15 (9):10.1088/1612-202X/aacfaa SEP 2018

4. Feng, Ping; Wang, Wen-Yuan; Sun, Jian-An; Dou, Fu-Quan
Demkov-Kunike transition dynamics in a nonlinear two-level system
NONLINEAR DYNAMICS, 91 (4):2477-2484; 10.1007/s11071-017-4026-8 MAR 2018

3. Luo, Xiaobing; Yang, Baiyuan; Zhang, Xiaofei; Li, Lei; Yu, Xiaoguang
Analytical results for a parity-time-symmetric two-level system under

synchronous combined modulations
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.052128 MAY 30 2017

2. Kenmoe, MB; Tchabda, AB; Fai, LC
Demkov-Kunike models with decay
JOURNAL OF MATHEMATICAL PHYSICS, 57 (12):10.1063/1.4972289 DEC 2016

1. Chruscinski, Dariusz; Messina, Antonino; Militello, Benedetto; Napoli, Anna
Interaction-free evolution in the presence of time-dependent Hamiltonians
PHYSICAL REVIEW A, 91 (4):10.1103/PhysRevA.91.042123 APR 20 2015

=====
163. A. A. Rangelov, N. V. Vitanov, and G. Montemezzani
Robust and broadband frequency conversion in composite crystals with tailored segment widths and χ^2 nonlinearities of alternating signs
Opt. Lett. 39, 2959-62 (2014)

3. Kyoseva, Elica; Greener, Hadar; Suchowski, Haim
Detuning-modulated composite pulses for high-fidelity robust quantum control
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.032333 SEP 25 2019

2. Ohae, C; Zheng, J; Ito, K; Suzuki, M; Minoshima, K; Katsuragawa, M
Tailored Raman-resonant four-wave-mixing processes
OPTICS EXPRESS, 26 (2):1452-1460; 10.1364/OE.26.001452 JAN 22 2018

1. Zheng, Jian; Katsuragawa, Masayuki
Freely designable optical frequency conversion in Raman-resonant four-wave-mixing process
SCIENTIFIC REPORTS, 5 10.1038/srep08874 MAR 9 2015

=====
164. G. T. Genov, A. A. Rangelov, and N. V. Vitanov
Efficient broadband frequency generation by composite crystals
J. Opt. 16, 062001(6pp) (2014)

=====
165. P. A. Ivanov, N. I. Karchev, N. V. Vitanov and D. G. Angelakis
Quantum simulation of superexchange magnetism in linear ion crystals
Phys. Rev. A 90, 012325(9pp) (2014)

3. Channa, Muhammad Yousif; Nizamani, Altaf H.; Saleem, Hussain; et al.
Surface Ion Trap Designs for Vertical Ion Shuttling
INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY
Volume: 19 Issue: 4 Pages: 264-269 Published: APR 30 2019

2. Elyasi, Mehrdad; Bhatia, Charanjit S.; Yang, Hyunsoo
Individual magnetization reversal of a square dot matrix by common current excitation
JOURNAL OF PHYSICS D-APPLIED PHYSICS, 48 (29):10.1088/0022-3727/48/29/295301 JUL 29 2015

1. Elyasi, M., Bhatia, C.S., Yang, H.
Individual site reversal in centro-symmetric matrices by common current excitation
IEEE International Magnetism Conference, INTERMAG 2015 7156655 (2015)

=====
166. G. T. Genov, D. Schraft, T. Halfmann and N. V. Vitanov
Correction of arbitrary field errors in population inversion of quantum systems by universal composite pulses
Phys. Rev. Lett. 113, 043001 (5pp) (2014)

27. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

26. Gong, Bo; Tu, Tao; Guo, Ao-Lin; Zhu, Le-Tian; Li, Chuan-Feng
A Noise-Robust Pulse for Excitation Transfer in a Multi-Mode Quantum Memory
CHINESE PHYSICS LETTERS Volume: 38 Issue: 4 Article Number: 044201
Published: MAY 2021

25. Ansel, Quentin; Glaser, Steffen J.; Sugny, Dominique
Selective and robust time-optimal rotations of spin systems
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 54 Issue: 8 Article Number: 085204 Published: FEB 26 2021

24. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

23. He, Yizun; Ji, Lingjing; Wang, Yuzhuo; Qiu, Liyang; Zhao, Jian; Yudi; Huang, Xing; Wu, Saijun; Chang, Darrick E.
Atomic spin-wave control and spin-dependent kicks with shaped subnanosecond pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 4 Article Number: 043418
Published: DEC 24 2020

22. Dridi, Ghassen; Liu, Kaipeng; Guerin, Stephane
Optimal Robust Quantum Control by Inverse Geometric Optimization
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 25 Article Number: 250403
Published: DEC 16 2020

21. Zhu, Jing-Jun; Chen, Xi; Jauslin, Hans-Rudolf; Guerin, Stephane
Robust control of unstable nonlinear quantum systems
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 052203
Published: NOV 4 2020

20. Martikyan, V; Devra, A.; Guery-Odelin, D.; Glaser, S. J.; Sugny, D.
Robust control of an ensemble of springs: Application to ion cyclotron resonance and two-level quantum systems
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053104
Published: NOV 4 2020

19. Gong, Bo; Tu, Tao; Zhu, Xing-Yu; Guo, Ao-lin; Zhou, Zong-quan; Guo, Guang-Can; Li, Chuan-Feng
A noise-resisted scheme of dynamical decoupling pulses for quantum memories
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 15089 Published: SEP 15 2020

18. Ma, Yudi; Huang, Xing; Wang, Xiaoqing; Ji, Lingjing; He, Yizun; Qiu, Liyang; Zhao, Jian; Wang, Yuzhuo; Wu, Saijun
Precise pulse shaping for quantum control of strong optical transitions
OPTICS EXPRESS Volume: 28 Issue: 12 Pages: 17171-17187 Published: JUN 8 2020

17. Majumder, Swarnadeep; de Castro, Leonardo Andreta; Brown, Kenneth R.
Real-time calibration with spectator qubits
NPJ QUANTUM INFORMATION Volume: 6 Issue: 1 Article Number: 19
Published: FEB 7 2020

16. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

15. Zarantonello, G; Hahn, H; Morgner, J; Schulte, M; Bautista-Salvador, A; Werner, RF; Hammerer, K; Ospelkaus, C
Robust and Resource-Efficient Microwave Near-Field Entangling Be-9(+) Gate
PHYSICAL REVIEW LETTERS Volume: 123 Issue: 26 Article Number: 260503
Published: DEC 26 2019

14. Kyoseva, Elica; Greener, Hadar; Suchowski, Haim
Detuning-modulated composite pulses for high-fidelity robust quantum control
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.032333 SEP 25 2019

13. Wu, Jin-Lei; Wang, Yan; Song, Jie; Xia, Yan; Su, Shi-Lei; Jiang, Yong-Yuan
Robust and highly efficient discrimination of chiral molecules through three-mode parallel paths
PHYSICAL REVIEW A, 100 (4):10.1103/PhysRevA.100.043413 OCT 21 2019

12. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019

11. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018

10. Dorier, V; Gevorgyan, M; Ishkhanyan, A; Leroy, C; Jauslin, HR; Guerin, S
Nonlinear Stimulated Raman Exact Passage by Resonance-Locked Inverse Engineering
PHYSICAL REVIEW LETTERS, 119 (24):10.1103/PhysRevLett.119.243902 DEC 13

2017

9. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

8. Van Damme, L; Ansel, Q; Glaser, SJ; Sugny, D
Robust optimal control of two-level quantum systems
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.063403 JUN 2 2017

7. Calderon-Vargas, FA; Kestner, JP
Dynamically Correcting a CNOT Gate for any Systematic Logical Error
PHYSICAL REVIEW LETTERS, 118 (15):10.1103/PhysRevLett.118.150502 APR 10
2017

6. Cruzeiro, Emmanuel Zambrini; Frowis, Florian; Timoney, Nuala; Afzelius, Mikael
Noise in optical quantum memories based on dynamical decoupling of spin states
JOURNAL OF MODERN OPTICS, 63 (20):2101-2113;
10.1080/09500340.2016.1204472 2016

5. Dou, Fu-Quan; Cao, Hui; Liu, Jie; Fu, Li-Bin
High-fidelity composite adiabatic passage in nonlinear two-level systems
PHYSICAL REVIEW A, 93 (4):10.1103/PhysRevA.93.043419 APR 25 2016

4. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense,
inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

3. Goldner, P., Ferrier, A., Guillot-Noel, O.
Rare Earth-Doped Crystals for Quantum Information Processing
Handbook on the Physics and Chemistry of Rare Earths 46, pp. 1-78 (2015)

2. Dngong, Mamadou; Djotyan, Gagik; Ruschhaupt, Andreas; Guerin, Stephane
Robust coherent superposition of states by single-shot shaped pulse
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 48 (17):SI
10.1088/0953-4075/48/17/174007 SEP 14 2015

1. Wolfowicz, Gary; Maier-Flaig, Hannes; Marino, Robert; Ferrier, Alban; Vezin,
Herve; Morton, John J. L.; Goldner, Philippe
Coherent Storage of Microwave Excitations in Rare-Earth Nuclear Spins
PHYSICAL REVIEW LETTERS, 114 (17):10.1103/PhysRevLett.114.170503 APR 30
2015

=====

167. B. T. Torosov and N. V. Vitanov
High-fidelity error-resilient composite phase gates
Phys. Rev. A 90, 012341 (5pp) (2014)

12. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-
Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic
passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR
2021

11. Whitty, C.; Kiely, A.; Ruschhaupt, A.
Quantum control via enhanced shortcuts to adiabaticity
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 2 Article Number: 023360
Published: JUN 18 2020

10. Al-Mahmoud, Mouhamad; Coda, Virginie; Rangelov, Andon; Montemezzani,
Germano
Broadband Polarization Rotator With Tunable Rotation Angle Composed of Three
Wave Plates
PHYSICAL REVIEW APPLIED Volume: 13 Issue: 1 Article Number: 014048
Published: JAN 24 2020

9. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

8. Dimova, Emiliya
Individual selective rotation of the linear polarization of single light beam in a
bundle
REVIEW OF SCIENTIFIC INSTRUMENTS, 90 (8):10.1063/1.5100663 AUG 2019

7. Hristova, Hristina; Ognianski, Stefano; Rangelov, Andon; Dimova, Emiliya
A different optical composition for a broadband linear polarization rotator
Journal of Physics Conference Series, 20th Jubilee International School on
Condensed Matter Physics - Physics and Applications of Advanced and
Multifunctional Materials (ISCPM), SEP 03-06, 2018 Varna, BULGARIA

6. Shirkhaghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic
passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG
2018

5. Levy, Amikam; Torrontegui, E.; Kosloff, Ronnie
Action-noise-assisted quantum control
PHYSICAL REVIEW A, 96 (3):10.1103/PhysRevA.96.033417 SEP 25 2017

4. Kiely, A; Muga, JG; Ruschhaupt, A
Effect of Poisson noise on adiabatic quantum control
PHYSICAL REVIEW A, 95 (1):10.1103/PhysRevA.95.012115 JAN 13 2017

3. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense,
inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

2. Dong, Dong; Zhang, Yan-Lei; Zou, Chang-Ling; Zou, Xu-Bo; Guo, Guang-Can
Quantum phase gate through the dispersive atom-field interaction with atoms
trapped in optical cavity QED
PHYSICS LETTERS A, 379 (38):2291-2294; 10.1016/j.physleta.2015.07.020 OCT 9
2015

1. Rangelov, Andon A.; Kyoseva, Elica
Broadband composite polarization rotator
OPTICS COMMUNICATIONS, 338 574-577; 10.1016/j.optcom.2014.11.037 MAR 1
2015

=====

168. S. S. Ivanov, P. A. Ivanov and N. V. Vitanov
**Efficient construction of three- and four-qubit quantum gates by global
entangling gates**
Phys. Rev. A, 91, 032311 (8pp) (2015)

16. van de Wetering, John
Constructing quantum circuits with global gates
NEW JOURNAL OF PHYSICS Volume: 23 Issue: 4 Article Number: 043015
Published: APR 2021

15. Han, Yu-Hong; Cao, Cong; Zhang, Li; Yin, Pan-Pan; Fan, Ling; Zhang, Ru
High-Fidelity Hybrid Universal Quantum Controlled Gates on Photons and
Quantum-Dot Spins
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS DOI: 10.1007/s10773-021-
04738-8
Early Access: FEB 2021

14. Liu, Wen-Qiang; Wei, Hai-Rui; Kwek, Leong-Chuan
Low-Cost Fredkin Gate with Auxiliary Space
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 5 Published: NOV 23 2020

13. Liu, Wen-Qiang; Wei, Hai-Rui
Optimal synthesis of the Fredkin gate in a multilevel system
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 6 Article Number: 063026
Published: JUN 2020

12. Lu, Yao; Zhang, Shuaining; Zhang, Kuan; Chen, Wentao; Shen, Yangchao;
Zhang, Jiali; Zhang, Jing-Ning; Kim, Kihwan
Global entangling gates on arbitrary ion qubits
NATURE, 572 (7769):363-+; 10.1038/s41586-019-1428-4 AUG 15 2019

11. Zhang Qian; Li Meng; Gong Qi-Huang; Li Yan
Femtosecond laser direct writing of optical quantum logic gates
ACTA PHYSICA SINICA, 68 (10):10.7498/aps.68.20190024 MAY 20 2019

10. Dorai, K., Devra, A., Prabhu, P., Singh, H., Arvind
Efficient experimental design of high-fidelity three-qubit quantum gates via
genetic programming
Quantum Information Processing 17(3),67, pp. 1-24 (2018)

9. Dong, Li; Wang, Sen-Lin; Cui, Cen; Geng, Xue; Li, Qing-Yang; Dong, Hai-Kuan;
Xiu, Xiao-Ming; Gao, Ya-Jun

Polarization Toffoli gate assisted by multiple degrees of freedom
OPTICS LETTERS, 43 (19):4635-4638; 10.1364/OL.43.004635 OCT 1 2018

8. Xiu, Xiao-Ming; Cui, Cen; Geng, Xue; Wang, Sen-Lin; Li, Qing-Yang; Dong, Hai-Kuan; Dong, Li; Gao, Ya-Jun

Constructing the nearly deterministic Toffoli polarization gate with the spatial degree of freedom based on weak cross-Kerr nonlinearities
OPTICS COMMUNICATIONS, 426 308-312; 10.1016/j.optcom.2018.05.060 NOV 1 2018

7. Dong, Li; Lin, Yan-Fang; Cui, Cen; Dong, Hai-Kuan; Xiu, Xiao-Ming; Gao, Ya-Jun
Single-photon controlled multi-photon polarization unitary gate based on weak cross-Kerr nonlinearities
QUANTUM INFORMATION PROCESSING, 17 (5):10.1007/s11128-018-1882-1 MAY 2018

6. Maslov, Dmitri; Nam, Yunseong
Use of global interactions in efficient quantum circuit constructions
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aaa398 MAR 26 2018

5. Pineda, Eufemio Moreno; Lan, Yanhua; Fuhr, Olaf; Wernsdorfer, Wolfgang; Ruben, Mario
Exchange-bias quantum tunnelling in a CO₂-based Dy-4-single molecule magnet
CHEMICAL SCIENCE, 8 (2):1178-1185; 10.1039/c6sc03184f 2017

4. Abovyan, GA; Kryuchkyan, GY
Interaction of qubits in Furry-Magnus approach
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 51 (3):222-228; 10.3103/S1068337216030038 JUL 2016

3. Mao, Lijun; Liu, Yanxia; Zhang, Yunbo
Entanglement dynamics of the ultrastrong-coupling three-qubit Dicke model
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.052305 MAY 3 2016

2. Dong, Li; Lin, Yan-Fang; Wang, Jun-Xi; Li, Qing-Yang; Shen, Hong-Zhi; Dong, Hai-Kuan; Ren, Yuan-Peng; Xiu, Xiao-Ming; Gao, Ya-Jun; Oh, Choo Hiap
Nearly deterministic Fredkin gate based on weak cross-Kerr nonlinearities
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 33 (2):253-260; 10.1364/JOSAB.33.000253 FEB 1 2016

1. Luo, Ming-Xing; Ma, Song-Ya; Chen, Xiu-Bo; Wang, Xiaojun
Hybrid Toffoli gate on photons and quantum spins
SCIENTIFIC REPORTS, 5 10.1038/srep16716 NOV 16 2015

=====
169. N. V. Vitanov, T. F. Gloger, P. Kaufmann, D. Kaufmann, T. Collath, M. T. Baig, M. Johanning, and C. Wunderlich
Fault-tolerant Hahn-Ramsey interferometry with pulse sequences of alternating detuning
Phys. Rev. A 91, 033406 (10pp) (2015)

1. Zanon-Willette, Thomas; Lefevre, Remi; Metzdorff, Remi; Sillitoe, Nicolas; Almonacil, Sylvain; Minissale, Marco; de Clercq, Emeric; Taichenachev, Alexey V.; Yudin, Valeriy I.; Arimondo, Ennio
Composite laser-pulses spectroscopy for high-accuracy optical clocks: a review of recent progress and perspectives
REPORTS ON PROGRESS IN PHYSICS, 81 (9):10.1088/1361-6633/aac9e9 SEP 2018

=====
170. K. Bergmann, N. V. Vitanov, and B. W. Shore
Perspective: Stimulated Raman adiabatic passage: The status after 25 years
J. Chem. Phys. 142, 170901(20pp) (2015)

102. Sarma, Bijita; Busch, Thomas; Twamley, Jason
Cavity magnomechanical storage and retrieval of quantum states
NEW JOURNAL OF PHYSICS Volume: 23 Issue: 4 Article Number: 043041
Published: APR 2021

101. Shirkhaghah, N.; Saadati-Niari, M.; Nedaee-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021

100. Zhu, Jing-Jun; Chen, Xi
Fast-forward scaling of atom-molecule conversion in Bose-Einstein condensates
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023307
Published: FEB 4 2021

99. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaee-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

98. Mokhberi, Arezoo; Hennrich, Markus; Schmidt-Kaler, Ferdinand
Trapped Rydberg ions: A new platform for quantum information processing
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 69 Book Series: Advances In Atomic Molecular and Optical Physics Volume: 69 Pages: 233-306 Published: 2020

97. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020

96. Khosravi, Soroush D.; Scipioni, Marco; Gibson, George N.
Toward an ultrafast double-pulse stretcher-compressor
JOURNAL OF MODERN OPTICS [early access icon] Early Access: DEC 2020

95. Schmidt, Piet O.
Quantum Logic-Enabled Spectroscopy
Quantum Information: From Foundations To Quantum Technology Applications, Vol 2 Book Editor(s): Dagmar Bruss, Gerd Leuchs

94. Qiu, Ming-Yang; Jin, Wei; Qu, Shi-Xian; Li, Chun; Lefkidis, Georgios; Huebner, Wolfgang
Optically- and thermally-induced electronic transitions in a three-level system
PHYSICA SCRIPTA Volume: 95 Issue: 10 Article Number: 105808 Published: OCT 2020

93. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Stimulated Raman adiabatic passage: Effects of system parameters on population transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1 2020

92. Sarreshtedari, Farrokh; Rashedi, Alireza; Ghashghaei, Fahime;(Sabooni, Mahmood
Engineering of the Cesium Zeeman sublevel populations using sequences of laser pulses and RF excitation
PHYSICA SCRIPTA Volume: 96 Issue: 1 Article Number: 015401 Published: JAN 2021

91. Aashna, Pragati; Thyagarajan, K.
Wideband two-process frequency conversion under stimulated Raman adiabatic passage via a continuum of dark intermediate states
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 11 Pages: 3370-3378 Published: NOV 1 2020

90. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Xue-Feng
Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043
Published: JUL 15 2020

89. Wang, Rong; Niu, Ying-Yu
Population transfer through multiple channels in two harmonic laser pulses
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY Volume: 19 Issue: 5 Article Number: 2050023 Published: AUG 2020

88. Hanks, Michael; Munro, William J.; Nemoto, Kae
Optical manipulation of the negative silicon-vacancy center in diamond
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 022616
Published: AUG 24 2020

87. Lefebvre, Roland; Atabek, Osman
Progress toward full optical control of ultracold-molecule formation: Role of scattering Feshbach resonances
PHYSICAL REVIEW A Volume: 101 Issue: 6 Article Number: 063406
Published: JUN 15 2020

86. Sun, Hui; Xu, Ning; Fan, Shuangli; Liu, Mingwei
Speeding up the creation of coherent superposition states by shortcut-to-adiabaticity means
ANNALS OF PHYSICS Volume: 418 Article Number: 168200 Published: JUL

85. Chen, Disheng; Zheludev, Nikolay; Gao, Wei-bo
Building Blocks for Quantum Network Based on Group-IV Split-Vacancy Centers in Diamond
ADVANCED QUANTUM TECHNOLOGIES Volume: 3 Issue: 2 Special Issue: SI
Article Number: 1900069 Published: FEB 2020
84. Naoki Iwamoto, Charles J. Schwartz, Bethany Jochim, Kanaka Raju P., Peyman Feizollah, J. L. Napierala, T. Severt, S. N. Tegegn, A. Solomon, S. Zhao, Huynh Lam, Tomthin Nghanba Wangjam, V. Kumarappan, K. D. Carnes, I. Ben-Itzhak, and E. Wells
Strong-field control of H-3(+) production from methanol dications: Selecting between local and extended formation mechanisms
JOURNAL OF CHEMICAL PHYSICS Volume: 152 Issue: 5 Article Number: 054302 Published: FEB 7 2020
83. Shirikhanghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages:344-351
Published: MAY-JUN 2020
82. Ge, Xiaozhen; Ding, Haijin; Rabitz, Herschel; Wu, Rebing
Robust quantum control in games: An adversarial learning approach
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 052317
Published: MAY 11 2020
81. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020
80. Salah, Reyad; Farouk, Ahmed M.; Farouk, Ahmed; Farouk, Ahmed; Abdel-Aty, Mahmoud; Eleuch, Hichem; Obada, Abdel-Shafy F.
Entanglement Control of Two-Level Atoms in Dissipative Cavities
APPLIED SCIENCES-BASEL Volume: 10 Issue: 4 Article Number: 1510
Published: FEB 2020
79. S. V. Kozlov, E. A. Bormotova, A. A. Medvedev, E. A. Pazyuk, A. V. Stolyarov and A. Zaitsevskii
A first principles study of the spin-orbit coupling effect in LiM (M = Na, K, Rb, Cs) molecules Associated Data
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 4 Pages: 2295-2306 Published: JAN 28 2020
78. Shirikhanghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
77. Paul, Anam C.; Sharma, Ketan; Reza, Md Asmaul; Telfah, Hamzeh; Miller, Terry A.; Liu, Jinjun
Laser-induced fluorescence and dispersed-fluorescence spectroscopy of the A²E-X & x303;2A1 transition of jet-cooled calcium methoxide (CaOCH₃) radicals
JOURNAL OF CHEMICAL PHYSICS, 151 (13):10.1063/1.5104278 OCT 7 2019
76. Hernandez-Castillo, A. O.; Abeysekera, Chamara; Robicheaux, F.; Zwier, Timothy S.
Propagating molecular rotational coherences through single-frequency pulses in the strong field regime
JOURNAL OF CHEMICAL PHYSICS, 151 (8):10.1063/1.5099049 AUG 28 2019
75. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019
74. Debnath, Kamanasish; Kielerich, Alexander Holm; Benseny, Albert; Molmer, Klaus
Coherent spectral hole burning and qubit isolation by stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023813 AUG 9 2019
73. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Investigation of robust population transfer using quadratically chirped laser interacting with a two-level system
PHYSICA SCRIPTA, 94 (10):10.1088/1402-4896/ab254d OCT 2019
72. Wu, Shu-Hao; Amezcua, Mayra; Wang, Hailin
Adiabatic population transfer of dressed spin states with quantum optimal control
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063812 JUN 10 2019
71. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Robust population transfer in a two-level system using finite chirping method
PHYSICA SCRIPTA, 94 (8):10.1088/1402-4896/ab1689 AUG 2019
70. Longhi, Stefano
Topological pumping of edge states via adiabatic passage
PHYSICAL REVIEW B, 99 (15):10.1103/PhysRevB.99.155150 APR 26 2019
69. Shen, Ya-Xi; Peng, Yu-Gui; Zhao, De-Gang; Chen, Xin-Cheng; Zhu, Jie; Zhu, Xue-Feng
One-Way Localized Adiabatic Passage in an Acoustic System
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.094501 MAR 8 2019
68. Lyu, Bing Kuan; Li, Jing Lun; Wang, Meng; Wang, Gao Ren; Cong, Shu Lin
Efficient formation of stable ultracold Cs-2 molecules in the ground electronic state via two-color photoassociation
EUROPEAN PHYSICAL JOURNAL D, 73 (1):10.1140/epjd/e2018-90314-5 JAN 22 2019
67. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019
66. Csehi, Andras
Single-pulse-induced total population inversion between indirectly coupled quantum states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 2 Article Number: 025002 Published: JAN 28 2019
65. Castellini, Alessia; Jauslin, Hans Rudolf; Rousseaux, Benjamin; et al.
Quantum plasmonics with multi-emitters: application to stimulated Raman adiabatic passage
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 223
Published: DEC 21 2018
64. Niu, Ying-Yu; Wang, Rong
Adiabatic population transfer between electronic states of LiH molecule in two picosecond laser pulses
AIP ADVANCES, 8 (11):10.1063/1.5052465 NOV 2018
63. Devolder, Adrien; Luc-Koenig, Eliane; Atabek, Osman; Desouter-Lecomte, Michele; Dulieu, Olivier
Proposal for the formation of ultracold deeply bound RbSr dipolar molecules by all-optical methods
PHYSICAL REVIEW A, 98 (5):10.1103/PhysRevA.98.053411 NOV 9 2018
62. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019
61. Shirikhanghah, N.; Saadati-Niari, M.; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
60. Fernandez-Soler, JJ; Font, JL; Vilaseca, R
Adiabatic population transfer in the D-1 transition of K-39
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.063848 JUN 22 2018
59. Zaitsevskii, AV; Skripnikov, LV; Kudrin, AV; Oleinichenko, AV; Eliav, E; Stolyarov, AV
Electronic Transition Dipole Moments in Relativistic Coupled-Cluster Theory: the Finite-Field Method
OPTICS AND SPECTROSCOPY, 124 (4):451-456; 10.1134/S0030400X18040215 APR 2018
58. Quemener, G.
CHAPTER 12: Ultracold Collisions of Molecules
RSC Theoretical and Computational Chemistry Series 2018-January(11), pp. 579-632
57. Stolyarov, A.

Laser synthesis of ultra-cold molecules: From design to production
Springer Series in Chemical Physics 115, pp. 169-177 (2017)

56. Ray, Amelia W.; Ma, Jianyi; Otto, Rico; Li, Jun; Guo, Hua; Continetti, Robert E.
Effects of vibrational excitation on the $F + H_2O \rightarrow HF + OH$ reaction:
dissociative photodetachment of overtone-excited $[F-H-OH](-)$
CHEMICAL SCIENCE, 8 (11):7821-7833; 10.1039/c7sc03364h NOV 1 2017

55. Hill, J. Grant; Peterson, Kirk A.
Gaussian basis sets for use in correlated molecular calculations. XI.
Pseudopotential-based and all-electron relativistic basis sets for alkali metal (K-Fr)
and alkaline earth (Ca-Ra) elements
JOURNAL OF CHEMICAL PHYSICS, 147 (24):DEC 28 2017

54. Continetti, Robert E.; Guo, Hua
Dynamics of transient species via anion photodetachment
CHEMICAL SOCIETY REVIEWS, 46 (24):7650-7667; 10.1039/c7cs00684e DEC 21 2017

53. Jing, Da; Wang, Shuo; Zhan, Wei-Shen; Yang, Jian; Zhang, You-De
Quantum control of dressed state population for four-level ladder Li-2 molecules
in femtosecond laser fields
EUROPEAN PHYSICAL JOURNAL D, 71 (8):10.1140/epjd/e2017-70784-7 AUG 29 2017

52. Higgins, Gerard; Pokorny, Fabian; Zhang, Chi; Bodart, Quentin; Hennrich, Mark
Coherent Control of a Single Trapped Rydberg Ion
PHYSICAL REVIEW LETTERS, 119 (22):10.1103/PhysRevLett.119.220501 NOV 28 2017

51. Ciamei, A; Bayerle, A; Pasquiou, B; Schreck, F
Observation of Bose-enhanced photoassociation products
EPL, 119 (4):10.1209/0295-5075/119/46001 AUG 2017

50. Ray, Amelia W.; Ma, Jianyi; Otto, Rico; Li, Jun; Guo, Hua; Continetti, Robert E.
Effects of vibrational excitation on the $F + H_2O \rightarrow HF + OH$ reaction:
dissociative photodetachment of overtone-excited $[F-H-OH](-)$
CHEMICAL SCIENCE, 8 (11):7821-7833; 10.1039/c7sc03364h NOV 2017

49. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state engineering in tripod systems using x-ray laser pulses
PHYSICAL REVIEW C, 96 (4):10.1103/PhysRevC.96.044619 OCT 24 2017

48. Grimes, David D.; Barnum, Timothy J.; Zhou, Yan; Colombo, Anthony P.; Field, Robert W.
Coherent laser-millimeter-wave interactions en route to coherent population transfer
JOURNAL OF CHEMICAL PHYSICS, 147 (14):10.1063/1.4997624 OCT 14 2017

47. Mirza-Zadeh, S; Saadati-Niari, M; Amnat-Talab, M
Creation of N-partite W-states by adiabatic passage and pulse area techniques
JOURNAL OF MODERN OPTICS, 64 (21):2376-2384;
10.1080/09500340.2017.1361478 2017

46. Zheng, Hao; Zhang, Junyi; Berndt, Richard
A minimal double quantum dot
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-10814-z SEP 7 2017

45. Jing, Da; Wang, Shuo; Zhan, Wei-Shen; Yang, Jian; Zhang, You-De
Quantum control of dressed state population for four-level ladder Li-2 molecules
in femtosecond laser fields
EUROPEAN PHYSICAL JOURNAL D, 71 (8):10.1140/epjd/e2017-70784-7 AUG 29 2017

44. Zaitsevskii, A; Mosyagin, NS; Stolyarov, AV; Eliav, E
Approximate relativistic coupled-cluster calculations on heavy alkali-metal diatomics: Application to the spin-orbit-coupled $A(1)\Sigma^+$ and $b(3)\Pi$ states of RbCs and Cs-2
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022516 AUG 29 2017

43. Lefkidis, G; Sold, S; Hubner, W
Relaxation of a coherent, magnetic s-p model system coupled to one and two thermal baths and a laser pulse
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, 432 276-282;
10.1016/j.jmmm.2017.01.093 JUN 15 2017

42. Coto, Raul; Jacques, Vincent; Hetet, Gabriel; Maze, Jeronimo R.
Stimulated Raman adiabatic control of a nuclear spin in diamond
PHYSICAL REVIEW B, 96 (8):10.1103/PhysRevB.96.085420 AUG 14 2017

41. Benseny, Albert; Kiely, Anthony; Zhang, Yongping; Busch, Thomas; Ruschhaupt, Andreas
Spatial non-adiabatic passage using geometric phases
EPJ QUANTUM TECHNOLOGY, 4 10.1140/epjqt/s40507-017-0056-x MAR 28 2017

40. Alps, K; Kruzins, A; Nikolayeva, O; Tamanis, M; Ferber, R; Pazyuk, EA; Stolyarov, AV
Energy and radiative properties of the $(3)(1)\Pi$ and $(5)(1)\Sigma^+$ states of RbCs:
Experiment and theory
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022510 AUG 11 2017

39. Reshodko, Irina; Benseny, Albert; Busch, Thomas
Robust boson dispenser: Quantum state preparation in interacting many-particle systems
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023606 AUG 3 2017

38. Ciamei, Alessio; Bayerle, Alex; Chen, Chun-Chia; Pasquiou, Benjamin; Schreck, Florian
Efficient production of long-lived ultracold Sr-2 molecules
PHYSICAL REVIEW A, 96 (1):10.1103/PhysRevA.96.013406 JUL 7 2017

37. Mukherjee, Nandini; Perreault, William E.; Zare, Richard N.
Stark-induced adiabatic Raman ladder for preparing highly vibrationally excited quantum states of molecular hydrogen
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (14):10.1088/1361-6455/aa786f JUL 28 2017

36. Zhang, Zhenhua; Tian, Jin; Du, Juan
Control of selective population transfer and creation of two orthogonal maximally superposition states via a pair of pump and chirped Stokes pulses
LASER PHYSICS LETTERS Volume: 14 Issue: 2 Article Number: 025202
Published: FEB 2017

35. Pan, Huilin; Mondal, Sohidul; Yang, Chung-Hsin; Liu, Kopin
Imaging characterization of the rapid adiabatic passage in a source-rotatable, crossed-beam scattering experiment
JOURNAL OF CHEMICAL PHYSICS Volume: 147 Issue: 1 Article Number: 013928
Published: JUL 7 2017

34. Pototschnig, Johann V.; Meyer, Ralf; Hauser, Andreas W.; Ernst, Wolfgang E.
Vibronic transitions in the alkali-metal (Li, Na, K, Rb) - alkaline-earth-metal (Ca, Sr) series: A systematic analysis of de-excitation mechanisms based on the graphical mapping of Frank-Condon integrals
PHYSICAL REVIEW A, 95 (2):10.1103/PhysRevA.95.022501 FEB 2 2017

33. Pletyukhov, Mikhail; Mueller, Niclas; Gritsev, Vladimir
Photonic Kondo-like model
PHYSICAL REVIEW A, 95 (4):10.1103/PhysRevA.95.043829 APR 20 2017

32. Lefkidis, G.; Sold, S.; Huebner, W.
Relaxation of a coherent, magnetic s-p model system coupled to one and two thermal baths and a laser pulse
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 432 Pages: 276-282
Published: JUN 15 2017

31. Shu, Chuan-Cun; Dong, Daoyi; Petersen, Ian R.; Henriksen, Niels E.
Complete elimination of nonlinear light-matter interactions with broadband ultrafast laser pulses
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.033809 MAR 10 2017

30. Gazazyan, EA
Transfer of Populations in the Multi-Level System by Partly Overlapping of the Laser Pulses
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 52 (1):5-9; 10.3103/S1068337217010029 JAN 2017

29. Muralidharan, Sreraman; Zou, Chang-Ling; Li, Linshu; Wen, Jianming; Jiang, Liang
Overcoming erasure errors with multilevel systems
NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa573a JAN 20 2017

28. Alps, K., Kruzins, A., Tamanis, M., (...), Pazyuk, E.A., Stolyarov, A.V.
Fourier-transform spectroscopy and deperturbation analysis of the spin-orbit coupled $A1\Sigma^+$ and $b3\Pi$ states of KRb
Journal of Chemical Physics 144(14), 144310 (2016)

27. Lacki, M; Baranov, MA; Pichler, H; Zoller, P
Nanoscale "Dark State" Optical Potentials for Cold Atoms
PHYSICAL REVIEW LETTERS, 117 (23):10.1103/PhysRevLett.117.233001 NOV 30 2017

26. Golter, D. Andrew; Oo, Thein; Amezcua, Mayra; Lekavicius, Ignas; Stewart, Kevin A.; Wang, Hailin
Coupling a Surface Acoustic Wave to an Electron Spin in Diamond via a Dark State
PHYSICAL REVIEW X, 6 (4):10.1103/PhysRevX.6.041060 DEC 20 2016
25. Rancic, Marko J.; Stepanenko, Dimitrije
Coherent manipulation of single electron spins with Landau-Zener sweeps
PHYSICAL REVIEW B, 94 (24):10.1103/PhysRevB.94.241301 DEC 12 2016
24. Boyero Garcia, R.; Carpentier, A. V.; Gomez-Cadenas, J. J.; Peralta Conde, A.
A novel technique to achieve atomic macro-coherence as a tool to determine the nature of neutrinos
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6532-7 OCT 2016
23. Tian, Si-Cong; Xing, En-Bo; Wan, Ren-Gang; Wang, Chun-Liang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Control of coherence transfer via tunneling in quadruple and multiple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125205 DEC 2016
22. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016
21. Zai, Jing-Bo; Zhan, Wei-Shen; Wang, Shuo; Dang, Hai-Ping; Han, Xiao
Population transfer of a NaH molecule via stimulated Raman adiabatic passage
LASER PHYSICS, 26 (9):10.1088/1054-660X/26/9/096002 SEP 2016
20. Tian, Si-Cong; Wan, Ren-Gang; Wang, Li-Jie; Shu, Shi-Li; Tong, Cun-Zhu; Wang, Li-Jun
Tunneling-assisted coherent population transfer and creation of coherent superposition states in triple quantum dots
LASER PHYSICS LETTERS, 13 (12):10.1088/1612-2011/13/12/125203 DEC 2016
19. Perreault, William E.; Mukherjee, Nandini; Zare, Richard N.
Preparation of a selected high vibrational energy level of isolated molecules
JOURNAL OF CHEMICAL PHYSICS, 145 (15):10.1063/1.4964938 OCT 21 2016
18. Becker, Jonas Nils; Goerlitz, Johannes; Arend, Carsten; Markham, Matthew; Becher, Christoph
Ultrafast all-optical coherent control of single silicon vacancy colour centres in diamond
NATURE COMMUNICATIONS, 7 10.1038/ncomms13512 NOV 14 2016
17. Nedaee-Shakarab, B; Saadati-Niari, M; Zolfagharpour, F
Nuclear-state population transfer by a train of coincident pulses
PHYSICAL REVIEW C, 94 (5):10.1103/PhysRevC.94.054601 NOV 1 2016
16. Kozlov, SV; Pazyuk, EA; Stoliarov, AV
Twofold diabaticization of the KRb (1-2)(1)Pi complex in the framework of ab initio and deperturbation approaches
PHYSICAL REVIEW A, 94 (4):10.1103/PhysRevA.94.042510 OCT 14 2016
15. Menchon-Enrich, R; Benseny, A; Ahufinger, V; Greentree, AD; Busch, T; Mompert, J
Spatial adiabatic passage: a review of recent progress
REPORTS ON PROGRESS IN PHYSICS, 79 (7):10.1088/0034-4885/79/7/074401 JUL 2016
14. Saadati-Niari, Maghsoud
Coherent superpositions of states in coupled Hilbert-space using step by step Morris-Shore transformation
ANNALS OF PHYSICS, 372 138-148; 10.1016/j.aop.2016.04.023 SEP 2016
13. Tikhova, OS
Adiabatic transfer of population in five-level system in the absence of four-photon resonance
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 51 (3):250-255; 10.3103/S1068337216030075 JUL 2016
12. Sheffield, LS; Woo, SO; Rathnayaka, KDD; Lyuksyutov, IF; Herschbach, DR
Production of high density molecular beams with wide velocity scanning
REVIEW OF SCIENTIFIC INSTRUMENTS, 87 (6):10.1063/1.4953613 JUN 2016
11. Di Stefano, PG; Paladino, E; Pope, TJ; Falci, G
Coherent manipulation of noise-protected superconducting artificial atoms in the
Lambda scheme
PHYSICAL REVIEW A, 93 (5):10.1103/PhysRevA.93.051801 MAY 23 2016
10. Tian, Si-Cong; Wan, Ren-Gang; Wang, Chun-Liang; Shu, Shi-Li; Wang, Li-Jie; Tong, Chun-Zhu
Creation and Transfer of Coherence via Technique of Stimulated Raman Adiabatic Passage in Triple Quantum Dots
NANOSCALE RESEARCH LETTERS, 11 10.1186/s11671-016-1433-6 APR 23 2016
9. Pazyuk, Elena A.; Revina, Elena I.; Stoliarov, Andrey V.
Ab initio and long-range studies of the electronic transition dipole moments among the low-lying states of Rb-2 and Cs-2 molecules
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, 177 283-290; SI 10.1016/j.jqsrt.2016.01.004 JUL 2016
8. Um, Mark; Zhang, Junhua; Lv, Dingshun; et al.
Phonon arithmetic in a trapped ion system
NATURE COMMUNICATIONS Volume: 7 Article Number: 11410 Published: APR 2016
7. Zhang, Zhenhua; Tian, Jin; Du, Juan
Selective population transfer and creation of an arbitrary superposition between quantum states in a Lambda-type four-level system by a single linearly chirped pulse
LASER PHYSICS LETTERS, 13 (5):10.1088/1612-2011/13/5/055201 MAY 2016
6. Xu, H. K.; Song, C.; Liu, W. Y.; Xue, G. M.; Su, F. F.; Deng, H.; Tian, Ye; Zheng, D. N.; Han, Siyuan; Zhong, Y. P.; Wang, H.; Liu, Yu-Xi; Zhao, S. P.
Coherent population transfer between uncoupled or weakly coupled states in ladder-type superconducting qutrits
NATURE COMMUNICATIONS, 7 10.1038/ncomms11018 MAR 2016
5. Gebert, F.; Wan, Y.; Wolf, F.; Heip, Jan C.; Schmidt, Piet O.
Detection of motional ground state population of a trapped ion using delayed pulses
NEW JOURNAL OF PHYSICS, 18 10.1088/1367-2630/18/1/013037 JAN 14 2016
4. Tikman, Y; Yavuz, I; Ciappina, MF; Chacon, A; Altun, Z; Lewenstein, M
High-order-harmonic generation from Rydberg atoms driven by plasmon-enhanced laser fields
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023410 FEB 10 2016
3. Richter, Maria; Bouakline, Foudhil; Gonzalez-Vazquez, Jesus; Martinez-Fernandez, Lara; Corral, Ines; Patchkovskii, Serguei; Morales, Felipe; Ivanov, Misha; Martin, Fernando; Smirnova, Olga
Sub-laser-cycle control of coupled electron-nuclear dynamics at a conical intersection
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/11/113023 NOV 6 2015
2. Picon, Antonio; Mompert, Jordi; Southworth, Stephen H.
Stimulated Raman adiabatic passage with two-color x-ray pulses
NEW JOURNAL OF PHYSICS, 17 10.1088/1367-2630/17/8/083038 AUG 19 2015
1. Martinez-Garaot, S; Palmero, M; Guery-Odelin, D; Muga, JG
Fast bias inversion of a double well without residual particle excitation
PHYSICAL REVIEW A, 92 (5):10.1103/PhysRevA.92.053406 NOV 5 2015
- =====
- 171. B. D. Militello and N. V. Vitanov**
Dynamics of a two-state system through a real level crossing
Phys. Rev. A 91, 053402(6pp) (2015)
2. Pradhan, Priodyuti; Jalan, Sarika
From Spectra to Localized Networks: A Reverse Engineering Approach
IEEE TRANSACTIONS ON NETWORK SCIENCE AND ENGINEERING Volume: 7 Issue: 4 Pages: 3008-3017 Published: OCT 1 2020
1. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Anomalous dynamical evolution and nonadiabatic level crossing in exactly solvable time-dependent quantum systems
EUROPEAN PHYSICAL JOURNAL D Volume: 73 Issue: 10 Article Number: 218 Published: OCT 2019
- =====
- 172. B. T. Torosov, E. Kyoseva and N. V. Vitanov**
Fault-tolerant composite Householder reflection
J. Phys. B 48, 135502(5pp) (2015)

3. Malvetti, Emanuel; Iten, Raban; Colbeck, Roger
Quantum Circuits for Sparse Isometries
QUANTUM Volume: 5 Published: MAR 15 2021

2. Shirkhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018

1. Hu, J., Wang, P., Zhang, Q.
Multiplex householder reflection gate and its application in preparation of quantum state
IPPTA: Quarterly Journal of Indian Pulp and Paper Technical Association 30(1), pp. 233-241 (2018)

=====

173. N. V. Vitanov and B. W. Shore
Designer evolution of quantum systems by inverse engineering
J. Phys. B: At. Mol. Opt. Phys. 48, 174008(12pp) (2015)

12. Popov, Nikolay L.; Vinogradov, Alexander V.
Space-Time Coupling: Current Concept and Two Examples from Ultrafast Optics Studied Using Exact Solution of EM Equations
SYMMETRY-BASEL Volume: 13 Issue: 4 Article Number: 529 Published: APR 2021

11. Stefanatos, Dionisis; Paspalakis, Emmanuel
Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 11 Article Number: 115304 Published: MAR 20 2020

10. Guery-Odelin, D.; Ruschhaupt, A.; Kiely, A.; Torrontegui, E.; Martinez-Garaot, S.; Muga, J. G.
Shortcuts to adiabaticity: Concepts, methods, and applications
REVIEWS OF MODERN PHYSICS Volume: 91 Issue: 4 Article Number: 045001 Published: OCT 24 2019

9. Stefanatos, Dionisis; Paspalakis, Emmanuel
Resonant shortcuts for adiabatic rapid passage with only z-field control
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019

8. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018

7. Dutta, Shovan; Mueller, Erich J.
Coherent generation of photonic fractional quantum Hall states in a cavity and the search for anyonic quasiparticles
PHYSICAL REVIEW A, 97 (3):10.1103/PhysRevA.97.033825 MAR 15 2018

6. Li, Yi-Chao; Martinez-Cercos, D.; Martinez-Garaot, S.; Chen, Xi; Muga, J. G.
Hamiltonian design to prepare arbitrary states of four-level systems
PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013830 JAN 19 2018

5. Zhang, Qi; Chen, Xi; Guery-Odelin, D.
Reverse engineering protocols for controlling spin dynamics
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017

4. Liu, Yen-Huang; Tseng, Shuo-Yen
Robust coherent superposition of states using quasiadiabatic inverse engineering
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (20):10.1088/1361-6455/aa8b4e OCT 28 2017

3. Li, Wenlin; Zhang, Fengyang; Jiang, Yunfeng; Li, Chong; Song, Heshan
Flexible and experimentally feasible shortcut to quantum Zeno dynamic passage
PHYSICS LETTERS A, 380 (43):3595-3600; 10.1016/j.physleta.2016.08.051 OCT 23 2016

2. Averbukh, Ilya; Hepburn, John; Milner, Valery; Tannor, David
Special issue on coherence and control in the quantum world
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 49 (15):10.1088/0953-4075/49/15/150202 AUG 14 2016

1. Ibanez, S; Li, YC; Chen, X; Muga, JG
Pulse design without the rotating-wave approximation
PHYSICAL REVIEW A, 92 (6):10.1103/PhysRevA.92.062136 DEC 30 2015

174. N. V. Vitanov
Dynamical rephasing of ensembles of qudits
Phys. Rev. A 92, 022314(7pp) (2015)

=====

175. S. S. Ivanov and N. V. Vitanov
Composite two-qubit gates
Phys. Rev. A 92, 022333(8pp) (2015)

12. Whitty, C.; Kiely, A.; Ruschhaupt, A.
Quantum control via enhanced shortcuts to adiabaticity
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 2 Article Number: 023360 Published: JUN 18 2020

11. Dridi, Ghassen; Liu, Kaipeng; Guerin, Stephane
Optimal Robust Quantum Control by Inverse Geometric Optimization
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 25 Article Number: 250403 Published: DEC 16 2020

10. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321 Published: JAN 15 2020

9. Leung, Pak Hong; Brown, Kenneth R.
Entangling an arbitrary pair of qubits in a long ion crystal
PHYSICAL REVIEW A, 98 (3):10.1103/PhysRevA.98.032318 SEP 18 2018

8. Santos, Alan C.
Quantum gates by inverse engineering of a Hamiltonian
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (1):10.1088/1361-6455/aa987c JAN 14 2018

7. Manovitz, Tom; Rotem, Amit; Shaniv, Ravid; Cohen, Itsik; Shapira, Yotam; Akerman, Nitzan; Retzker, Alex; Ozeri, Roee
Fast Dynamical Decoupling of the Molmer-Sorensen Entangling Gate
PHYSICAL REVIEW LETTERS, 119 (22):10.1103/PhysRevLett.119.220505 NOV 29 2017

6. Xu, G. F.; Zhao, P. Z.; Tong, D. M.; Sjoqvist, Erik
Robust paths to realize nonadiabatic holonomic gates
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.052349 MAY 30 2017

5. Xu, GF; Zhao, PZ; Xing, TH; Sjoqvist, E; Tong, DM
Composite nonadiabatic holonomic quantum computation
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.032311 MAR 8 2017

4. Gefen, Tuvia; Cohen, Daniel; Cohen, Itsik; Retzker, Alex
Enhancing the fidelity of two-qubit gates by measurements
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.032314 MAR 9 2017

3. Kiely, A; Muga, JG; Ruschhaupt, A
Effect of Poisson noise on adiabatic quantum control
PHYSICAL REVIEW A, 95 (1):10.1103/PhysRevA.95.012115 JAN 13 2017

2. Low, Guang Hao; Yoder, Theodore J.; Chuang, Isaac L.
Methodology of Resonant Equiangular Composite Quantum Gates
PHYSICAL REVIEW X, 6 (4):10.1103/PhysRevX.6.041067 DEC 28 2016

1. Cohen, I; Rotem, A; Retzker, A
Refocusing two-qubit-gate noise for trapped ions by composite pulses
PHYSICAL REVIEW A, 93 (3):10.1103/PhysRevA.93.032340 MAR 28 2016

=====

176. B. T. Torosov, E. S. Kyoseva and N. V. Vitanov
Composite pulses for ultrabroad-band and ultranarrow-band excitation
Phys. Rev. A 92, 033406(8pp) (2015)

7. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaei-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

6. Whitty, C.; Kiely, A.; Ruschhaupt, A.
Quantum control via enhanced shortcuts to adiabaticity
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 2 Article Number: 023360

Published: JUN 18 2020

5. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

4. Greener, H.; Suchowski, H.
Composite pulses in N-level systems with SU(2) symmetry and their geometrical representation on the Majorana sphere
JOURNAL OF CHEMICAL PHYSICS, 148 (7):10.1063/1.5013672 FEB 21 2018

3. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563
SEP 30 2017

2. Kiely, A; Muga, JG; Ruschhaupt, A
Effect of Poisson noise on adiabatic quantum control
PHYSICAL REVIEW A, 95 (1):10.1103/PhysRevA.95.012115 JAN 13 2017

1. Demeter, Gabor
Composite pulses for high-fidelity population inversion in optically dense, inhomogeneously broadened atomic ensembles
PHYSICAL REVIEW A, 93 (2):10.1103/PhysRevA.93.023830 FEB 22 2016

=====
177. K. Zlatanov, G. S. Vasilev, P. A. Ivanov and N. V. Vitanov
Exact solution of the Bloch equations for the nonresonant exponential model in the presence of dephasing
Phys. Rev. A 92, 043404(7pp) (2015)

6. Ran, Du; Zhang, Bin; Chen, Ye-Hong; Shi, Zhi-Cheng; Xia, Yan; Ianculescu, Reuven; Scheuer, Jacob; Gover, Avraham
Effective pulse reverse-engineering for strong field-matter interaction
OPTICS LETTERS Volume: 45 Issue: 13 Pages: 3597-3600 Published: JUL 1 2020

5. Ran, Du; Shan, Wu-Jiang; Shi, Zhi-Cheng; Yang, Zhen-Biao; Song, Jie; Xia, Yan
Pulse reverse engineering for controlling two-level quantum systems
PHYSICAL REVIEW A Volume: 101 Issue: 2 Article Number: 023822
Published: FEB 14 2020

4. Avanesov, AS; Manko, VI
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 58 (6):2054-2067;
10.1007/s10773-019-04099-3 JUN 2019
Unitary and Nonunitary Evolution of Qubit States in Probability Representation of Quantum Mechanics

3. Qin, Xi-Zhou; Huang, Jia-Hao; Zhong, Hong-Hua; Lee, Chaohong
Clock frequency estimation under spontaneous emission
FRONTIERS OF PHYSICS, 13 (1):10.1007/s11467-017-0706-6 FEB 2018

2. Avanesov, Ashot S.; Man'ko, Vladimir I.
Dissipative Evolution of the Qubit State in the Tomographic-Probability Representation
JOURNAL OF RUSSIAN LASER RESEARCH, 38 (4):311-323; 10.1007/s10946-017-9647-3 JUL 2017

1. Sarreshtedari, Farrokh; Hosseini, Mehdi
Tunable Landau-Zener transitions using continuous- and chirped-pulse-laser couplings
PHYSICAL REVIEW A, 95 (3):10.1103/PhysRevA.95.033834 MAR 27 2017

=====
178. P. A. Ivanov, K. Singer, N. V. Vitanov and D. Porras
Quantum Sensors Assisted by Spontaneous Symmetry Breaking for Detecting Very Small Forces
Phys. Rev. Appl. 4, 054007(7pp) (2015)

3. Bernal-Garcia, D. N.; Vinck-Posada, H.; Woolley, M. J.
Nonstationary force sensing under dissipative mechanical quantum squeezing
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053515
Published: NOV 24 2020

2. Carollo, Federico; Garrahan, Juan P.; Lesanovsky, Igor; Perez-Espigares, Carlos
Making rare events typical in Markovian open quantum systems
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.010103 JUL 10 2018

1. Qin, Xi-Zhou; Huang, Jia-Hao; Zhong, Hong-Hua; Lee, Chaohong
Clock frequency estimation under spontaneous emission
FRONTIERS OF PHYSICS, 13 (1):10.1007/s11467-017-0706-6 FEB 2018

=====
179. S. Mieth, G. Genov, L. P. Yatsenko, N. V. Vitanov and T. Halfmann
Phase-insensitive storage of coherences by reversible mapping onto long-lived populations
Phys. Rev. A 93, 012312(4pp) (2016)

1. Neveu, P; Bretenaker, F; Goldfarb, F; Brion, E
Quantum properties of light propagating in a coherent-population-oscillation storage medium
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.013820 JUL 12 2019

=====
180. L. S. Simeonov and N. V. Vitanov
Dynamical invariants for pseudo-Hermitian Hamiltonians
Phys. Rev. A 93, 012123(7pp) (2016)

8. Dizdarevic, Daniel; Cartarius, Holger; Main, Joerg; Wunner, Guenter
Balancing gain and loss in symmetrised multi-well potentials
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 40 Article Number: 405304 Published: OCT 9 2020

7. Tabeu, SB; Fotsa-Ngaffo, F; Kenfack-Jiotsa, A
Non-Hermitian Hamiltonian of two-level systems in complex quaternionic space: An introduction in electronics
EPL, 125 (2):10.1209/0295-5075/125/24002 JAN 2019

6. Zhang, Guo-Qiang; You, J. Q.
Higher-order exceptional point in a cavity magnonics system
PHYSICAL REVIEW B, 99 (5):10.1103/PhysRevB.99.054404 FEB 6 2019

5. Grimaudo, R; de Castro, ASM; Kus, M; Messina, A
Exactly solvable time-dependent pseudo-Hermitian $su(1,1)$ Hamiltonian models
PHYSICAL REVIEW A, 98 (3):10.1103/PhysRevA.98.033835 SEP 28 2018

4. Simon, Miguel Angel; Buendia, Alvaro; Muga, J. G.
Symmetries and Invariants for Non-Hermitian Hamiltonians
MATHEMATICS, 6 (7):10.3390/math6070111 JUL 2018

3. Skoromnik, OD; Feranchuk, ID
Analytic approximation for eigenvalues of a class of PT-symmetric Hamiltonians
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.052102 NOV 2 2017

2. Schulze-Halberg, Axel; Roy, Pinaki
Pseudo-hermitian and PT-symmetric quantum systems with energy-dependent potentials: Bound-state solutions and energy spectra
ANNALS OF PHYSICS, 380 78-92; 10.1016/j.aop.2017.02.014 MAY 2017

1. Gardas, Bartlomiej; Deffner, Sebastian; Saxena, Avadh
Repeatability of measurements: Non-Hermitian observables and quantum Coriolis force
PHYSICAL REVIEW A, 94 (2):10.1103/PhysRevA.94.022121 AUG 26 2016

=====
181. H. S. Hristova, A. A. Rangelov, G. Montemezzani and N. V. Vitanov
Adiabatic three-waveguide coupler
Phys. Rev. A 93, 033802(5pp) (2016)

14. Chen, Jian; Deng, Li; Niu, Yueping; Gong, Shangqing
Double rapid adiabatic passage in three optical waveguides with longitudinally varying detunings
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053705
Published: MAY 11 2021

13. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Yuan, Mingrui; Zhang, Wentao; Han, Jiaguang
Quantum Engineering Enables Broadband and Robust Terahertz Surface Plasmon-Polaritons Coupler
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 27 Issue: 2 Article Number: 8400107 Published: MAR-APR 2021

12. Tang Kai; Hu Zhengfeng; Liu Chengpu; Chen Xi
Beam Splitting via Non-Hermitian Stimulated Raman Shortcut to Adiabatic Passage

11. Dou, F.-Q., Yan, Z.-M., Liu, X.-Q., Wang, W.-Y., Shu, C.-C.
Accelerating adiabatic light transfer and split in three-waveguide via dressed state
Optik 210,164516 (2020)

10. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020

9. Xu, Xin-Biao; Guo, Xiang; Chen, Wei; Tang, Hong X.; Dong, Chun-Hua; Guo, Guang-Can; Zou, Chang-Ling
Flat-top optical filter via the adiabatic evolution of light in an asymmetric coupler
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023809 AUG 8 2019

8. Li, Hong; Zhang, Si-Qi; Li, Mei-Xuan; Guo, Ming; Song, Li-Jun
Quantum State Conversion in Two-Level System Without Rotating-Wave Approximation via Non-Hermitian Shortcuts to Adiabaticity
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 58 (8):2692-2702; 10.1007/s10773-019-04159-8 AUG 2019

7. Della Valle, Giuseppe
Ultra-compact low-pass modal filters based on shortcuts to adiabaticity
PHYSICAL REVIEW A, 98 (5):10.1103/PhysRevA.98.053861 NOV 30 2018

6. Chen, Xi; Wen, Rui-Dan; Shi, Jie-Long; Tseng, Shuo-Yen
Compact beam splitters in coupled waveguides using shortcuts to adiabaticity
JOURNAL OF OPTICS, 20 (4):10.1088/2040-8986/aab02c APR 2018

5. Huang, Wei; Liang, Shi-Jun; Kyoseva, Elica; Ang, Lay Kee
Adiabatic control of surface plasmon-polaritons in a 3-layers graphene curved configuration
CARBON, 127 187-192; 10.1016/j.carbon.2017.10.087 FEB 2018

4. Complete achromatic and robustness electro-optic switch between two integrated optical waveguides
Huang, W., Kyoseva, E.
Proceedings of SPIE - The International Society for Optical Engineering 10456,1045654 (2017)

3. Evangelou, Sofia
Using interference effects for controlled light propagation in four-waveguide directional couplers
JOURNAL OF MODERN OPTICS, 64 (19):2017-2022; 10.1080/09500340.2017.1332252 2017

2. Li, Guan-Qiang; Chen, Guang-De; Peng, Ping; Qi, wei
Non-Hermitian shortcut to adiabaticity of two- and three-level systems with gain and loss
EUROPEAN PHYSICAL JOURNAL D, 71 (1):10.1140/epjd/e2016-70525-6 JAN 19 2017

1. Liu, Tong; Solntsev, Alexander S.; Boes, Andreas; Nguyen, Thach; Will, Christian; Mitchell, Arnan; Neshev, Dragomir N.; Sukhorukov, Andrey A.
Experimental demonstration of bidirectional light transfer in adiabatic waveguide structures
OPTICS LETTERS, 41 (22):5278-5281; 10.1364/OL.41.005278 NOV 15 2016

=====
182. B. W. Shore, A. A. Rangelov, N. V. Vitanov and K. Bergmann
Piecewise adiabatic passage in polarization optics: An achromatic polarization rotator
Adv. Chem. Phys. 159, 211(16pp) (2016)

=====
183. P. A. Ivanov, N. V. Vitanov and K. Singer
High-precision force sensing using a single trapped ion
Sci. Rep. 6, 28078(8pp) (2016)

12. Hastrup, Jacob; Park, Kimin; Filip, Radim; Andersen, Ulrik Lund
Unconditional Preparation of Squeezed Vacuum from Rabi Interactions
PHYSICAL REVIEW LETTERS Volume: 126 Issue: 15 Article Number: 153602
Published: APR 13 2021

11. D Carney, G Krnjaic, D C Moore, C A Regal, G Afek, S Bhave, B Brubaker, T

Corbitt, J Cripe, N Crisosto, A Geraci, S Ghosh, J G E Harris, A Hook, E W Kolb, J Kunjummen, R F Lang, T Li, T Lin, Z Liu, J Lykken, L Magrini, J Manley, N Matsumoto, A Monte, F Monteiro, T Purdy, C J Riedel, R Singh, S Singh, K Sinha, J M Taylor, J Qin, D J Wilson and Y Zhao
Mechanical quantum sensing in the search for dark matter
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 024002 Published: APR 2021

10. V. V. Gudkov, M. N. Sarychev, S. Zherlitsyn, I. V. Zhevstovskikh, N. S. Averkiev, D. A. Vinnik, S. A. Gudkova, R. Niewa, M. Dressel, L. N. Alyabyeva, B. P. Gorshunov & I. B. Bersuker
Sub-lattice of Jahn-Teller centers in hexaferrite crystal
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Published: APR 27 2020

9. Sameed, Muhammed; Maxwell, Daniel; Madsen, Niels
Ion generation and loading of a Penning trap using pulsed laser ablation
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 1 Article Number: 013009
Published: JAN 2020

8. Heugel, Toni L.; Biondi, Matteo; Zilberberg, Oded; Chitra, R.
Quantum Transducer Using a Parametric Driven-Dissipative Phase Transition
PHYSICAL REVIEW LETTERS Volume: 123 Issue: 17 Article Number: 173601
Published: OCT 23 2019

7. Bahrami, Abasalt; Mueller, Matthias; Drechsler, Martin; Joger, Jannis; Gerritsma, Rene; Schmidt-Kaler, Ferdinand
Operation of a Microfabricated Planar Ion-Trap for Studies of a Yb+Rb Hybrid Quantum System
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, 256 (9):10.1002/pssb.201800647 SEP 2019

6. Maitra, A; Leibfried, D; Ullmo, D; Landa, H
Far-from-equilibrium noise-heating and laser-cooling dynamics in radio-frequency Paul traps
PHYSICAL REVIEW A, 99 (4):10.1103/PhysRevA.99.043421 APR 23 2019

5. Design, development and testing of a helical resonator for trapping Sr+ ions for frequency standards and sensing applications
Pedrosa-Rodriguez, L., Outerelo, D.A., Gomez-Alcala, R., de Vicente, F.I., Diaz-Otero, F.J.
Measurement: Journal of the International Measurement Confederation 125, pp. 156-162 (2018)

4. Shaw, Gordon A.
Current state of the art in small mass and force metrology within the International System of Units
MEASUREMENT SCIENCE AND TECHNOLOGY, 29 (7):10.1088/1361-6501/aaac51 JUL 2018

3. Martinez-Garaot, S; Rodriguez-Prieto, A; Muga, JG
Interferometer with a driven trapped ion
PHYSICAL REVIEW A, 98 (4):10.1103/PhysRevA.98.043622 OCT 18 2018

2. Koepsell, J.; Thiele, T.; Deiglmayr, J.; et al.
Measuring the polarization of electromagnetic fields using Rabi-rate measurements with spatial resolution: Experiment and theory
PHYSICAL REVIEW A Volume: 95 Issue: 5 Article Number: 053860 Published: MAY 24 2017

1. Shaniv, Ravid; Ozeri, Roee
Quantum lock-in force sensing using optical clock Doppler velocimetry
NATURE COMMUNICATIONS Volume: 8 Article Number: 14157 Published: FEB 10 2017

=====
184. H. S. Hristova, A. A. Rangelov, G. Montemezzani and N. V. Vitanov
Adiabatic frequency conversion with a sign flip in the coupling
Phys. Rev. A 94, 033849(5pp) (2016)

=====
185. H. S. Tonchev and N. V. Vitanov
Quantum phase estimation and quantum counting with qudits
Phys. Rev. A 94, 042307(7pp) (2016)

7. Wang, Yuchen; Hu, Zixuan; Sanders, Barry C.; Kais, Sabre
Qudits and High-Dimensional Quantum Computing
FRONTIERS IN PHYSICS Volume: 8 Article Number: 589504 Published: NOV 10 2020

6. Wu, Xia; Jia, Heng-Yue; Li, Dan-Dan; Yang, Ying-Hui; Gao, Fei
N-qudit SLOCC equivalent W states are determined by their bipartite reduced density matrices with tree form
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 12 Article Number: 423 Published: NOV 2020

5. Jafarzadeh, Mahnaz; Wu, Ya-Dong; Sanders, Yuval R.; Sanders, Barry C.
Randomized benchmarking for qudit Clifford gates
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 6 Article Number: 063014
Published: JUN 2020

4. Sawant, Rahul; Blackmore, Jacob A.; Gregory, Philip D.; Mur-Petit, Jordi; Jaksch, Dieter; Aldegunde, Jesus; Hutson, Jeremy M.; Tarbutt, M. R.; Cornish, Simon L.
Ultracold polar molecules as qudits
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 1 Article Number: 013027
Published: JAN 2020

3. Saleh, Sahar Q.; Younes, Ahmed
Different Fixed-Phases for Quantum Search Operators
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 88 Issue: 12 Article Number: 124002 Published: DEC 15 2019

2. Martinez, D; Solis-Prosser, MA; Canas, G; Jimenez, O; Delgado, A; Lima, G
Experimental quantum tomography assisted by multiply symmetric states in higher dimensions
PHYSICAL REVIEW A, 99 (1):10.1103/PhysRevA.99.012336 JAN 22 2019

1. Pereira, L; Zambrano, L; Cortes-Vega, J; Niklitschek, S; Delgado, A
Adaptive quantum tomography in high dimensions
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.012339 JUL 31 2018

=====
186. H. Oukraou, L. Vittadello, V. Coda, C. Ciret, M. Alonzo, A. A. Rangelov, N. V. Vitanov, and G. Montemezzani
Control of adiabatic light transfer in coupled waveguides with longitudinally varying detuning
Phys. Rev. A 95, 023811(7pp) (2017)

11. Chen, Jian; Deng, Li; Niu, Yueping; Gong, Shangqing
Double rapid adiabatic passage in three optical waveguides with longitudinally varying detunings
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053705
Published: MAY 11 2021

10. Taras, Adam K.; Tuniz, Alessandro; Bajwa, Musawer A.; Ng, Vincent; Dawes, Judith M.; Poulton, Christopher G.; De Sterke, C. Martijn
Shortcuts to adiabaticity in waveguide couplers-theory and implementation
ADVANCES IN PHYSICS-X Volume: 6 Issue: 1 Article Number: 1894978
Published: JAN 1 2021

9. Dou, Fu-Quan; Yan, Zhi-Ming; Liu, Xuan-Qing; Wang, Wen-Yuan; Shu, Chuan-Cun
Accelerating adiabatic light transfer and split in three-waveguide couplers via dressed state
OPTIK Volume: 210 Article Number: UNSP 164516 Published: MAY 2020

8. Cui, Jin; Yang, Baiyuan; Luo, Xiaobing; Li, Lei; Yu, Xiaoguang
Controlling light tunneling by adiabatic passage in two modulated nonlinear waveguides
RESULTS IN PHYSICS Volume: 15 Article Number: 102792 Published: DEC 2019

7. Xu, Xin-Biao; Guo, Xiang; Chen, Wei; Tang, Hong X.; Dong, Chun-Hua; Guo, Guang-Can; Zou, Chang-Ling
Flat-top optical filter via the adiabatic evolution of light in an asymmetric coupler
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023809 AUG 8 2019

6. Ng, Vincent; Tuniz, Alessandro; Dawes, Judith M.; de Sterke, C. Martijn
Insights from a systematic study of crosstalk in adiabatic couplers
OSA CONTINUUM, 2 (3):629-639; 10.1364/OSAC.2.000629 MAR 15 2019

5. Deng, Li; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in two-level systems with permanent dipole moments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063830 DEC 20 2018

4. Saalmann, Ulf; Giri, Sajal Kumar; Rost, Jan M.
Adiabatic Passage to the Continuum: Controlling Ionization with Chirped Laser

Pulses
PHYSICAL REVIEW LETTERS, 121 (15):10.1103/PhysRevLett.121.153203 OCT 11 2018

3. Chen, Xi; Wen, Rui-Dan; Shi, Jie-Long; Tseng, Shuo-Yen
Compact beam splitters in coupled waveguides using shortcuts to adiabaticity
JOURNAL OF OPTICS, 20 (4):10.1088/2040-8986/aab02c APR 2018

2. Aydinoglu, Gunes; Guven, Kaan
Asymmetric Rosen-Zener-like transition through a soliton-surface-plasmon photonic Josephson junction with spatially varying coupling
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053802 NOV 1 2017

1. Shore, Bruce W.
Picturing stimulated Raman adiabatic passage: a STIRAP tutorial
ADVANCES IN OPTICS AND PHOTONICS, 9 (3):563-719; 10.1364/AOP.9.000563 SEP 30 2017

=====
187. N. V. Vitanov, A. A. Rangelov, B. W. Shore and K. Bergmann
Stimulated Raman adiabatic passage in physics, chemistry, and beyond
Rev. Mod. Phys. 89, 015006 (66pp) (2017)

295. Fedoseev, Vitaly; Luna, Fernando; Hedgepeth, Ian; Löffler, Wolfgang; Bouwmeester, Dirk
Stimulated Raman Adiabatic Passage in Optomechanics
PHYSICAL REVIEW LETTERS Volume: 126 Issue: 11 Article Number: 113601
Published: MAR 19 2021

294. Liu, Dan; Gao, Yichun; Xu, Jianqin; Qian, Jing
Stable quantum interference enabled by coexisting detuned and resonant STIRAPs*
CHINESE PHYSICS B Volume: 30 Issue: 5 Article Number: 053701
Published: MAY 2021

293. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

292. Zhang, Jia-Hui; Dou, Fu-Quan
High-fidelity formation of deeply bound ultracold molecules via non-Hermitian shortcut to adiabaticity
NEW JOURNAL OF PHYSICS Volume: 23 Issue: 6 Article Number: 063001
Published: JUN 2021

291. Stefanatos, D.; Paspalakis, E.
A shortcut tour of quantum control methods for modern quantum technologies
EPL Volume: 132 Issue: 6 Article Number: 60001 Published: DEC 2020

290. Asadpour, Seyyed Hossein; Faizabadi, Edris; Kudriasov, Viaceslav; Paspalakis, Emmanuel; Hamed, Hamid R.
Swapping of orbital angular momentum states of light in a quantum well waveguide
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 136 Issue: 4 Article Number: 457 Published: APR 27 2021

289. Ridolfo, A; Rajendran, J; Giannelli, L; Paladino, E; Falcì, G
Probing ultrastrong light-matter coupling in open quantum systems
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS [early access icon] Early Access: MAY 2021

288. Tao, Ziyu; Zhang, Libo; Li, Xiaole; Niu, Jingjing; Luo, Kai; Yi, Kangyuan; Zhou, Yuxuan; Jia, Hao; Zhang, Xu; Liu, Song; Yan, Tongxing; Chen, Yuanzhen; Yu, Dapeng
Experimental realization of phase-controlled dynamics with hybrid digital-analog approach
NPJ QUANTUM INFORMATION Volume: 7 Issue: 1 Article Number: 73
Published: MAY 18 2021

287. Wu, Jin-Lei; Wang, Yan; Han, Jin-Xuan; Feng, Yu-Kun; Su, Shi-Lei; Xia, Yan; Jiang, Yongyuan; Song, Jie
One-step implementation of Rydberg-antiblockade SWAP and controlled-SWAP gates with modified robustness
PHOTONICS RESEARCH Volume: 9 Issue: 5 Pages: 814-821 Published: MAY 1 2021

286. Dey, Amit
Quantum signatures of chaos in a cavity-QED-based stimulated Raman adiabatic

- passage
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 053704
Published: MAY 11 2021
285. Song, Xue-Ke; Meng, Fei; Liu, Bao-Jie; Wang, Dong; Ye, Liu; Yung, Man-Hong
Robust stimulated Raman shortcut-to-adiabatic passage with invariant-based optimal control
OPTICS EXPRESS Volume: 29 Issue: 6 Pages: 7998-8014 Published: MAR 15 2021
284. Shi, Xiao-Feng
Rydberg quantum computation with nuclear spins in two-electron neutral atoms
FRONTIERS OF PHYSICS Volume: 16 Issue: 5 Article Number: 52501
Published: OCT 2021
283. Sarma, Bijita; Busch, Thomas; Twamley, Jason
Cavity magnomechanical storage and retrieval of quantum states
NEW JOURNAL OF PHYSICS Volume: 23 Issue: 4 Article Number: 043041
Published: APR 2021
282. Kandel, Yadav P.; Qiao, Haifeng; Fallahi, Saeed; Gardner, Geoffrey C.; Manfra, Michael J.; Nichol, John M.
Adiabatic quantum state transfer in a semiconductor quantum-dot spin chain
NATURE COMMUNICATIONS Volume: 12 Issue: 1 Article Number: 2156
Published: APR 12 2021
281. Tolazzi, Karl Nicolas; Wang, Bo; Ianzano, Christopher; Neumeier, Jonas; Villas-Boas, Celso Jorge; Rempe, Gerhard
Continuous quantum light from a dark atom
COMMUNICATIONS PHYSICS Volume: 4 Issue: 1 Article Number: 57
Published: MAR 23 2021
280. Yuan, Jiale; Xu, Chenran; Cai, Han; Wang, Da-Wei
Gap-protected transfer of topological defect states in photonic lattices
APL PHOTONICS Volume: 6 Issue: 3 Article Number: 030803 Published: MAR 1 2021
279. Saha, Arindam; Sarma, Amarendra K.
Transitionless phonon assisted photon-qubit quantum state transfer in a hybrid optomechanical system
PHYSICS LETTERS A Volume: 393 Article Number: 127176 Published: MAR 26 2021
278. Devolder, Adrien; Desouter-Lecomte, Michele; Atabek, Osman; Luc-Koenig, Eliane; Dulieu, Olivier
Laser control of ultracold molecule formation: The case of RbSr
PHYSICAL REVIEW A Volume: 103 Issue: 3 Article Number: 033301
Published: MAR 2 2021
277. Shirkhaghah, N.; Saadati-Niari, M.; Nedae-Shakarab, B.
Stark-shift-chirped rapid-adiabatic-passage technique in tripod systems
REVISTA MEXICANA DE FISICA Volume: 67 Issue: 2 Pages: 180-187 Published: MAR-APR 2021
276. Chiesa, A.; Petiziol, F.; Macaluso, E.; Wimberger, S.; Santini, P.; Carretta, S.
Embedded quantum-error correction and controlled-phase gate for molecular spin qubits
Conference: 65th Annual Conference on Magnetism and Magnetic Materials (MMM) Location: Palm Beach, FL Date: NOV 02-06, 2020
AIP ADVANCES Volume: 11 Issue: 2 Article Number: 025134 Published: FEB 1 2021
275. Tonchev, Hristo
Comparison between XY Spin Chains with Spin 1/2 or 1 Interacting with Quantized Electromagnetic Field by One and Two Photon Jaynes-Cummings Model
MAGNETOCHEMISTRY Volume: 7 Issue: 1 Article Number: 4 Published: JAN 2021
274. Zhu, Jing-Jun; Chen, Xi
Fast-forward scaling of atom-molecule conversion in Bose-Einstein condensates
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 023307
Published: FEB 4 2021
273. Valente, Daniel; Brito, Frederico; Werlang, Thiago
Quantum dissipative adaptation
COMMUNICATIONS PHYSICS Volume: 4 Issue: 1 Article Number: 11
Published: JAN 19 2021
272. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021
271. Li, Danyu; Zheng, Wen; Chu, Ji; Yang, Xiaopei; Song, Shuqing; Han, Zhikun; Dong, Yuqian; Wang, Zhimin; Yu, Xiangmin; Lan, Dong; Zhao, Jie; Li, Shaoxiong; Tan, Xinsheng; Yu, Yang
Coherent state transfer between superconducting qubits via stimulated Raman adiabatic passage
APPLIED PHYSICS LETTERS Volume: 118 Issue: 10 Article Number: 104003
Published: MAR 8 2021
270. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021
269. Santos, Alan C.; Villas-Boas, C. J.; Bachelard, R.
Quantum adiabatic brachistochrone for open systems
PHYSICAL REVIEW A Volume: 103 Issue: 1 Article Number: 012206
Published: JAN 11 2021
268. Liu, Bao-Jie; Yung, Man-Hong
Coherent control with user-defined passage
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 025002 Published: APR 2021
267. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020
266. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Jie; Zhu, Xue-Feng
Acoustic topological adiabatic passage via a level crossing
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY Volume: 64 Issue: 4 Special Issue: SI Article Number: 244302 Published: APR 2021
265. Yan, Run-Ying; Feng, Zhi-Bo
Fast generation of microwave photon Fock states in a superconducting nanocircuit
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 127 Article Number: 114522 Published: MAR 2021
264. Krumins, V; Kruzins, A.; Tamanis, M.; Ferber, R.; Pashov, A.; Oleynichenko, A., V.; Zaitsevskii, A.; Pazyuk, E. A.; Stolyarov, A., V.
The branching ratio of intercombination $A(1)\Sigma^+$ similar to $b(3)\Pi \rightarrow a(3)\Sigma^+ / X-1 \Sigma^+$ transitions in the RbCs molecule: Measurements and calculations
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER Volume: 256 Article Number: 107291 Published: NOV 2020
263. Dey, Amit; Kulkarni, Manas
Emergence of chaos and controlled photon transfer in a cavity-QED network
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 4 Article Number: 042004
Published: OCT 9 2020
262. Hu, Ming-Guang; Liu, Yu; Nichols, Matthew A.; Zhu, Lingbang; Quemener, Goulven; Dulieu, Olivier; Ni, Kang-Kuen
Nuclear spin conservation enables state-to-state control of ultracold molecular reactions
NATURE CHEMISTRY DOI: 10.1038/s41557-020-00610-0 Early Access: DEC 2020
261. Khosravi, Soroush D.; Scipioni, Marco; Gibson, George N.
Toward an ultrafast double-pulse stretcher-compressor
JOURNAL OF MODERN OPTICS [early access icon] Early Access: DEC 2020
260. Whitty, C.; Kiely, A.; Ruschhaupt, A.
Quantum control via enhanced shortcuts to adiabaticity
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 2 Article Number: 023360
Published: JUN 18 2020
259. Yang, Yu Kun; Cheng, Yongjun; Wu, Yong; Qu, Yi Zhi; Wang, Jian Guo; Zhang, Song Bin
Particle scattering and resonances involving avoided crossing
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 12 Article Number: 123022

Published: DEC 2020

258. Werther, Michael; Grossmann, Frank

Stabilization of adiabatic population transfer by strong coupling to a phonon bath
PHYSICAL REVIEW A Volume: 102 Issue: 6 Article Number: 063710
Published: DEC 11 2020

257. Dridi, Ghassen; Liu, Kaipeng; Guerin, Stephane

Optimal Robust Quantum Control by Inverse Geometric Optimization
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 25 Article Number: 250403
Published: DEC 16 2020

256. Huang, Wei; Chen, Yun; Qu, Xiaowei; Yin, Shan; Shi, Xintong; Xiong,

Xianming; Zhang, Wentao; Qin, Zujun; Zhang, Yuting
Complete and robust light transfer in three-waveguide coupler by shortcut to adiabaticity
AIP ADVANCES Volume: 10 Issue: 9 Article Number: 095104 Published: SEP 1 2020

255. Wu, Jizhou; Ma, Jie; Li, Yuqing; Liu, Wenliang; Li, Peng; Sovkov, Vladimir B.
Bichromatic Photoassociation Spectroscopy for the Determination of Rotational Constants of Cs-2 0(u)(+) Long-Range State below the 6S(1/2)+6P(1/2) Asymptote
MOLECULES Volume: 25 Issue: 17 Article Number: 3963 Published: SEP 2020

254. Ji, Zhonghua; Gong, Ting; Zhao, Yanting; Li, Chuanliang; Xiao, Liantuan; Jia, Suotang
Resonance enhanced two-photon ionization spectrum of ultracold (RbCs)-Rb-85-Cs-133 molecules in (2) (1)Pi(1) <- X-1 Sigma(+) transitions
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER Volume: 254 Article Number: 107215 Published: OCT 2020

253. Dou, Fu-Quan; Wang, Yuan-Jin; Sun, Jian-An

Closed-loop three-level charged quantum battery
Europhysics Letters (EPL) 131, 43001 (2020)

252. Aashna, Pragati; Thyagarajan, K.

Wideband two-process frequency conversion under stimulated Raman adiabatic passage via a continuum of dark intermediate states
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 11 Pages: 3370-3378 Published: NOV 1 2020

251. Wellnitz, David; Schuetz, Stefan; Whitlock, Shannon; Schachenmayer, Johannes; Pupillo, Guido

Collective Dissipative Molecule Formation in a Cavity
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 19 Article Number: 193201
Published: NOV 2 2020

250. Gladysz, Piotr; Wcislo, Piotr; Slowik, Karolina

Propagation of optically tunable coherent radiation in a gas of polar molecules
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 17615 Published: OCT 19 2020

249. Zhu, Jing-Jun; Chen, Xi; Jauslin, Hans-Rudolf; Guerin, Stephane

Robust control of unstable nonlinear quantum systems
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 052203
Published: NOV 4 2020

248. Martikyan, V; Devra, A.; Guery-Odelin, D.; Glaser, S. J.; Sugny, D.

Robust control of an ensemble of springs: Application to ion cyclotron resonance and two-level quantum systems
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053104
Published: NOV 4 2020

247. Lang, Johannes; Chang, Darrick E.; Piazza, Francesco

Nonequilibrium diagrammatic approach to strongly interacting photons
PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 033720
Published: SEP 23 2020

246. Eichmann, U.; Rottke, H.; Meise, S.; Rubensson, J-E; Soderstrom, J.; Agaker, M.; Sathe, C.; Meyer, M.; Baumann, T. M.; Boll, R.; De Fanis, A.; Grychtol, P.; Mazza, T.; Montano, J.; Music, V.; Ovcharenko, Y.; Rivas, D. E.; Serkez, S.; Wagner, R.; Eisebitt, S.; Ilchen, M.

Photon-recoil imaging: Expanding the view of nonlinear x-ray physics
SCIENCE Volume: 369 Issue: 6511 Pages: 1630+ Published: SEP 25 2020

245. Qiu, Ming-Yang; Jin, Wei; Qu, Shi-Xian; Li, Chun; Lefkidis, Georgios; Huebner, Wolfgang

Optically- and thermally-induced electronic transitions in a three-level system
PHYSICA SCRIPTA Volume: 95 Issue: 10 Article Number: 105808 Published:

OCT 2020

244. Gullans, M. J.; Petta, J. R.

Coherent transport of spin by adiabatic passage in quantum dot arrays
PHYSICAL REVIEW B Volume: 102 Issue: 15 Article Number: 155404
Published: OCT 6 2020

243. Torrontegui, E.; Heinrich, D.; Hussain, M.; I; Blatt, R.; Garcia-Ripoll, J. J.

Ultra-fast two-qubit ion gate using sequences of resonant pulses
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 10 Article Number: 103024
Published: OCT 2020

242. Li, Hong; Zhang, Si-Qi; Li, Mei-Xuan; Liu, Xiao-Han

Lewis-Riesenfeld Invariants in Two-level Quantum System Without the Rotating-Wave Approximation
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 59 Issue: 11 Pages: 3613-3622 Published: NOV 2020

241. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu

Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714
Published: OCT 21 2020

240. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh

Stimulated Raman adiabatic passage: Effects of system parameters on population transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1 2020

239. Guo, Yu; Shu, Chuan-Cun; Dong, Daoyi; Nori, Franco

Vanishing and Revival of Resonance Raman Scattering
Physical Review Letters 123, 223202 – Published 26 November 2019

238. Sarma, Bijita; Busch, Thomas; Twamley, Jason

Optomechanical cooling by STIRAP-assisted energy transfer: an alternative route towards the mechanical ground state
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 10 Article Number: 103043
Published: OCT 2020

237. Pershin, D. A.; Yaroshenko, V. V.; Tsyganok, V. V.; Khlebnikov, V. A.; Davletov, E. T.; Shaykin, D. V.; Gadylshin, E. R.; Cocjaru, I. S.; Svechnikov, E. L.; Kapitanova, P. V.; Akimov, A. V.

Microwave coherent spectroscopy of ultracold thulium atoms
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043114
Published: OCT 23 2020

236. Huang, Wei; Qu, Xiaowei; Yin, Shan; Zubair, Muhammad; Yuan, Mingrui;

Zhang, Wentao; Han, Jiaguang
Quantum Engineering Enables Broadband and Robust Terahertz Surface Plasmon-Polaritons Coupler
IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS Volume: 27 Issue: 2 Article Number: 8400107 Published: MAR-APR 2021

235. Huang, Wei; Yin, Shan; Zhang, Wentao

Complete Transfer of Terahertz Surface Plasmon-polaritons Based on STIRAP
2019 PHOTONICS & ELECTROMAGNETICS RESEARCH SYMPOSIUM - SPRING (PIERS-SPRING) Book Series: Progress in Electromagnetics Research Symposium
Pages: 1489-1492 Published: 2019

234. Groenland, Koen; Groenland, Carla; Kramer, Reinier

Stimulated Raman adiabatic passage-like protocols for amplitude transfer generalize to many bipartite graphs
JOURNAL OF MATHEMATICAL PHYSICS Volume: 61 Issue: 7 Published: JUL 1 2020

233. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Xue-Feng

Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043
Published: JUL 15 2020

232. Bataille, P.; Litvinov, A.; Manai, I; Huckans, J.; Wiotte, F.; Kaladjian, A.;

Gorceix, O.; Marechal, E.; Laburthe-Tolra, B.; Robert-de-Saint-Vincent, M.
Adiabatic spin-dependent momentum transfer in an SU(N) degenerate Fermi gas
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 013317
Published: JUL 17 2020

231. Tian, Xue-Dong; Zhang, Han-Xiao; Gao, Feng; Bao, Qian-Qian

Stimulated Raman Adiabatic Passage of Interacting Cold Atoms Driven Into Y

230. Petiziol, Francesco; Arimondo, Ennio; Giannelli, Luigi; Mintert, Florian; Wimberger, Sandro
Optimized three-level quantum transfers based on frequency-modulated optical excitations
SCIENTIFIC REPORTS Volume: 10 Issue: 1 Article Number: 2185 Published: FEB 10 2020

229. Wang, Rong; Niu, Ying-Yu
Population transfer through multiple channels in two harmonic laser pulses
JOURNAL OF THEORETICAL & COMPUTATIONAL CHEMISTRY Volume: 19 Issue: 5 Article Number: 2050023 Published: AUG 2020

228. Voges, Kai K.; Gersema, Philipp; Borgloh, Mara Meyer zum Alten; Schulze, Torben A.; Hartmann, Torsten; Zenesini, Alessandro; Ospelkaus, Silke
Ultracold Gas of Bosonic (NaK)-Na-23-K-39 Ground-State Molecules
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 8 Article Number: 083401 Published: AUG 21 2020

227. Parshkov, Oleg M.; Dmitriev, Alexei E.
Phase modulation effects in the case of electromagnetically induced transparency
SARATOV FALL MEETING 2019: LASER PHYSICS, PHOTONIC TECHNOLOGIES, AND MOLECULAR MODELING Book Series: Proceedings of SPIE Volume: 11458 Article Number: 114580G Published: 2020

226. Blekos, Kostas; Stefanatos, Dionisis; Paspalakis, Emmanuel
Performance of superadiabatic stimulated Raman adiabatic passage in the presence of dissipation and Ornstein-Uhlenbeck dephasing
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 023715 Published: AUG 24 2020

225. Beterov, I. I.; Tretyakov, D. B.; Entin, V. M.; Yakshina, E. A.; Ryabtsev, I. I.; Saffman, M.; Bergamini, S.
Application of adiabatic passage in Rydberg atomic ensembles for quantum information processing
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 18 Article Number: 182001 Published: SEP 28 2020

224. Du, Yanxiong; Liang, Zhentao; Yan, Hui; Zhu, Shiliang
Geometric Quantum Computation with Shortcuts to Adiabaticity
ADVANCED QUANTUM TECHNOLOGIES Volume: 2 Issue: 9 Article Number: UNSP 1900013 Published: SEP 2019

223. Chen, Disheng; Zheludev, Nikolay; Gao, Wei-bo
Building Blocks for Quantum Network Based on Group-IV Split-Vacancy Centers in Diamond
ADVANCED QUANTUM TECHNOLOGIES Volume: 3 Issue: 2 Special Issue: SI Article Number: 1900069 Published: FEB 2020

222. Zhou, Ming-Ti; Liu, Jian-Long; Sun, Peng-Fei; An, Zi-ye; Li, Jun; Bao, Xiao-Hui; Pan, Jian-Wei
Experimental creation of single Rydberg excitations via adiabatic passage
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 013706 Published: JUL 6 2020

221. Ricottone, A.; Rudner, M. S.; Coish, W. A.
Topological transition of a non-Markovian dissipative quantum walk
PHYSICAL REVIEW A Volume: 102 Issue: 1 Article Number: 012215 Published: JUL 14 2020

220. Xie, Qiong-Tao; Liu, Xiao-Liang
Exact analytical results for a two-level quantum system under a Lorentzian-shaped pulse field
Chinese Physics B 29 060305 (2020)

219. Wu, X.; Han, Z.; Chow, J.; Ang, D. G.; Meisenhelder, C.; Panda, C. D.; West, E. P.; Gabrielse, G.; Doyle, J. M.; DeMille, D.
The metastable Q(3)Delta(2) state of ThO: a new resource for the ACME electron EDM search
New Journal Of Physics 22 023013 (2020)

218. Chang, H-S; Zhong, Y. P.; Bienfait, A.; Chou, M-H; Conner, C. R.; Dumur, E.; Grebel, J.; Peairs, G. A.; Povey, R. G.; Satzinger, K. J.; Cleland, A. N.
Remote Entanglement via Adiabatic Passage Using a Tunably Dissipative Quantum Communication System
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 24 Article Number: 240502 Published: JUN 17 2020

217. Patchkovskii, Serguei; Vrakking, Marc J. J.; Villeneuve, D. M.; Niikura, Hiromichi
Selection of the magnetic quantum number in resonant ionization of neon using an XUV-IR two-color laser field
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 13 Article Number: 134002 Published: JUL 14 2020

216. Yan, Run-Ying; Feng, Zhi-Bo
Generating microwave photon Fock states in a circuit QED via invariant-based shortcuts to adiabaticity
QUANTUM SCIENCE AND TECHNOLOGY Volume: 5 Issue: 4 Article Number: 045001 Published: OCT 2020

215. Dou, Fu-Quan; Yan, Zhi-Ming; Liu, Xuan-Qing; Wang, Wen-Yuan; Shu, Chuan-Cun
Accelerating adiabatic light transfer and split in three-waveguide couplers via dressed state
OPTIK Volume: 210 Article Number: UNSP 164516 Published: MAY 2020

214. Lee, Kai Sheng; Zhuo, Zhao; Couteau, Christophe; Wilkowski, David; Paterek, Tomasz
Atomic test of higher-order interference
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 052111 Published: MAY 18 2020

213. Dey, Amit; Vardi, Amichay
Interaction-induced instability and chaos in the photoassociative stimulated Raman adiabatic passage from atomic to molecular Bose-Einstein condensates
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 053627 Published: MAY 18 2020

212. Irani, N.; Saadati-Niari, M.; Amniat-Talab, M.
Digital adiabatic passage in multi-state systems
PHYSICA SCRIPTA Volume: 95 Issue: 3 Article Number: 035109 Published: MAR 2020

211. Stefanatos, Dionisis; Paspalakis, Emmanuel
Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 11 Article Number: 115304 Published: MAR 20 2020

210. Gerianne Alexander, Roland E Allen, Anthony Atala, Warwick P Bowen, Alan A Coley, John B Goodenough, Mikhail I Katsnelson, Eugene V Koonin, Mario Krenn, Lars S Madsen, Martin Mensson, Nicolas P Mauranyapin, Art I Melvin, Ernst Rasel, Linda E Reichl, Roman Yampolskiy, Philip B Yasskin, Anton Zeilinger and Suzy Lidström
The sounds of science-a symphony for many instruments and voices
PHYSICA SCRIPTA Volume: 95 Issue: 6 Article Number: 062501 Published: JUN 2020

209. Shi, Jian; Ma, Rui-Qiong; Liu, Lin
Coherent Tunneling by Nonadiabatic Passage in a Three-Waveguide Coupler
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 89 Issue: 6 Article Number: 064006 Published: JUN 15 2020

208. Liu, Xiaoze; Yi, Jun; Li, Quanwei; Yang, Sui; Bao, Wei; Ropp, Chad; Lan, Shoufeng; Wang, Yuan; Zhang, Xiang
Nonlinear Optics at Excited States of Exciton Polaritons in Two-Dimensional Atomic Crystals
NANO LETTERS Volume: 20 Issue: 3 Pages: 1676-1685 Published: MAR 11 2020

207. Macha, Tobias; Urunuela, Eduardo; Alt, Wolfgang; Ammenwerth, Maximilian; Pandey, Deepak; Pfeifer, Hannes; Meschede, Dieter
Nonadiabatic storage of short light pulses in an atom-cavity system
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 053406 Published: MAY 4 2020

206. Ge, Xiaozhen; Ding, Haijin; Rabitz, Herschel; Wu, Rebing
Robust quantum control in games: An adversarial learning approach
PHYSICAL REVIEW A Volume: 101 Issue: 5 Article Number: 052317 Published: MAY 11 2020

205. Liu, Shuai; Ran, Du; Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Accelerated and Robust Generation of W State by Parametric Amplification and Inverse Hamiltonian Engineering
ANNALEN DER PHYSIK Article Number: 2000002 [early access icon] Early Access: MAY 2020

204. Shirkhaghah, N.; Saadati-Niari, M.
Nonlinear fractional stimulated Raman exact passage in three-level lambda systems
REVISTA MEXICANA DE FISICA Volume: 66 Issue: 3 Pages: 344-351 Published: MAY-JUN 2020
203. Salah, Reyad; Farouk, Ahmed M.; Farouk, Ahmed; Farouk, Ahmed; Abdel-Aty, Mahmoud; Eleuch, Hichem; Obada, Abdel-Shafy F.
Entanglement Control of Two-Level Atoms in Dissipative Cavities
APPLIED SCIENCES-BASEL Volume: 10 Issue: 4 Article Number: 1510 Published: FEB 2020
202. Stefanatos, Dionisis; Blekos, Kostas; Paspalakis, Emmanuel
Robustness of STIRAP Shortcuts under Ornstein-Uhlenbeck Noise in the Energy Levels
APPLIED SCIENCES-BASEL Volume: 10 Issue: 5 Article Number: 1580 Published: MAR 2020
201. T-C. Tsui, Y. Wang, S. Subhankar, J. V. Porto, and S. L. Rolston
Realization of a stroboscopic optical lattice for cold atoms with subwavelength spacing
PHYSICAL REVIEW A Volume: 101 Issue: 4 Article Number: 041603 Published: APR 17 2020
200. Kai K. Voges, Philipp Gersema, Torsten Hartmann, Torben A. Schulze, Alessandro Zenesini, and Silke Ospelkaus
Formation of ultracold weakly bound dimers of bosonic (NaK)-Na-23-K-39
PHYSICAL REVIEW A Volume: 101 Issue: 4 Article Number: 042704 Published: APR 20 2020
199. Paparella, Iris; Moro, Lorenzo; Prati, Enrico
Digitally stimulated Raman passage by deep reinforcement learning
PHYSICS LETTERS A Volume: 384 Issue: 14 Article Number: 126266 Published: MAY 18 2020
198. Subhankar, S; Bienias, P; Titum, P; Tsui, TC; Wang, Y; Gorshkov, AV; Rolston, SL; Porto, JV
Floquet engineering of optical lattices with spatial features and periodicity below the diffraction limit
NEW JOURNAL OF PHYSICS Volume: 21 Issue: 11 Article Number: 113058 Published: NOV 2019
197. Xiaofeng Wang, Wenliang Liu, Yuqing Li, Jizhou Wu, Vladimir B. Sovkov, Jie Ma, Sofiia Onishchenko, Peng Li, Yongming Fu, Dan Li, Qunchao Fan, Liantuan Xiao and Suotang Jia
Hyperfine structure of the NaCs $b(3)P(2)$ state near the dissociation limit $3S(1/2)+6P(3/2)$ observed with ultracold atomic photoassociation
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 22 Issue: 7 Pages: 3809-3816 Published: FEB 21 2020
196. Xianghong Ge, Xuehua Zhang, Xingxing Ding, Linfeng Yang and Peng Guo
Robust SWAP gate on two distant atoms through virtual excitations and transitionless quantum driving
LASER PHYSICS LETTERS Volume: 17 Issue: 2 Article Number: 025207 Published: FEB 2020
195. Herrera, Felipe; Owrutsky, Jeffrey
Molecular polaritons for controlling chemistry with quantum optics
JOURNAL OF CHEMICAL PHYSICS Volume: 152 Issue: 10 Article Number: 100902 Published: MAR 14 2020
194. Aslanyan, L. S.; Hovakimyan, H. H.
Spatial resonance in an anisotropic medium with modulated gyrotropy
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS Volume: 37 Issue: 3 Pages: 847-851 Published: MAR 1 2020
193. Daniel Finkelstein-Shapiro, David Viennot, Ibrahim Saideh, Thorsten Hansen, Txnu Pullerits, and Arne Keller
Adiabatic elimination and subspace evolution of open quantum systems
Phys. Rev. A 101, 042102 – Published 1 April 2020
192. A. Yang, S. Botsi, S. Kumar, S. B. Pal, M. Lam, I. Cebaite, A. Laugharn, and K. Dieckmann
Singlet Pathway to the Ground State of Ultracold Polar Molecules
Phys. Rev. Lett. 124, 133203 – Published 1 April 2020
191. Jin-Lei Wu, Yan Wang, Jin-Xuan Han, Cong Wang, Shi-Lei Su, Yan Xia, Yongyuan Jiang, and Jie Song
Two-Path Interference for Enantiomer-Selective State Transfer of Chiral Molecules
Phys. Rev. Applied 13, 044021 – Published 8 April 2020
190. Wu, Ji-Zhou; Li, Yu-Qing; Liu, Wen-Liang; Ma, Jie; Xiao, Lian-Tuan; Jia, Suo-Tang
Light-induced frequency shifts for the lowest vibrational levels of ultracold Cs-2 in the molecular pure long-range $O(g^-)$ state
FRONTIERS OF PHYSICS Volume: 15 Issue: 2 Article Number: 22602 Published: MAR 5 2020
189. Shirkhaghah, N.; Saadati-Niari, M.; Ahadpour, S.
Fractional population transfer among three-level systems in a cavity by Stark-shift-chirped rapid adiabatic passage
QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 4 Article Number: 128 Published: MAR 5 2020
188. Pope, TJ; Rajendran, J; Ridolfo, A; Paladino, E; Pellegrino, FMD; Falci, G
Coherent trapping in small quantum networks
JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT Volume: 2019 Issue: 12 Article Number: 124024 Published: DEC 2019
187. Zhuang, Min; Huang, Jiahao; Ke, Yongguan; Lee, Chaohong
Symmetry-Protected Quantum Adiabatic Evolution in Spontaneous Symmetry-Breaking Transitions
ANNALEN DER PHYSIK Article Number: 1900471 Early Access: FEB 2020
186. Liu, Ya-Xiong; Zhao, Bo
Theoretical analysis of the coupling between Feshbach states and hyperfine excited states in the creation of (NaK)-Na-23-K-40 molecule*
CHINESE PHYSICS B Volume: 29 Issue: 2 Article Number: 023103 Published: JAN 2020
185. Tomza, Michal; Lisaj, Mateusz
Interactions and charge-transfer dynamics of an Al⁺ ion immersed in ultracold Rb and Sr atoms
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012705 Published: JAN 16 2020
184. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321 Published: JAN 15 2020
183. Martikyan, V; Guery-Odelin, D.; Sugny, D.
Comparison between optimal control and shortcut to adiabaticity protocols in a linear control system
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 013423 Published: JAN 15 2020
182. Maroufian, Aarash; Hosseini, Mehdi
The investigation of Landau - Zener transition in coupled three-particle systems
OPTIK Volume: 201 Article Number: UNSP 163520 Published: JAN 2020
181. Parshkov, O. M.
Normal modes of strictly resonant and quasi-resonant regimes of electromagnetically induced transparency
QUANTUM ELECTRONICS Volume: 49 Issue: 11 Pages: 1019-1027 Published: 2019
180. Liu, Xiaosong; Zhang, Wei; Liu, Weilong; Song, Yunfei; Wang, Zhuo; Zhang, Wenjing
Vibrational energy redistribution and vibrational dynamics of methanol mixed with Rhodamine 101 dye
MOLECULAR PHYSICS Early Access: JAN 2020
179. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430 Published: DEC 30 2019
178. Ali, Khurshaid; Ullah, Maghfir; Bacha, Bakht Amin; Jabar, M. S. Abdul
Complex conductivity-dependent two-dimensional atom microscopy
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 134 Issue: 12 Article Number: 618 Published: DEC 2019
177. Vovk, Tatiana A.; Rudyi, Semyon S.; Ivanov, Andrei, V; Perlin, Evgeniy Y.; Rozhdestvensky, Yuri, V
Features of laser cooling of Yb-doped fluorite nanocrystals using coherent population transfer techniques
NONLINEAR OPTICS AND APPLICATIONS XI Book Series: Proceedings of SPIE Volume: 11026 Article Number: UNSP 110260W Published: 2019

176. Guo, Yu; Shu, Chuan-Cun; Dong, Daoyi; Nori, Franco
Vanishing and Revival of Resonance Raman Scattering
PHYSICAL REVIEW LETTERS Volume: 123 Issue: 22 Article Number: 223202
Published: NOV 26 2019
175. Xu, Tian-Niu; Liu, Kaipeng; Chen, Xi; Guerin, Stephane
Invariant-based optimal composite stimulated Raman exact passage
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52
Issue: 23 Article Number: 235501 Published: DEC 14 2019
174. Ghaeminezhad, Nourallah; Cong, Shuang
Preparation of the entanglement states by realizing the Hadamard and CNOT
quantum gates
Proceedings Of 2019 Ieee 3rd Information Technology, Networking, Electronic
And Automation Control Conference (ITNEC 2019) Pages: 155-159 Published:
2019
173. Duffin, Christian; Dijkstra, Arend G.
Controlling a quantum system via its boundary conditions
EUROPEAN PHYSICAL JOURNAL D Volume: 73 Issue: 10 Article Number: 221
Published: OCT 28 2019
172. Guery-Odelin, D.; Ruschhaupt, A.; Kiely, A.; Torrontegui, E.; Martinez-Garaot,
S.; Muga, J. G.
Shortcuts to adiabaticity: Concepts, methods, and applications
REVIEWS OF MODERN PHYSICS Volume: 91 Issue: 4 Article Number: 045001
Published: OCT 24 2019
171. Huang, Wei; Yin, Shan; Zhang, Wentao; Wang, Kaili; Zhang, Yuting; Han,
Jiaguang
Robust and broadband integrated terahertz coupler conducted with adiabatic
following
NEW JOURNAL OF PHYSICS Volume: 21 Issue: 11 Article Number: 113004
Published: NOV 2019
170. Oberg, Lachlan M.; Huang, Eric; Reddy, Prithvi M.; Alkauskas, Audrius;
Greentree, Andrew D.; Cole, Jared H.; Manson, Neil B.; Meriles, Carlos A.;
Doherty, Marcus W.
Spin coherent quantum transport of electrons between defects in diamond
NANOPHOTONICS Volume: 8 Issue: 11 Special Issue: SI Pages: 1975-1984
Published: NOV 2019
169. Szidarovszky, Tamas; Csaszar, Attila G.; Halasz, Gabor J.; Vibok, Agnes
Rovibronic spectra of molecules dressed by light fields
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.033414 SEP 19 2019
168. Ribeiro, Hugo; Clerk, Aashish A.
Accelerated adiabatic quantum gates: Optimizing speed versus robustness
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.032323 SEP 17 2019
167. Baekkegaard, T; Kristensen, LB; Loft, NJS; Andersen, CK; Petrosyan, D;
Zinner, NT
Realization of efficient quantum gates with a superconducting qubit-qutrit circuit
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-49657-1 SEP 16 2019
166. Ye, C; Zhang, QS; Chen, YY; Li, Y
Effective two-level models for highly efficient inner-state enantioseparation based
on cyclic three-level systems of chiral molecules
PHYSICAL REVIEW A Volume: 100 Issue: 4 Published: OCT 10 2019 DOI:
10.1103/PhysRevA.100.043403
165. Paul, Anam C.; Sharma, Ketan; Reza, Md Asmaul; Telfah, Hamzeh; Miller,
Terry A.; Liu, Jinjun
Laser-induced fluorescence and dispersed-fluorescence spectroscopy of the A2E-
X & x303;2A1 transition of jet-cooled calcium methoxide (CaOCH3) radicals
JOURNAL OF CHEMICAL PHYSICS, 151 (13):10.1063/1.5104278 OCT 7 2019
164. Wu, Jin-Lei; Wang, Yan; Song, Jie; Xia, Yan; Su, Shi-Lei; Jiang, Yong-Yuan
Robust and highly efficient discrimination of chiral molecules through three-
mode parallel paths
PHYSICAL REVIEW A, 100 (4):10.1103/PhysRevA.100.043413 OCT 21 2019
163. Xu, Jian; Du, Yan-Xiong; Huang, Wei
Improving coherent population transfer via a stricter adiabatic condition
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023848 AUG 29 2019
162. Rontgen, M; Morfonios, CV; Brouzos, I; Diakonou, FK; Schmelcher, P
Quantum Network Transfer and Storage with Compact Localized States Induced
by Local Symmetries
PHYSICAL REVIEW LETTERS, 123 (8):10.1103/PhysRevLett.123.080504 AUG 23
2019
161. Liu, Xiaoze; Yi, Jun; Li, Quanwei; Yang, Sui; Bao, Wei; Ropp, Chad; Lan,
Shoufeng; Wang, Yuan; Zhang, Xiang
Probing the excited states of valley polaritons in atomic crystals
Conference on Lasers and Electro-Optics (CLEO), MAY 05-10, 2019, San Jose, CA
160. de Leseleuc, Sylvain; Lienhard, Vincent; Scholl, Pascal; Barredo, Daniel;
Weber, Sebastian; Lang, Nicolai; Buechler, Hans Peter; Lahaye, Thierry; Browaeys,
Antoine
Observation of a symmetry-protected topological phase of interacting bosons
with Rydberg atoms
SCIENCE, 365 (6455):775-+; SI 10.1126/science.aav9105 AUG 23 2019
159. Santos, Alan C.; Cakmak, Barn; Campbell, Steve; Zinner, Nikolaj T.
Stable adiabatic quantum batteries
PHYSICAL REVIEW E, 100 (3):10.1103/PhysRevE.100.032107 SEP 4 2019
158. Liu, Yuting; Gong, Ting; Ji, Zhonghua; Wang, Gaoren; Zhao, Yanting; Xiao,
Liantuan; Jia, Suotang
Production of ultracold (RbCs)-Rb-85-Cs-133 molecules in the lowest ground
state via the π short-range state
JOURNAL OF CHEMICAL PHYSICS, 151 (8):10.1063/1.5108637 AUG 28 2019
157. Liu, Bao-Jie; Song, Xue-Ke; Xue, Zheng-Yuan; Wang, Xin; Yung, Man-Hong
Plug-and-Play Approach to Nonadiabatic Geometric Quantum Gates
PHYSICAL REVIEW LETTERS, 123 (10):10.1103/PhysRevLett.123.100501 SEP 3
2019
156. Liu, Junjie; Segal, Dvira; Hanna, Gabriel
Loss-Free Excitonic Quantum Battery
JOURNAL OF PHYSICAL CHEMISTRY C, 123 (30):18303-18314;
10.1021/acs.jpcc.9b06373 AUG 1 2019
155. Guo, Yu; Luo, Xiaobing; Ma, Shan; Shu, Chuan-Cun
All-optical generation of quantum entangled states with strictly constrained
ultrafast laser pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023409 AUG 12 2019
154. Yang, Zhen; Tan, Xinsheng; Dong, Yuqian; Yang, Xiaopei; Song, Shuqing; Han,
Zhikun; Chu, Ji; Li, Zhiyuan; Lan, Dong; Yu, Haifeng; Yu, Yang
Realization of arbitrary state-transfer via superadiabatic passages in a
superconducting circuit
APPLIED PHYSICS LETTERS, 115 (7):10.1063/1.5111060 AUG 12 2019
153. Laforgue, X.; Chen, Xi; Guerin, S.
Robust stimulated Raman exact passage using shaped pulses
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019
152. Azuma, Hiroo
Numerical analyses of emission of a single-photon pulse based on single-atom-
cavity quantum electrodynamics
PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS,
(6):10.1093/ptep/ptz052 JUN 2019
151. Yu, Dongmin; Wang, Han; Ma, Dandan; Zhao, Xingdong; Qian, Jing
Adiabatic and high-fidelity quantum gates with hybrid Rydberg-Rydberg
interactions
OPTICS EXPRESS, 27 (16):23080-23094; 10.1364/OE.27.023080 AUG 5 2019
150. Singh, Pooja; Patnaik, Anil K.; Roy, Suresh; Gord, James R.; Rostovtsev, Yuri, V
Influence of coherent population trapping on Raman scattering
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023808 AUG 8 2019
149. Ding, Hai-Jin; Wu, Re-Bing
Robust quantum control against clock noises in multiqubit systems
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.022302 AUG 6 2019
148. Debnath, Kamanasish; Kielerich, Alexander Holm; Benseny, Albert; Molmer,
Klaus
Coherent spectral hole burning and qubit isolation by stimulated Raman adiabatic
passage
PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023813 AUG 9 2019
147. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Investigation of robust population transfer using quadratically chirped laser
interacting with a two-level system
PHYSICA SCRIPTA, 94 (10):10.1088/1402-4896/ab254d OCT 2019
146. Zhang, Zhenxing; Zhao, P. Z.; Wang, Tenghui; Xiang, Liang; Jia, Zhilong; Duan,

- Peng; Tong, D. M.; Yin, Yi; Guo, Guoping
Single-shot realization of nonadiabatic holonomic gates with a superconducting Xmon qutrit
NEW JOURNAL OF PHYSICS, 21 10.1088/1367-2630/ab2e26 JUL 17 2019
145. Wu, JL; Su, SL
Universal speeded-up adiabatic geometric quantum computation in three-level systems via counteradiabatic driving
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 52 (33):10.1088/1751-8121/ab2a92 AUG 16 2019
144. Li, Dong-Xiao; Zheng, Tai-Yu; Shao, Xiao-Qiang
Adiabatic preparation of Multipartite GHZ states via Rydberg ground-state blockade
OPTICS EXPRESS, 27 (15):20874-20885; 10.1364/OE.27.020874 JUL 22 2019
143. Dijkstra, Arend G.; Beige, Almut
Efficient long-distance energy transport in molecular systems through adiabatic passage
JOURNAL OF CHEMICAL PHYSICS, 151 (3):10.1063/1.5100210 JUL 23 2019
142. Anza, Fabio; Messina, Antonino; Militello, Benedetto
Resonant Transitions Due to Changing Boundaries
OPEN SYSTEMS & INFORMATION DYNAMICS, 26 (2):10.1142/S1230161219500069 JUN 2019
141. Stefanatos, Dionisis; Paspalakis, Emmanuel
Resonant shortcuts for adiabatic rapid passage with only z-field control
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019
140. Tian, Jiazhao; Du, Tianyi; Liu, Yu; Liu, Haibin; Jin, Fangzhou; Said, Ressa S.; Cai, Jianming
Optimal quantum optical control of spin in diamond
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012110 JUL 11 2019
139. Xu, Kebiao; Xie, Tianyu; Shi, Fazhan; Wang, Zhen-Yu; Xu, Xiangkun; Wang, Pengfei; Wang, Ya; Plenio, Martin B.; Du, Jiangfeng
Breaking the quantum adiabatic speed limit by jumping along geodesics
SCIENCE ADVANCES, 5 (6):10.1126/sciadv.aax3800 JUN 2019
138. Liu, Lan; Zhang, De-Chao; Yang, Huan; Liu, Ya-Xiong; Nan, Jue; Rui, Jun; Zhao, Bo; Pan, Jian-Wei
Observation of Interference between Resonant and Detuned STIRAP in the Adiabatic Creation of $(23)\text{Na}(40)\text{K}$ Molecules
PHYSICAL REVIEW LETTERS, 122 (25):10.1103/PhysRevLett.122.253201 JUN 25 2019
137. Falci, G; Ridolfo, A; Di Stefano, PG; Paladino, E
Ultrastrong coupling probed by Coherent Population Transfer
SCIENTIFIC REPORTS, 9 10.1038/s41598-019-45187-y JUN 25 2019
136. Katz, Or; Firstenberg, Ofer
Transverse optical pumping of spin states
COMMUNICATIONS PHYSICS, 2 10.1038/s42005-019-0170-4 JUN 19 2019
135. Wu, Shu-Hao; Amezcua, Mayra; Wang, Hailin
Adiabatic population transfer of dressed spin states with quantum optimal control
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063812 JUN 10 2019
134. Schmid, Philipp C.; Miller, Mikhail I.; Greenberg, James; Nguyen, Thanh L.; Stanton, John F.; Lewandowski, H. J.
Quantum-state-specific reaction rate measurements for the photo-induced reaction $\text{Ca}^+ + \text{O}_2 \rightarrow \text{CaO}^+ + \text{O}$
MOLECULAR PHYSICS, 10.1080/00268976.2019.1622811
133. Kurosaki, Yuzuru; Yokoyama, Keiichi
Quantum Optimal Control of Rovibrational Excitations of a Diatomic Alkali Halide: One-Photon vs. Two-Photon Processes
UNIVERSE, 5 (5):10.3390/universe5050109 MAY 2019
132. Khachatryan, DN; Grigoryan, GG
Selective Reflection for a Fabry-Perot Interferometer in Presence of Electromagnetically Induced Transparency
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 54 (2):136-145; 10.3103/S106833721902004X APR 2019
131. Ahmadinouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Robust population transfer in a two-level system using finite chirping method
PHYSICA SCRIPTA, 94 (8):10.1088/1402-4896/ab1689 AUG 2019
130. Parshkov, OM
Short Pulses of Normal Modes of Electromagnetically Induced Transparency
OPTICS AND SPECTROSCOPY, 126 (4):400-411; 10.1134/S0030400X19040180 APR 2019
129. Finkelstein-Shapiro, Daniel; Felicetti, Simone; Hansen, Thorsten; Pullerits, Tonu; Keller, Arne
Classification of dark states in multilevel dissipative systems
PHYSICAL REVIEW A, 99 (5):10.1103/PhysRevA.99.053829 MAY 20 2019
128. Abdelhafez, Mohamed; Schuster, David, I; Koch, Jens
Gradient-based optimal control of open quantum systems using quantum trajectories and automatic differentiation
PHYSICAL REVIEW A, 99 (5):10.1103/PhysRevA.99.052327 MAY 20 2019
127. Ghobadi, Roohollah; Wein, Stephen; Kaviani, Hamidreza; Barclay, Paul; Simon, Christoph
Progress toward cryogen-free spin-photon interfaces based on nitrogen-vacancy centers and optomechanics
PHYSICAL REVIEW A, 99 (5):10.1103/PhysRevA.99.053825 MAY 17 2019
126. Kozyryev, Ivan; Steimle, Timothy C.; Yu, Phelan; Duc-Trung Nguyen; Doyle, John M.
Determination of CaOH and CaOCH_3 vibrational branching ratios for direct laser cooling and trapping
NEW JOURNAL OF PHYSICS, 21 10.1088/1367-2630/ab19d7 MAY 8 2019
125. Longhi, Stefano
Topological pumping of edge states via adiabatic passage
PHYSICAL REVIEW B, 99 (15):10.1103/PhysRevB.99.155150 APR 26 2019
124. Zilberberg, Oded; Romito, Alessandro
Sensing electrons during an adiabatic coherent transport passage
PHYSICAL REVIEW B, 99 (16):10.1103/PhysRevB.99.165422 APR 17 2019
123. Wu, Re-Bing; Ding, Haijin; Dong, Daoyi; Wang, Xiaoting
Learning robust and high-precision quantum controls
PHYSICAL REVIEW A, 99 (4):10.1103/PhysRevA.99.042327 APR 18 2019
122. Taherkhani, Masoomeh; Willatzen, Morten; Denning, Emil, V; Protsenko, Igor E.; Gregersen, Niels
High-fidelity optical quantum gates based on type-II double quantum dots in a nanowire
PHYSICAL REVIEW B, 99 (16):10.1103/PhysRevB.99.165305 APR 10 2019
121. Dey, Amit; Cohen, Doron; Vardi, Amichay
Many-body adiabatic passage: Quantum detours around chaos
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033623 MAR 27 2019
120. Subhankar, S; Wang, Y; Tsui, TC; Rolston, SL; Porto, JV
Nanoscale Atomic Density Microscopy
PHYSICAL REVIEW X, 9 (2):10.1103/PhysRevX.9.021002 APR 1 2019
119. Ridolfo, A; Falci, G; Pellegrino, FMD; Maccarrone, GD; Paladino, E
Photon pair production by STIRAP in ultrastrongly coupled matter-radiation systems
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, 227 (15-16):2183-2188; 10.1140/epjst/e2018-800076-1 MAR 2019
118. Liu, Xiaosong; Zhang, Wei; Song, Yunfei; Zheng, Zhaoyang; Lv, Zhe; Yang, Yanqiang
Selective excitation of vibrational modes and probe for asymmetric intramolecular energy redistribution
PHYSICA SCRIPTA, 94 (6):10.1088/1402-4896/ab08d6 JUN 2019
117. Kolbl, J; Barfuss, A; Kasperczyk, MS; Thiel, L; Clerk, AA; Ribeiro, H; Maletinsky, P
Initialization of Single Spin Dressed States using Shortcuts to Adiabaticity
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.090502 MAR 5 2019
116. Dodonov, AV; Napoli, A; Militello, B
Emulation of n-photon Jaynes-Cummings and anti-Jaynes-Cummings models via parametric modulation of a cyclic qutrit
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033823 MAR 11 2019
115. Vepsalainen, Antti; Danilin, Sergey; Paraoanu, Gheorghe Sorin
Superadiabatic population transfer in a three-level superconducting circuit
SCIENCE ADVANCES, 5 (2):10.1126/sciadv.aau5999 FEB 2019

114. Shen, Ya-Xi; Peng, Yu-Gui; Zhao, De-Gang; Chen, Xin-Cheng; Zhu, Jie; Zhu, Xue-Feng
One-Way Localized Adiabatic Passage in an Acoustic System
PHYSICAL REVIEW LETTERS, 122 (9):10.1103/PhysRevLett.122.094501 MAR 8 2019
113. Hamed, Hamid Reza; Ruseckas, Julius; Paspalakis, Emmanuel; Juzeliunas, Gediminas
Transfer of optical vortices in coherently prepared media
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033812 MAR 6 2019
112. Liu, Ji-Cai; Guo, Fen-Fen; Zhao, Nan; Li, Xing-Zhe
Optical power limiting of ultrashort hyper-Gaussian pulses in cascade three-level system
CHINESE PHYSICS B, 27 (10):10.1088/1674-1056/27/10/104209 OCT 2018
111. Weinzetl, Christian; Goerlitz, Johannes; Becker, Jonas Nils; Walmsley, Ian A.; Poem, Eilon; Nunn, Joshua; Becher, Christoph
Coherent Control and Wave Mixing in an Ensemble of Silicon-Vacancy Centers in Diamond
PHYSICAL REVIEW LETTERS, 122 (6):10.1103/PhysRevLett.122.063601 FEB 12 2019
110. Wang, Jing; Wu, Jin-Hui; Cui, Cui-Li
Tunable photonic dark modes in coupled cavity chains
OPTICS COMMUNICATIONS, 438 106-110; 10.1016/j.optcom.2019.01.035 MAY 1 2019
109. Mostafavi, Fatemeh; Yuan, Luqi; Ramezani, Hamidreza
Eigenstates Transition without Undergoing an Adiabatic Process
PHYSICAL REVIEW LETTERS, 122 (5):10.1103/PhysRevLett.122.050404 FEB 8 2019
108. Paspalakis, Emmanuel; Economou, Sophia E.; Carreno, Fernando
Adiabatically preparing quantum dot spin states in the Voigt geometry
JOURNAL OF APPLIED PHYSICS Volume: 125 Issue: 2 Article Number: 024305
Published: JAN 14 2019
107. Hollstein, Maximilian; Rohringer, Nina
Stimulated resonant inelastic x-ray scattering with chirped, broadband pulses
PHYSICAL REVIEW A Volume: 99 Issue: 1 Article Number: 013425 Published: JAN 18 2019
106. Zhang, Xiaofan; Zhu, Xiaosong; Wang, Dian; Li, Liang; Liu, Xi; Liao, Qing; Lan, Pengfei; Lu, Peixiang
Ultrafast oscillating-magnetic-field generation based on electronic-current dynamics
PHYSICAL REVIEW A, 99 (1):10.1103/PhysRevA.99.013414 JAN 14 2019
105. Xu, Dapeng; Gao, Shuohui; Liu, Wenqiang; Liu, Ying; Zhou, Qiang; Li, Liang; Cui, Tian; Yuan, Hongming
The Raman scattering of trirutile structure MgTa₂O₆ single crystals grown by the optical floating zone method
RSC ADVANCES, 9 (2):839-843; 10.1039/c8ra06113k 2019
104. Ma, Dan-Dan; Zhang, Ke-ye; Qian, Jing
Properties of collective Rabi oscillations with two Rydberg atoms
CHINESE PHYSICS B, 28 (1):10.1088/1674-1056/28/1/013202 JAN 2019
103. Zeng, Ye-Xiong; Gebremariam, Tesfay; Ding, Ming-Song; Li, Chong
The Influence of Non-Markovian Characters on Quantum Adiabatic Evolution
ANNALEN DER PHYSIK, 531 (1):10.1002/andp.201800234 JAN 2019
102. Fabri, Csaba; Marquardt, Roberto; Csaszar, Attila G.; Quack, Martin
Controlling tunneling in ammonia isotopomers
JOURNAL OF CHEMICAL PHYSICS, 150 (1):10.1063/1.5063470 JAN 7 2019
101. Gujarati, Tanvi P.
Rydberg-atom-based creation of an N-particle Greenberger-Horne-Zeilinger state using stimulated Raman adiabatic passage
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.062326 DEC 21 2018
100. Dey, Amit; Cohen, Doron; Vardi, Amichay
Adiabatic Passage through Chaos
PHYSICAL REVIEW LETTERS, 121 (25):10.1103/PhysRevLett.121.250405 DEC 21 2018
99. Deng, Li; Niu, Yueping; Gong, Shangqing
Detuning-induced stimulated Raman adiabatic passage in two-level systems with permanent dipole moments
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063830 DEC 20 2018
98. Chaneliere, Thierry; Comparat, Daniel; Lignier, Hans
Phase-space-density limitation in laser cooling without spontaneous emission
PHYSICAL REVIEW A, 98 (6):10.1103/PhysRevA.98.063432 DEC 27 2018
97. Csehi, Andras
Single-pulse-induced total population inversion between indirectly coupled quantum states
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 2 Article Number: 025002 Published: JAN 28 2019
96. Castellini, Alessia; Jauslin, Hans Rudolf; Rousseaux, Benjamin; et al.
Quantum plasmonics with multi-emitters: application to stimulated Raman adiabatic passage
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 223
Published: DEC 21 2018
95. Unanyan, Razmik G.
Excitation of strongly interacting moving Rydberg atoms by photon recoil momentum
EUROPEAN PHYSICAL JOURNAL D Volume: 72 Issue: 12 Article Number: 228
Published: DEC 21 2018
94. Sola, Ignacio R.; Chang, Bo Y.; Malinovskaya, Svetlana A.; Malinovsky, Vladimir S.
Quantum Control in Multilevel Systems
Edited by: Arimondo E; DiMauro LF; Yelin SF
ADVANCES IN ATOMIC, MOLECULAR, AND OPTICAL PHYSICS, VOL 67, 67 151-256; 10.1016/bs.aamop.2018.02.003 2018
93. Giannelli, Luigi; Schmit, Tom; Morigi, Giovanna
Weak coherent pulses for single-photon quantum memories
PHYSICA SCRIPTA, 94 (1):10.1088/1402-4896/aeee36 JAN 2019
92. Gazazyan, E; Grigoryan, G; Khachatryan, D
Four-Photon Adiabatic Excitation of Rydberg States
JOURNAL OF CONTEMPORARY PHYSICS-ARMENIAN ACADEMY OF SCIENCES, 53 (4):293-300; 10.3103/S1068337218040047 OCT 2018
91. Biro, Laszlo; Csehi, Andras
Time-dependent state populations with and without the rotating wave approximation: a model-based study
JOURNAL OF MODERN OPTICS, 66 (2):119-129; 10.1080/09500340.2018.1512673 JAN 19 2019
90. Parshkov, OM
Normal modes for electromagnetically induced transparency in a lambda system of degenerate energy levels
QUANTUM ELECTRONICS, 48 (11):1027-1034; 10.1070/QEL16683 2018
89. Niu, Ying-Yu; Wang, Rong
Adiabatic population transfer between electronic states of LiH molecule in two picosecond laser pulses
AIP ADVANCES, 8 (11):10.1063/1.5052465 NOV 2018
88. Leyton, V; Arguelles, A; Camargo, M
Quench Dynamics of Neutral Atoms in Out-Equilibrium One-Dimensional Optical Lattices
COMMUNICATIONS IN THEORETICAL PHYSICS, 70 (4):496-500; 10.1088/0253-6102/70/4/496 OCT 2018
87. Ban, Yue; Jiang, Li-Xin; Li, Yi-Chao; Wang, Lin-Jun; Chen, Xi
Fast creation and transfer of coherence in triple quantum dots by using shortcuts to adiabaticity
OPTICS EXPRESS, 26 (24):31137-31149; 10.1364/OE.26.031137 NOV 26 2018
86. Omiste, Juan J.; Floss, Johannes; Brume, Paul
Coherent Control of Penning and Associative Ionization: Insights from Symmetries
PHYSICAL REVIEW LETTERS, 121 (16):10.1103/PhysRevLett.121.163405 OCT 17 2018
85. Ke, Shaolin; Zhao, Dong; Liu, Qingjie; Liu, Weiwei
Adiabatic transfer of surface plasmons in non-Hermitian graphene waveguides
OPTICAL AND QUANTUM ELECTRONICS, 50 (11):10.1007/s11082-018-1661-3 NOV 2018
84. Huang, Bi-Hua; Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
Shortcut Scheme for One-Step Implementation of a Three-Qubit Nonadiabatic Holonomic Gate

83. Vepsalainen, A; Paraoanu, GS
Cross-coupling effects in circuit-QED stimulated Raman adiabatic passage
Journal of Physics Conference Series, 28th International Conference on Low Temperature Physics (LT28), Chalmers Univ Technol, Gothenburg, SWEDEN, 969
10.1088/1742-6596/969/1/012141 2018
82. Reddy, Dileep, V; Raymer, Michael G.
Photonic temporal-mode multiplexing by quantum frequency conversion in a dichroic-finesse cavity
OPTICS EXPRESS, 26 (21):28091-28103; 10.1364/OE.26.028091 OCT 15 2018
81. Grass, Tobias; Gullans, Michael; Bienias, Przemyslaw; Zhu, Guanyu; Ghazaryan, Areg; Ghaemi, Pouyan; Hafezi, Mohammad
Optical control over bulk excitations in fractional quantum Hall systems
PHYSICAL REVIEW B, 98 (15):10.1103/PhysRevB.98.155124 OCT 15 2018
80. Matekole, Elisha S.; Lee, Hwang; Dowling, Jonathan P.
Limits to atom-vapor-based room-temperature photon-number-resolving detection
PHYSICAL REVIEW A, 98 (3):10.1103/PhysRevA.98.033829 SEP 28 2018
79. Ma, Rui-Qiong; Chai, Bao-Yu; Liang, Meng; Duan, Zuo-Liang; Zhang, Wen-Wen; Dong, Jun; Shi, Jian
High-fidelity stimulated Raman adiabatic passage analog in optimum three-waveguide system
OPTICS COMMUNICATIONS, 430 1-8; 10.1016/j.optcom.2018.08.027 JAN 1 2019
78. Ban, Yue; Chen, Xi; Platero, Gloria
Fast long-range charge transfer in quantum dot arrays
NANOTECHNOLOGY, 29 (50):10.1088/1361-6528/aeeOce DEC 14 2018
77. Veljic, Vladimir; Lima, Aristeu R. P.; Chomaz, Lauriane; Baier, Simon; Mark, Manfred J.; Ferlaino, Francesca; Pelster, Axel; Balaz, Antun
Ground state of an ultracold Fermi gas of tilted dipoles in elongated traps
NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aade24 SEP 13 2018
76. Oliveira, AN; Sacramento, RL; Moreira, LS; Azevedo, LOA; Wolff, W; Cesar, CL
Heteronuclear molecules from matrix isolation sublimation and atomic diffusion
JOURNAL OF CHEMICAL PHYSICS, 149 (8):10.1063/1.5043421 AUG 28 2018
75. Barredo, Daniel; Lienhard, Vincent; De Leseleuc, Sylvain; Lahaye, Thierry; Browaeys, Antoine
Synthetic three-dimensional atomic structures assembled atom by atom
NATURE, 561 (7721):79-82; 10.1038/s41586-018-0450-2 SEP 6 2018
74. Sun, Shuo; Zhang, Jingyuan Linda; Fischer, Kevin A.; Burek, Michael J.; Dory, Constantin; Lagoudakis, Konstantinos G.; Tzeng, Yan-Kai; Radulaski, Marina; Kelaita, Yousif; Safavi-Naeini, Amir; Shen, Zhi-Xun; Melosh, Nicholas A.; Chu, Steven; Loncar, Marko; Vuckovic, Jelena
Cavity-Enhanced Raman Emission from a Single Color Center in a Solid
PHYSICAL REVIEW LETTERS, 121 (8):10.1103/PhysRevLett.121.083601 AUG 21 2018
73. Zhang, Xiaofan; Li, Liang; Zhu, Xiaosong; Liu, Kunlong; Liu, Xi; Wang, Dian; Lan, Pengfei; Barth, Ingo; Lu, Peixiang
Subpetahertz helicity-modulated high-order harmonic radiation
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.023418 AUG 20 2018
72. Abad, Tahereh; Molmer, Klaus
Critical slowing down of multiatom entanglement by Rydberg blockade
PHYSICAL REVIEW A, 98 (2):10.1103/PhysRevA.98.022324 AUG 21 2018
71. Haase, JF; Wang, ZY; Casanova, J; Plenio, MB
Soft Quantum Control for Highly Selective Interactions among Joint Quantum Systems
PHYSICAL REVIEW LETTERS, 121 (5):10.1103/PhysRevLett.121.050402 AUG 2 2018
70. Ivanov, Peter A.; Letscher, Fabian; Simon, Jonathan; Fleischhauer, Michael
Adiabatic flux insertion and growing of Laughlin states of cavity Rydberg polaritons
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.013847 JUL 27 2018
69. Weigl, Peter; Talluto, Vincenzo; Walther, Thomas; Blochowicz, Thomas
Triplet Solvation Dynamics of Hydrogen Bonding Liquids in Confinement
ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS, 232 (7-8):1017-1039; SI 10.1515/zpch-2017-1024 JUL 2018
68. Gratsea, A; Nikolopoulos, GM; Lambropoulos, P
Photon-assisted quantum state transfer and entanglement generation in spin chains
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.012304 JUL 5 2018
67. Shirkhanghah, N; Saadati-Niari, M; Ahadpour, S
Creation of qutrit and one-qubit gates in atom-cavity-laser systems by adiabatic passage
QUANTUM INFORMATION PROCESSING, 17 (8):10.1007/s11128-018-1972-0 AUG 2018
66. Tagliaferri, MLV; Bavdaz, PL; Huang, W; Dzurak, AS; Culcer, D; Veldhorst, M
Impact of valley phase and splitting on readout of silicon spin qubits
PHYSICAL REVIEW B, 97 (24):10.1103/PhysRevB.97.245412 JUN 14 2018
65. Malinovskaya, Svetlana A.; Liu, Gengyuan
Adiabatic Passage Control Methods for Ultracold Alkali Atoms and Molecules via Chirped Laser Pulses and Optical Frequency Combs
ADVANCES IN QUANTUM CHEMISTRY, VOL 77, 77 241-294; 10.1016/bs.aiq.2018.02.001 2018
64. Yu, Xiao-Tong; Zhang, Qi; Ban, Yue; Chen, Xi
Fast and robust control of two interacting spins
PHYSICAL REVIEW A, 97 (6):10.1103/PhysRevA.97.062317 JUN 11 2018
63. de Leseleuc, Sylvain; Barredo, Daniel; Lienhard, Vincent; Browaeys, Antoine; Lahaye, Thierry
Analysis of imperfections in the coherent optical excitation of single atoms to Rydberg states
PHYSICAL REVIEW A, 97 (5):10.1103/PhysRevA.97.053803 MAY 3 2018
62. Benseny, Albert; Reshodko, Irina; Busch, Thomas
Entanglement in Spatial Adiabatic Processes for Interacting Atoms
FEW-BODY SYSTEMS, 59 (4):10.1007/s00601-018-1366-y JUL 2018
61. Militello, Benedetto
Steepest entropy ascent for two-state systems with slowly varying Hamiltonians
PHYSICAL REVIEW E, 97 (5):10.1103/PhysRevE.97.052113 MAY 14 2018
60. Vepsalainen, A; Danilin, S; Paraoanu, GS
Optimal superadiabatic population transfer and gates by dynamical phase corrections
QUANTUM SCIENCE AND TECHNOLOGY, 3 (2):10.1088/2058-9565/aaa640 APR 2018
59. Vogell, B; Vermersch, B; Northup, TE; Lanyon, BP; Muschik, CA
Deterministic quantum state transfer between remote qubits in cavities
QUANTUM SCIENCE AND TECHNOLOGY, 2 (4):10.1088/2058-9565/aa868b DEC 2017
58. Guo, Yu; Dong, Daoyi; Shu, Chuan-Cun
Optimal and robust control of quantum state transfer by shaping the spectral phase of ultrafast laser pulses
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 20 (14):9498-9506; 10.1039/c8cp00512e APR 14 2018
57. Fabri, Csaba; Albert, Sieghard; Chen, Ziqiu; Prentner, Robert; Quack, Martin
A molecular quantum switch based on tunneling in meta-D-phenol C6H4DOH
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, 20 (11):7387-7394; 10.1039/c8cp00133b MAR 21 2018
- 56 Chang, BY; Sola, IR; Malinovsky, VS
Anomalous Rabi Oscillations in Multilevel Quantum Systems
PHYSICAL REVIEW LETTERS, 120 (13):10.1103/PhysRevLett.120.133201 MAR 27 2018
55. Paul, Koushik; Sarma, Amarendra K.
Fast and efficient wireless power transfer via transitionless quantum driving
SCIENTIFIC REPORTS, 8 10.1038/s41598-018-22562-9 MAR 7 2018
54. Zhang, Wei; Liu, Xiaosong; Wu, Honglin; Song, Yunfei; Liu, Weilong; Yang, Yanqiang
Tracking coherent population transfer and thermal population relaxation in condensed system by broad-band transient grating spectroscopy
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 51 (7):10.1088/1361-6455/aab1aa APR 14 2018
53. Chen, Xi; Wen, Rui-Dan; Shi, Jie-Long; Tseng, Shuo-Yen
Compact beam splitters in coupled waveguides using shortcuts to adiabaticity

52. Zeng, Yong; Wang, Kun-Peng; Liu, Yang-Yang; He, Xiao-Dong; Liu, Min; Xu, Peng; Wang, Jin; Zhan, Ming-Sheng

Stabilizing dual laser with a tunable high-finesse transfer cavity for single-atom Rydberg excitation

JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (2):454-459; 10.1364/JOSAB.35.000454 FEB 1 2018

51. Greener, H.; Suchowski, H.

Composite pulses in N-level systems with SU(2) symmetry and their geometrical representation on the Majorana sphere

JOURNAL OF CHEMICAL PHYSICS, 148 (7):10.1063/1.5013672 FEB 21 2018

50. Mortensen, Henrik Lund; Sorensen, Jens Jakob W. H.; Molmer, Klaus; Sherson, Jacob Friis

Fast state transfer in a Lambda-system: a shortcut-to-adiabaticity approach to robust and resource optimized control

NEW JOURNAL OF PHYSICS, 20 10.1088/1367-2630/aaac8a FEB 19 2018

49. Mathisen, Thomas; Larson, Jonas

Liouvillian of the Open STIRAP Problem

ENTROPY, 20 (1):10.3390/e20010020 JAN 2018

48. Wang, Ying-Dan; Zhang, Rong; Yan, Xiao-Bo; Chesi, Stefano

Optimization of STIRAP-based state transfer under dissipation

NEW JOURNAL OF PHYSICS, 19 10.1088/1367-2630/aa7f5d SEP 28 2017

47. Kani, A.; Wanare, Harshawardhan

Anisotropic nonlinear optics based on quantum interference

EPL, 120 (3):10.1209/0295-5075/120/33001 NOV 2017

46. Seesselberg, Frauke; Buchheim, Nikolaus; Lu, Zhen-Kai; Schneider, Tobias; Luo, Xin-Yu; Tiemann, Eberhard; Bloch, Immanuel; Gohle, Christoph

Modeling the adiabatic creation of ultracold polar (NaK)-Na-23-K-40 molecules

PHYSICAL REVIEW A, 97 (1):10.1103/PhysRevA.97.013405 JAN 12 2018

45. Park, SJ; Yoon, JW; Ishiyama, H; Kang, BH; Woo, HJ; Jeong, SC

Efficient ionization of atomic tin assisted by N-type multiphoton Raman resonances

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, 414 79-83;

10.1016/j.nimb.2017.10.031 JAN 1 2018

44. Geiger, Remi; Trupke, Michael

Proposal for a Quantum Test of the Weak Equivalence Principle with Entangled Atomic Species

PHYSICAL REVIEW LETTERS, 120 (4):10.1103/PhysRevLett.120.043602 JAN 25 2018

43. Fresch, Barbara; Bocquel, Juanita; Hiluf, Dawit; Rogge, Sven; Levine, Raphael D.; Remacle, Françoise

Implementation of Multivariable Logic Functions in Parallel by Electrically Addressing a Molecule of Three Dopants in Silicon

CHEMPHYSCHEM, 18 (13):1790-1797; SI 10.1002/cphc.201700222 JUL 5 2017

42. Gu, Xiu; Kockum, Anton Frisk; Miranowicz, Adam; Liu, Yu-xi; Nori, Franco

Microwave photonics with superconducting quantum circuits

PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS, 718 1-102;

10.1016/j.physrep.2017.10.002 NOV 30 2017

41. Zhang Lu; Yan Lu-Yao; Bao Hui-Han; Chai Xiao-Qian; Ma Dan-Dan; Wu Qian-Nan; Xia Ling-Chen; Yao Dan; Qian Jing

Theoretical research on an efficient population transfer based on two different laser pulse sequences

ACTA PHYSICA SINICA, 66 (21):10.7498/aps.66.213301 NOV 5 2017

40. Shi, Jian; Ma, Rui-Qiong; Duan, Zuo-Liang; Liang, Meng; Chai, Bao-Yu; Dong, Jun

Geometrical representation of coherent tunneling process in two-waveguide and three-waveguide coupler

CHINESE PHYSICS B, 26 (12):10.1088/1674-1056/26/12/124214 DEC 2017

39. Huang, Wei; Liang, Shi-Jun; Kyoseva, Elica; Ang, Lay Kee

Adiabatic control of surface plasmon-polaritons in a 3-layers graphene curved configuration

CARBON, 127 187-192; 10.1016/j.carbon.2017.10.087 FEB 2018

38. Dorier, V; Gevorgyan, M; Ishkhanyan, A; Leroy, C; Jauslin, HR; Guerin, S

Nonlinear Stimulated Raman Exact Passage by Resonance-Locked Inverse

Engineering

PHYSICAL REVIEW LETTERS, 119 (24):10.1103/PhysRevLett.119.243902 DEC 13 2017

37. Chung, Hung-Pin; Huang, Kuang-Hsu; Wang, Kai; Yang, Sung-Lin; Yang, Shih-Yuan; Sung, Chun-I; Solntsev, Alexander S.; Sukhorukov, Andrey A.; Neshev, Dragomir N.; Chen, Yen-Hung

Asymmetric adiabatic couplers for fully-integrated broadband quantum-polarization state preparation

SCIENTIFIC REPORTS, 7 10.1038/s41598-017-17094-7 DEC 4 2017

36. Li, Hong; Shen, H. Z.; Wu, S. L.; Yi, X. X.

Shortcuts to adiabaticity in non-Hermitian quantum systems without rotating-wave approximation

OPTICS EXPRESS, 25 (24):30135-30148; 10.1364/OE.25.030135 NOV 27 2017

35. Higgins, Gerard; Pokorny, Fabian; Zhang, Chi; Bodart, Quentin; Hennrich, Markus

Coherent Control of a Single Trapped Rydberg Ion

PHYSICAL REVIEW LETTERS, 119 (22):10.1103/PhysRevLett.119.220501 NOV 28 2017

34. Zhang, Qi; Chen, Xi; Guery-Odelin, D.

Reverse engineering protocols for controlling spin dynamics

SCIENTIFIC REPORTS, 7 10.1038/s41598-017-16146-2 NOV 17 2017

33. Afa, IJ; Font, JL; Serrat, C

Control of rubidium low-lying Rydberg states with trichromatic femtosecond pi pulses for ultrafast quantum information processing

PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053843 NOV 20 2017

32. Setiawan, Iwan; Gunara, Bobby Eka; Masuda, Shumpei; Nakamura, Katsuhiko

Fast forward of the adiabatic spin dynamics of entangled states

PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.052106 NOV 8 2017

31. Parshkov, OM

Elliptically polarised normal modes under conditions of nonstationary electromagnetically induced transparency

QUANTUM ELECTRONICS, 47 (10):892-900; 10.1070/QEL16444 2017

30. Queralto, Gerard; Ahufinger, Veronica; Mompert, Jordi

Mode-division (de)multiplexing using adiabatic passage and supersymmetric waveguides

OPTICS EXPRESS, 25 (22):27396-27404; 10.1364/OE.25.027396 OCT 30 2017

29. Aydinoglan, Gunes; Guven, Kaan

Asymmetric Rosen-Zener-like transition through a soliton-surface-plasmon photonic Josephson junction with spatially varying coupling

PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.053802 NOV 1 2017

28. Yang, Rong-Can; Lin, Xiu; Liu, Hong-Yu

Singlet-State Preparation for Three Lambda-type Atoms with Rydberg Blockade Mechanism

COMMUNICATIONS IN THEORETICAL PHYSICS, 68 (2):215-219; 10.1088/0253-6102/68/2/215 AUG 2017

27. Kirova, T; Cinins, A; Efimov, DK; Bruvelis, M; Miculis, K; Bezuglov, NN; Auzinsh, M; Ryabtsev, II; Ekers, A

Hyperfine interaction in the Autler-Townes effect: The formation of bright, dark, and chameleon states

PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043421 OCT 26 2017

26. Han, Yong-Chang

Steering population transfer between electronic states of the Na-2 molecule beyond the rotating wave approximation

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, 50 (22):10.1088/1361-6455/aa90d9 NOV 28 2017

25. Waechtler, Falk; Lima, Aristeu R. P.; Pelster, Axel

Low-lying excitation modes of trapped dipolar Fermi gases: From the collisionless to the hydrodynamic regime

PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043608 OCT 10 2017

24. Longhi, Stefano

Oscillating potential well in the complex plane and the adiabatic theorem

PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.042101 OCT 2 2017

23. Zhou, Zheng-Yang; Chen, Mi; Wu, Lian-Ao; Yu, Ting; You, J. Q.

Dark state with counter-rotating dissipative channels

SCIENTIFIC REPORTS, 7 10.1038/s41598-017-06157-4 JUL 24 2017

22. Yang, Rong-Can; Lin, Xiu; Liu, Hong-Yu
Singlet-State Preparation for Three Lambda-type Atoms with Rydberg Blockade Mechanism
COMMUNICATIONS IN THEORETICAL PHYSICS Volume: 68 Issue: 2 Pages: 215-219 Published: AUG 2017
21. Wu, Huaizhi; Huang, Xi-Rong; Hu, Chang-Sheng; Yang, Zhen-Biao; Zheng, Shi-Biao
Rydberg-interaction gates via adiabatic passage and phase control of driving fields
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.022321 AUG 23 2017
20. Lefkidis, G; Sold, S; Hubner, W
Relaxation of a coherent, magnetic s-p model system coupled to one and two thermal baths and a laser pulse
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, 432 276-282; 10.1016/j.jmmm.2017.01.093 JUN 15 2017
19. Gustin, Chris; Hughes, Stephen
Influence of electron-phonon scattering for an on-demand quantum dot single-photon source using cavity-assisted adiabatic passage
PHYSICAL REVIEW B, 96 (8):10.1103/PhysRevB.96.085305 AUG 10 2017
18. Coto, Raul; Jacques, Vincent; Hetet, Gabriel; Maze, Jeronimo R.
Stimulated Raman adiabatic control of a nuclear spin in diamond
PHYSICAL REVIEW B, 96 (8):10.1103/PhysRevB.96.085420 AUG 14 2017
17. Benseny, Albert; Kiely, Anthony; Zhang, Yongping; Busch, Thomas; Ruschhaupt, Andreas
Spatial non-adiabatic passage using geometric phases
EPJ QUANTUM TECHNOLOGY, 4 10.1140/epjqt/s40507-017-0056-x MAR 28 2017
16. Zhou, Zheng-Yang; Chen, Mi; Wu, Lian-Ao; Yu, Ting; You, J. Q.
Dark state with counter-rotating dissipative channels
SCIENTIFIC REPORTS, 7 10.1038/s41598-017-06157-4 JUL 24 2017
15. Reshodko, Irina; Benseny, Albert; Busch, Thomas
Robust boson dispenser: Quantum state preparation in interacting many-particle systems
PHYSICAL REVIEW A, 96 (2):10.1103/PhysRevA.96.023606 AUG 3 2017
14. Fresch, Barbara; Bocquel, Juanita; Hiluf, Dawit; Rogge, Sven; Levine, Raphael D.; Remacle, Françoise
Implementation of Multivariable Logic Functions in Parallel by Electrically Addressing a Molecule of Three Dopants in Silicon
CHEMPHYSICHEM, 18 (13):1790-1797; SI 10.1002/cphc.201700222 JUL 5 2017
13. Longhi, Stefano
Nonadiabatic robust excitation transfer assisted by an imaginary gauge field
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.062122 JUN 27 2017
12. Kosicki, Maciej Bartosz; Kedziera, Dariusz; Zuchowski, Piotr Szymon
Ab Initio Study of Chemical Reactions of Cold SrF and CaF Molecules with Alkali-Metal and Alkaline-Earth-Metal Atoms: The Implications for Sympathetic Cooling
JOURNAL OF PHYSICAL CHEMISTRY A, 121 (21):4152-4159; 10.1021/acs.jpca.7b01523 JUN 1 2017
11. Van Damme, L; Ansel, Q; Glaser, SJ; Sugny, D
Robust optimal control of two-level quantum systems
PHYSICAL REVIEW A, 95 (6):10.1103/PhysRevA.95.063403 JUN 2 2017
10. Veljic, Vladimir; Balaz, Antun; Pelster, Axel
Time-of-flight expansion of trapped dipolar Fermi gases: From the collisionless to the hydrodynamic regime
PHYSICAL REVIEW A, 95 (5):10.1103/PhysRevA.95.053635 MAY 26 2017
9. Golubev, Nikolay V.; Despre, Victor; Kuleff, Alexander I.
Quantum control with smoothly varying pulses: general theory and application to charge migration
JOURNAL OF MODERN OPTICS Volume: 64 Issue: 10-11 Pages: 1031-1041 Published: 2017
8. Lefkidis, G.; Sold, S.; Huebner, W.
Relaxation of a coherent, magnetic s-p model system coupled to one and two thermal baths and a laser pulse
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 432 Pages: 276-282 Published: JUN 15 2017
7. Ng, Vincent; Vaitkus, Jesse A.; Chaboyer, Zachary J.; Thach Nguyen; Dawes, Judith M.; Withford, Michael J.; Greentree, Andrew D.; Steel, M. J.
OPTICS EXPRESS Volume: 25 Issue: 3 Pages: 2552-2559 Published: FEB 6 2017
6. Ribeiro, Hugo; Baksic, Alexandre; Clerk, Aashish A.
Systematic Magnus-Based Approach for Suppressing Leakage and Nonadiabatic Errors in Quantum Dynamics
PHYSICAL REVIEW X, 7 (1):10.1103/PhysRevX.7.011021 FEB 22 2017
5. Kiely, A; Muga, JG; Ruschhaupt, A
Effect of Poisson noise on adiabatic quantum control
PHYSICAL REVIEW A, 95 (1):10.1103/PhysRevA.95.012115 JAN 13 2017
4. Lacki, M; Baranov, MA; Pichler, H; Zoller, P
Nanoscale "Dark State" Optical Potentials for Cold Atoms
PHYSICAL REVIEW LETTERS, 117 (23):10.1103/PhysRevLett.117.233001 NOV 30 2016
3. Della Valle, Giuseppe; Perozziello, Gerardo; Longhi, Stefano
Shortcut to adiabaticity in full-wave optics for ultra-compact waveguide junctions
JOURNAL OF OPTICS Volume: 18 Issue: 9 Article Number: 09LT03 Published: SEP 2016
2. Li, Yi-Chao; Chen, Xi
Shortcut to adiabatic population transfer in quantum three-level systems: Effective two-level problems and feasible counterdiabatic driving
PHYSICAL REVIEW A, 94 (6):10.1103/PhysRevA.94.063411 DEC 9 2016
1. Unanyan, RG
Robust population transfer in atomic beams induced by Doppler shifts
APPLIED PHYSICS B-LASERS AND OPTICS, 122 (10):10.1007/s00340-016-6538-1 OCT 2016
- =====
- 188. G. T. Genov, D. Schraft, N. V. Vitanov, and T. Halfmann**
Arbitrarily accurate pulse sequences for robust dynamical decoupling
Phys. Rev. Lett. 118, 133202 (5pp) (2017)
17. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612 Published: MAY 25 2021
16. Liu, Bao-Jie; Yung, Man-Hong
Coherent control with user-defined passage
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 025002 Published: APR 2021
15. Wang, Zhenyu; Casanova, Jorge; Plenio, Martin B.
Enhancing the Robustness of Dynamical Decoupling Sequences with Correlated Random Phases
SYMMETRY-BASEL Volume: 12 Issue: 5 Published: MAY 2020
14. Xia, Kangwei; Kolesov, Roman; Wang, Ya; Siyushev, Petr; Kornher, Thomas; Reuter, Rolf; Yang, Sen; Wrachtrup, Joerg
Spectroscopy properties of a single praseodymium ion in a crystal
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 7 Article Number: 073002 Published: JUL 2020
13. Zhou, Hengyun; Choi, Joonhee; Choi, Soonwon; Landig, Renate; Douglas, Alexander M.; Isoya, Junichi; Jelezko, Fedor; Onoda, Shinobu; Sumiya, Hitoshi; Cappellaro, Paola; Knowles, Helena S.; Park, Hongkun; Lukin, Mikhail D.
Quantum Metrology with Strongly Interacting Spin Systems
PHYSICAL REVIEW X Volume: 10 Issue: 3 Article Number: 031003 Published: JUL 2 2020
12. Choi, Joonhee; Zhou, Hengyun; Knowles, Helena S.; Landig, Renate; Choi, Soonwon; Lukin, Mikhail D.
Robust Dynamic Hamiltonian Engineering of Many-Body Spin Systems
PHYSICAL REVIEW X Volume: 10 Issue: 3 Article Number: 031002 Published: JUL 2 2020
11. Yi-Hao Kang, Zhi-Cheng Shi, Bi-Hua Huang, Jie Song, and Yan Xia
Flexible scheme for the implementation of nonadiabatic geometric quantum computation
Phys. Rev. A 101, 032322 – Published 16 March 2020; Erratum Phys. Rev. A 101, 049902 (2020)
10. Ji, Yinghua; Hu, Juju

9. Liu, Bao-Jie; Song, Xue-Ke; Xue, Zheng-Yuan; Wang, Xin; Yung, Man-Hong
Plug-and-Play Approach to Nonadiabatic Geometric Quantum Gates
PHYSICAL REVIEW LETTERS, 123 (10):10.1103/PhysRevLett.123.100501 SEP 3
2019

8. Wang, Zhen-Yu; Lang, Jacob E.; Schmitt, Simon; Lang, Johannes; Casanova,
Jorge; McGuinness, Liam; Monteiro, Tania S.; Jelezko, Fedor; Plenio, Martin B.
Randomization of Pulse Phases for Unambiguous and Robust Quantum Sensing
PHYSICAL REVIEW LETTERS, 122 (20):10.1103/PhysRevLett.122.200403 MAY 24
2019

7. Minnegaliev, MM; Urmancehev, RV; Skrebnev, VA; Moiseev, SA
Investigation of a Sequence of Dynamical Decoupling Pulses for Dipole-Coupled
Spin Systems with Inhomogeneous Broadening
OPTICS AND SPECTROSCOPY, 126 (1):1-5; 10.1134/S0030400X19010120 JAN
2019

6. Woelk, Sabine; Sriarunothai, Theeraphot; Giri, Gouri S.; Wunderlich, Christof
Distinguishing between statistical and systematic errors in quantum process
tomography
NEW JOURNAL OF PHYSICS, 21 10.1088/1367-2630/aaf5f2 JAN 18 2019

5. Sriarunothai, Th; Woelk, S.; Giri, G. S.; et al.
Speeding-up the decision making of a learning agent using an ion trap quantum
processor
QUANTUM SCIENCE AND TECHNOLOGY Volume: 4 Issue: 1 Article Number:
015014 Published: JAN 2019

4. Pokharel, Bibek; Anand, Namit; Fortman, Benjamin; Lidar, Daniel A.
Demonstration of Fidelity Improvement Using Dynamical Decoupling with
Superconducting Qubits
PHYSICAL REVIEW LETTERS, 121 (22):10.1103/PhysRevLett.121.220502 NOV 29
2018

3. Yushkov, Konstantin B.; Molchanov, Vladimir Ya.; Ovchinnikov, Andrey V.;
Chefonov, Oleg V.
Acousto-optic replication of ultrashort laser pulses
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043866 OCT 30 2017

2. Qi, Haoyu; Dowling, Jonathan P.; Viola, Lorenza
Optimal digital dynamical decoupling for general decoherence via Walsh
modulation
QUANTUM INFORMATION PROCESSING, 16 (11):10.1007/s11128-017-1719-3
NOV 2017

1. Afek, Gadi; Coslovsky, Jonathan; Mil, Alexander; Davidson, Nir
Revival of Raman coherence of trapped atoms
PHYSICAL REVIEW A, 96 (4):10.1103/PhysRevA.96.043831 OCT 13 2017

=====
189. R. Grimaudo, A. Messina, P. A. Ivanov, and N. Vitanov
Spin-1/2 sub-dynamics nested in the quantum dynamics of two coupled qutrits
J. Phys. A 50, 175301(14pp) (2017)

1. Kenmoe, MB; Tchabda, AB; Fai, LC
SU(3) Landau-Zener interferometry with a transverse periodic drive
PHYSICAL REVIEW B, 96 (12):10.1103/PhysRevB.96.125126 SEP 18 2017

=====
190. K. N. Zlatanov and N. V. Vitanov
**Adiabatic generation of arbitrary coherent superpositions of two quantum states:
Exact and approximate solutions**
Phys. Rev. A 96, 013415(10pp) (2017)

2. Sun, Hui; Xu, Ning; Fan, Shuangli; Liu, Mingwei
Speeding up the creation of coherent superposition states by shortcut-to-
adiabaticity means
ANNALS OF PHYSICS Volume: 418 Article Number: 168200 Published: JUL
2020

1. Ran, Du; Zhang, Bin; Chen, Ye-Hong; Shi, Zhi-Cheng; Xia, Yan; Ianculescu,
Reuben; Scheuer, Jacob; Gover, Avraham
Effective pulse reverse-engineering for strong field-matter interaction
OPTICS LETTERS Volume: 45 Issue: 13 Pages: 3597-3600 Published: JUL 1

=====
191. B. T. Torosov and N. V. Vitanov
Pseudo-Hermitian Landau-Zener-Stueckelberg-Majorana model
Phys. Rev. A 96, 013845(5pp) (2017)

10. Landau-Zener-Stueckelberg-Majorana interference of a spin-orbit-coupled
Bose-Einstein condensate
Zhang, X.-X., Wang, W.-Y., Dou, F.-Q.
European Physical Journal D 75(5),150 (2021)

9. Kam, Chon-Fai; Chen, Yang
Analytical approximations to the dynamics of cubic level crossing model
ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND PHYSIK Volume: 72 Issue:
3 Article Number: 91 Published: JUN 2021

8. Krajewska, K.; Kaminski, J. Z.
Unitary versus pseudounitary time evolution and statistical effects in the
dynamical Sauter-Schwinger process
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 062116
Published: DEC 13 2019

7. Militello, Benedetto
Degenerate Landau-Zener model in the presence of quantum noise
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 17 Issue: 5
Article Number: 1950049 Published: AUG 2019

6. Shen, Xin; Wang, Fudong; Li, Zhi; Wu, Zhigang
Landau-Zener-Stueckelberg interferometry in PT-symmetric non-Hermitian
models<bold> </bold>
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 062514
Published: DEC 23 2019

5. Militello, Benedetto
Detuning-induced robustness of a three-state Landau-Zener model against
dissipation
PHYSICAL REVIEW A, 99 (6):10.1103/PhysRevA.99.063412 JUN 17 2019

4. Militello, Benedetto
Three-state Landau-Zener model in the presence of dissipation
PHYSICAL REVIEW A, 99 (3):10.1103/PhysRevA.99.033415 MAR 19 2019

3. Grimaudo, R; de Castro, ASM; Kus, M; Messina, A
Exactly solvable time-dependent pseudo-Hermitian su(1,1) Hamiltonian models
PHYSICAL REVIEW A, 98 (3):10.1103/PhysRevA.98.033835 SEP 28 2018

2. Li, Sheng-Chang; Fu, Li-Bin; Liu, Jie
Nonlinear Landau-Zener-Stueckelberg-Majorana interferometry
PHYSICAL REVIEW A, 98 (1):10.1103/PhysRevA.98.013601 JUL 2 2018

1. Skoromnik, OD; Feranchuk, ID
Analytic approximation for eigenvalues of a class of PT-symmetric Hamiltonians
PHYSICAL REVIEW A, 96 (5):10.1103/PhysRevA.96.052102 NOV 2 2017

=====
192. L. S. Simeonov and N. V. Vitanov
Generation of non-Abelian geometric phases in degenerate atomic transitions
Phys. Rev. A 96, 032102(7pp) (2017)

4. Yan, Guo-An; Lu, Hua; Liu, Yan
Implementation of nonadiabatic holonomic quantum computation via two
blockaded Rydberg atoms
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 136 Issue: 2 Article Number:
231 Published: FEB 19 2021

3. Zhang, Y. N.; Shen, J.; Liu, H. D.; Yi, X. X.
Non-Abelian quantum adiabatic dynamics and phase simulation with classical
resonant oscillators
PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 032213
Published: SEP 14 2020

2. Yan, Guo-An; Lu, Hua
Room Temperature High-fidelity Non-adiabatic Holonomic Quantum
Computation on Solid-state Spins in Nitrogen-vacancy Centers
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS [early access icon] Early
Access: JUN 2020

1. Yafis Barlas and Emil Prodan
Topological Braiding of Non-Abelian Midgap Defects in Classical Metamaterials
Phys. Rev. Lett. 124, 146801 – Published 7 April 2020

=====

193. P. A. Ivanov and N. V. Vitanov
Quantum sensing of the phase-space-displacement parameters using a single trapped ion
Phys. Rev. A 97, 032308(7pp) (2018)

3. Hastrup, Jacob; Park, Kimin; Filip, Radim; Andersen, Ulrik Lund
Unconditional Preparation of Squeezed Vacuum from Rabi Interactions
PHYSICAL REVIEW LETTERS Volume: 126 Issue: 15 Article Number: 153602
Published: APR 13 2021

2. Jahromi, HR; Amini, M; Ghanaatian, M
Multiparameter estimation, lower bound on quantum Fisher information, and non-Markovianity witnesses of noisy two-qubit systems
QUANTUM INFORMATION PROCESSING, 18 (11):10.1007/s11128-019-2446-8
NOV 2019

1. Polino, E; Riva, M; Valeri, M; Silvestri, R; Corrielli, G; Crespi, A; Spagnolo, N; Osellame, R; Sciarrino, F
Experimental multiphase estimation on a chip
OPTICA Volume: 6 Issue: 3 Pages: 288-295 Published: MAR 20 2019

=====

194. B. T. Torosov and N. V. Vitanov
Arbitrarily accurate twin composite pi-pulse sequences
Phys. Rev. A 97, 043408(5pp) (2018)

4. Pershin, D. A.; Yaroshenko, V. V.; Tsyganok, V. V.; Khlebnikov, V. A.; Davletov, E. T.; Shaykin, D. V.; Gadylshin, E. R.; Cojocar, I. S.; Svechnikov, E. L.; Kapitanova, P. V.; Akimov, A. V.
Microwave coherent spectroscopy of ultracold thulium atoms
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043114
Published: OCT 23 2020

3. Stefanatos, Dionisis; Paspalakis, Emmanuel
Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 11 Article Number: 115304 Published: MAR 20 2020

2. Dridi, G.; Mejatty, M.; Glaser, S. J.; Sugny, D.
Robust control of a NOT gate by composite pulses
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012321
Published: JAN 15 2020

1. Stefanatos, Dionisis; Paspalakis, Emmanuel
Resonant shortcuts for adiabatic rapid passage with only z-field control
PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019

=====

195. N. V. Vitanov
Relations between the single-pass and double-pass transition probabilities in quantum systems with two and three states
Phys. Rev. A 97, 053409(8pp) (2018)

1. Yan, Luyao; Ma, Dandan; Yu, Dongmin; Qian, Jing
Robust switching of superposition-states via a coherent double stimulated Raman adiabatic passage
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, 35 (12):3014-3020; 10.1364/JOSAB.35.003014 DEC 1 2018

=====

196. J. Randall, A. M. Lawrence, S. C. Webster, S. Weidt, N. V. Vitanov, and W. K. Hensinger
Generation of high-fidelity quantum control methods for multilevel systems
Phys. Rev. A 98, 043414(8pp) (2018)

11. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

10. Morachis Galindo, D.; Rojas, F.; Maytorena, Jesus A.

Topological Uhlmann phase transitions for a spin-j particle in a magnetic field
PHYSICAL REVIEW A Volume: 103 Issue: 4 Article Number: 042221
Published: APR 27 2021

9. Foroozandeh, M.
Spin dynamics during chirped pulses: applications to homonuclear decoupling and broadband excitation
Journal of Magnetic Resonance 318, 106768 (2020)

8. Shi, Yunong; Gokhale, Pranav; Murali, Prakash; et al.
Resource-Efficient Quantum Computing by Breaking Abstractions
Associated Data
PROCEEDINGS OF THE IEEE Volume: 108 Issue: 8 Pages: 1353-1370
Published: AUG. 2020

7. Smith, Kaitlin N.; Thornton, Mitchell A.
Entangled State Preparation for Non-binary Quantum Computing
PROCEEDINGS OF THE 2019 FOURTH IEEE INTERNATIONAL CONFERENCE ON REBOOTING COMPUTING (ICRC) Pages: 71-79 Published: 2019

6. Gokhale, Pranav; Baker, Jonathan M.; Duckering, Casey; Chong, Frederic T.; Brown, Kenneth R.; Brown, Natalie C.
Extending the Frontier of Quantum Computers With Qutrits
IEEE MICRO Volume: 40 Issue:3 Pages: 64-72 Published: MAY-JUN 2020

5. Pranav Gokhale, Jonathan M. Baker, Casey Duckering, Natalie C. Brown, Kenneth R. Brown, Frederic T. Chong
Asymptotic Improvements to Quantum Circuits via Qutrits
PROCEEDINGS OF THE 2019 46TH INTERNATIONAL SYMPOSIUM ON COMPUTER ARCHITECTURE (ISCA '19) Pages: 554-566 Published: 2019

4. Laupretre, Thomas; Groult, Lucas; Achi, Bachir; Petersen, Michael; Kersale, Yann; Delehay, Marion; Lacroute, Clement
Absolute frequency measurements of the S-1(0) -> P-1(1) transition in ytterbium
Associated Data
OSA CONTINUUM Volume: 3 Issue: 1 Pages: 50-57 Published: JAN 15 2020

3. Gokhale, P., Baker, J.M., Duckering, C., (...), Brown, K.R., Chong, F.T.
Asymptotic improvements to quantum circuits via qutrits
Proceedings - International Symposium on Computer Architecture pp. 554-566 (2019)

2. Zeng, YX; Shen, J; Gebremariam, T; Li, C
The study of interference effect in a globally coupled quantum network
QUANTUM INFORMATION PROCESSING Volume: 18 Issue: 7 Published: JUL 2019

1. Jo, Hanlae; Song, Yunheung; Ahn, Jaewook
Qubit leakage suppression by ultrafast composite pulses
OPTICS EXPRESS, 27 (4):3944-3951; 10.1364/OE.27.003944 FEB 18 2019

=====

197. A. Bruns, G. T. Genov, M. Hain, N. V. Vitanov, and T. Halfmann
Experimental demonstration of composite stimulated Raman adiabatic passage
Phys. Rev. A 98, 053413(10pp) (2018)

7. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedaei-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021

6. Beterov, I. I.; Tret'yakov, D. B.; Entin, V. M.; Yakshina, E. A.; Ryabtsev, I. I.; Saffman, M.; Bergamini, S.
Application of adiabatic passage in Rydberg atomic ensembles for quantum information processing
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 18 Article Number: 182001 Published: SEP 28 2020

5. Chang, H-S; Zhong, Y. P.; Bienfait, A.; Chou, M-H; Conner, C. R.; Dumur, E.; Grebel, J.; Peairs, G. A.; Povey, R. G.; Satzinger, K. J.; Cleland, A. N.
Remote Entanglement via Adiabatic Passage Using a Tunably Dissipative Quantum Communication System
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 24 Article Number: 240502
Published: JUN 17 2020

4. Feng, Zhi-Bo; Lu, Xiao-Jing
Optimal controls of invariant-based population transfer in a superconducting

- qutrit
 QUANTUM INFORMATION PROCESSING Volume: 19 Issue: 3 Article Number: 83 Published: JAN 18 2020
3. Xu, Tian-Niu; Liu, Kaipeng; Chen, Xi; Guerin, Stephane
 Invariant-based optimal composite stimulated Raman exact passage
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 52 Issue: 23 Article Number: 235501 Published: DEC 14 2019
2. Laforgue, X.; Chen, Xi; Guerin, S.
 Robust stimulated Raman exact passage using shaped pulses
 PHYSICAL REVIEW A, 100 (2):10.1103/PhysRevA.100.023415 AUG 21 2019
1. Wu, JL; Su, SL
 Universal speeded-up adiabatic geometric quantum computation in three-level systems via counterdiabatic driving
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, 52 (33):10.1088/1751-8121/ab2a92 AUG 16 2019
- =====
- 198. B. T. Torosov and N. V. Vitanov**
Arbitrarily accurate variable rotations on the Bloch sphere by composite pulse sequences
Phys. Rev. A 99, 013402(10pp) (2019)
5. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
 Robust single-qubit gates by composite pulses in three-level systems
 PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
 Published: MAY 25 2021
4. Li, Bing-Jie; Liu, Shuai; Wang, Yu; Kang, Yi-Hao; Shi, Zhi-Cheng; Xia, Yan
 Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control
 INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS
 [early access icon] Early Access: MAR 2021
3. Stefanatos, Dionisis; Paspalakis, Emmanuel
 Speeding up adiabatic passage with an optimal modified Roland-Cerf protocol
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL Volume: 53 Issue: 11 Article Number: 115304 Published: MAR 20 2020
2. Zhi-Cheng Shi, Cheng Zhang, Li-Tuo Shen, Yan Xia, X. X. Yi, and Shi-Biao Zheng
 Implementation of universal quantum gates by periodic two-step modulation in a weakly nonlinear qubit
 PHYSICAL REVIEW A Volume: 101 Issue: 4 Article Number: 042314
 Published: APR 14 2020
1. Stefanatos, Dionisis; Paspalakis, Emmanuel
 Resonant shortcuts for adiabatic rapid passage with only z-field control
 PHYSICAL REVIEW A, 100 (1):10.1103/PhysRevA.100.012111 JUL 12 2019
- =====
- 199. B. T. Torosov and N. V. Vitanov**
Robust high-fidelity coherent control of two-state systems by detuning pulses
Phys. Rev. A 99, 013424(8pp) (2019)
3. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
 Robust single-qubit gates by composite pulses in three-level systems
 PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
 Published: MAY 25 2021
2. Xu, Jing; Zhong, Changchun; Han, Xu; Jin, Dafei; Jiang, Liang; Zhang, Xufeng
 Coherent Gate Operations in Hybrid Magnonics
 PHYSICAL REVIEW LETTERS Volume: 126 Issue: 20 Article Number: 207202
 Published: MAY 21 2021
1. Ding, H.-J., Wu, R.-B.
 Robust quantum control against clock noises in multiqubit systems
 Physical Review A 100(2), 022302 (2019)
- =====
- 200. N. V. Vitanov and M. Drewsen**
Highly Efficient Detection and Separation of Chiral Molecules through Shortcuts to Adiabaticity
Phys. Rev. Lett. 122, 173202(5pp) (2019)
21. Tao, Ziyu; Zhang, Libo; Li, Xiaole; Niu, Jingjing; Luo, Kai; Yi, Kangyuan; Zhou, Yuxuan; Jia, Hao; Zhang, Xu; Liu, Song; Yan, Tongxing; Chen, Yuanzhen; Yu, Dapeng
 Experimental realization of phase-controlled dynamics with hybrid digital-analog approach
 NPJ QUANTUM INFORMATION Volume: 7 Issue: 1 Article Number: 73
 Published: MAY 18 2021
20. Kakkannattu, Aneeth; Eerqing, Narima; Ghamari, Shahin; Vollmer, Frank
 Review of optical sensing and manipulation of chiral molecules and nanostructures with the focus on plasmonic enhancements [Invited]
 OPTICS EXPRESS Volume: 29 Issue: 8 Pages: 12543-12579 Published: APR 12 2021
19. Ye, Chong; Liu, Bo; Chen, Yu-Yuan; Li, Yong
 Enantio-conversion of chiral mixtures via optical pumping
 PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 022830
 Published: FEB 25 2021
18. Stefanatos, D., Thanopoulos, I., Blekos, K., Paspalakis, E.
 Quantum control of generic quantum systems and nanostructures for quantum technologies: Different approaches
 CEUR Workshop Proceedings 2844, pp. 66-68 (2020)
17. Wu, J.-L., Wang, Y., Han, J.-X., (...), Jiang, Y., Song, J.
 Two-Path Interference for Enantiomer-Selective State Transfer of Chiral Molecules
 Physical Review Applied 13(4), 044021 (2020)
16. Stefanatos, D.; Paspalakis, E.
 A shortcut tour of quantum control methods for modern quantum technologies
 EPL Volume: 132 Issue: 6 Article Number: 60001 Published: DEC 2020
15. Ye, Chong; Zhang, Quansheng; Chen, Yu-Yuan; Li, Yong
 Fast enantioconversion of chiral mixtures based on a four-level double-Delta model
 PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033064
 Published: JUL 14 2020
14. Xu, Xun-Wei; Ye, Chong; Li, Yong; Chen, Ai-Xi
 Enantiomeric-excess determination based on nonreciprocal-transition-induced spectral-line elimination
 PHYSICAL REVIEW A Volume: 102 Issue: 3 Article Number: 033727
 Published: SEP 28 2020
13. Dou, Fu-Quan; Wang, Yuan-Jin; Sun, Jian-An
 Closed-loop three-level charged quantum battery
 Europhysics Letters (EPL) 131, 43001 (2020)
12. Zhang, Quansheng; Chen, Yu-Yuan; Ye, Chong; Li, Yong
 Evading thermal population influence on enantiomeric-specific state transfer based on a cyclic three-level system via ro-vibrational transitions
 JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 23 Article Number: 235103 Published: DEC 14 2020
11. Wu, Jin-Lei; Wang, Yan; Su, Shi-Lei; Xia, Yan; Jiang, Yongyuan; Song, Jie
 Discrimination of enantiomers through quantum interference and quantum Zeno effect
 OPTICS EXPRESS Volume: 28 Issue: 22 Pages: 33475-33489 Published: OCT 26 2020
10. Kang, Yi-Hao; Shi, Zhi-Cheng; Song, Jie; Xia, Yan
 Effective discrimination of chiral molecules in a cavity
 OPTICS LETTERS Volume: 45 Issue: 17 Pages: 4952-4955 Published: SEP 1 2020
9. Chen, Yu-Yuan; Ye, Chong; Zhang, Quansheng; Li, Yong
 Enantio-discrimination via light deflection effect
 JOURNAL OF CHEMICAL PHYSICS Volume: 152 Issue: 20 Article Number: 204305 Published: MAY 29 2020
8. Jin-Lei Wu, Yan Wang, Jin-Xuan Han, Cong Wang, Shi-Lei Su, Yan Xia, Yongyuan Jiang, and Jie Song
 Two-Path Interference for Enantiomer-Selective State Transfer of Chiral Molecules
 Phys. Rev. Applied 13, 044021 – Published 8 April 2020
7. Guery-Odelin, D.; Ruschhaupt, A.; Kiely, A.; Torrontegui, E.; Martinez-Garaot, S.; Muga, J. G.
 Shortcuts to adiabaticity: Concepts, methods, and applications
 REVIEWS OF MODERN PHYSICS Volume: 91 Issue: 4 Article Number: 045001
 Published: OCT 24 2019

6. Ye, Chong; Zhang, Quansheng; Chen, Yu-Yuan; Li, Yong
Determination of enantiomeric excess with chirality-dependent Stark effects in cyclic three-level models
PHYSICAL REVIEW A, 100 (3):10.1103/PhysRevA.100.033411 SEP 13 2019
5. Koch, Christiane P.; Lemesko, Mikhail; Sugny, Dominique
Quantum control of molecular rotation
REVIEWS OF MODERN PHYSICS, 91 (3):10.1103/RevModPhys.91.035005 SEP 18 2019
4. Wang, ZX; Gao, MS; Ren, SQ; Hao, XT; Qin, W
Magnetic and Electric Control of Circularly Polarized Emission through Tuning Chirality-Generated Orbital Angular Momentum in Organic Helical Polymeric Nanofibers
ADVANCED MATERIALS Early Access: OCT 2019 DOI: 10.1002/adma.201904857
3. Ye, C; Zhang, QS; Chen, YY; Li, Y
Effective two-level models for highly efficient inner-state enantioseparation based on cyclic three-level systems of chiral molecules
PHYSICAL REVIEW A Volume: 100 Issue: 4 Published: OCT 10 2019 DOI: 10.1103/PhysRevA.100.043403
2. Wu, Jin-Lei; Wang, Yan; Song, Jie; Xia, Yan; Su, Shi-Lei; Jiang, Yong-Yuan
Robust and highly efficient discrimination of chiral molecules through three-mode parallel paths
PHYSICAL REVIEW A, 100 (4):10.1103/PhysRevA.100.043413 OCT 21 2019
1. Leibscher, Monika; Giesen, Thomas F.; Koch, Christiane P.
Principles of enantio-selective excitation in three-wave mixing spectroscopy of chiral molecules
JOURNAL OF CHEMICAL PHYSICS, 151 (1):10.1063/1.5097406 JUL 7 2019
- =====
- 201. E. Stoyanova, S. Ivanov, A. Rangelov, and N. V. Vitanov**
Adiabatic motion of a charged particle in spatially uniform and nonuniform static magnetic fields
Physica Scripta **94**, 055501(4pp) (2019)
- =====
- 202. R. Grimaudo, N. V. Vitanov, and A. Messina**
Coupling-assisted Landau-Majorana-Stueckelberg-Zener transition in two-interacting-qubit systems
Phys. Rev. B **99**, 174416(8pp) (2019)
- =====
- 203. L. S. Simeonov, N. V. Vitanov, and P. A. Ivanov**
Compensation of the trap-induced quadrupole interaction in trapped Rydberg ions
Scient. Rep. **9**, 7340(9pp) (2019)
- =====
- 204. R. Grimaudo, N. V. Vitanov, and A. Messina**
Landau-Majorana-Stueckelberg-Zener dynamics driven by coupling for two interacting qutrit systems
Phys. Rev. B **99**, 214406(11pp) (2019)
1. Chen, YeJia; Lu, Zhiguo; Yan, Yiyang; Zheng, Hang
Plateau dynamics with quantized oscillations of a strongly driven qubit
PHYSICAL REVIEW A Volume: 102 Issue: 5 Article Number: 053703
Published: NOV 4 2020
- =====
- 205. B. T. Torosov and N. V. Vitanov**
Composite pulses with errant phases
Phys. Rev. A **100**, 023410(9pp) (2019)
3. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021
2. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021
1. Bulmer, J. F. F.; Jones, J. A.; Walmsley, I. A.
Drive-noise tolerant optical switching inspired by composite pulses
OPTICS EXPRESS Volume: 28 Issue: 6 Pages: 8646-8657 Published: MAR 16 2020
- =====
- 206. E. Stoyanova, M. Al-Mahmoud, H. Hristova, A. Rangelov, E. Dimova, and N. V. Vitanov**
Achromatic polarization rotator with tunable rotation angle
J. Opt. **21**, 105403(5pp) (2019)
- =====
- 207. K. Bergmann, H.-C. Nggerl, C. Panda, G. Gabrielse, E. Miloglyadov, M. Quack, G. Seyfang, G. Wichmann, S. Ospelkaus, A. Kuhn, S. Longhi, A. Szameit, P. Pirro, B. Hillebrands, X.-F. Zhu, J. Zhu, M. Drewsen, W. K. Hensinger, S. Weidt, T. Halfmann, H. Wang, G. S. Paraoanu, N. V. Vitanov, J. Mompart, Th. Busch, T. J. Barnum, D. D. Grimes, R. W. Field, M. G. Raizen, E. Narevicius, M. Auzinsh, D. Budker, A. Pálffy and C. H. Keitel**
Roadmap on STIRAP applications
J. Phys. B: At. Mol. Opt. Phys. **52**, 202001(55pp) (2019)
30. Schwarzer, Michael; Toennies, J. Peter
Accurate semiempirical potential energy curves for the σ^+ -state of NaCs, KCs, and RbCs
JOURNAL OF CHEMICAL PHYSICS Volume: 154 Issue: 15 Article Number: 154304 Published: APR 21 2021
29. Tao, Ziyu; Zhang, Libo; Li, Xiaole; Niu, Jingjing; Luo, Kai; Yi, Kangyuan; Zhou, Yuxuan; Jia, Hao; Zhang, Xu; Liu, Song; Yan, Tongxing; Chen, Yuanzhen; Yu, Dapeng
Experimental realization of phase-controlled dynamics with hybrid digital-analog approach
NPJ QUANTUM INFORMATION Volume: 7 Issue: 1 Article Number: 73
Published: MAY 18 2021
28. Mukherjee, Nandini
The quantum mechanism of an ultracold reaction
NATURE Volume: 593 Issue: 7859 Pages: 344-345 Published: MAY 20 2021
27. Peik, E; Schumm, T; Safronova, MS; Pálffy, A; Weitenberg, J; Thirolf, PG
Nuclear clocks for testing fundamental physics
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 3 Article Number: 034002 Published: JUL 2021
26. Sarma, Bijita; Busch, Thomas; Twamley, Jason
Cavity magnomechanical storage and retrieval of quantum states
NEW JOURNAL OF PHYSICS Volume: 23 Issue: 4 Article Number: 043041
Published: APR 2021
25. Li, Danyu; Zheng, Wen; Chu, Ji; Yang, Xiaopei; Song, Shuqing; Han, Zhikun; Dong, Yuqian; Wang, Zhimin; Yu, Xiangmin; Lan, Dong; Zhao, Jie; Li, Shaoxiong; Tan, Xinsheng; Yu, Yang
Coherent state transfer between superconducting qubits via stimulated Raman adiabatic passage
APPLIED PHYSICS LETTERS Volume: 118 Issue: 10 Article Number: 104003
Published: MAR 8 2021
24. Cano, Daniel
Conditional STIRAP based on Rydberg blockade: entanglement fidelities in three- and four-level schemes
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 54 Issue: 4 Article Number: 045502 Published: FEB 17 2021
23. Mansourzadeh-Ashkani, N.; Saadati-Niari, M.; Zolfagharpour, F.; Nedae-Shakarab, B.
Nuclear-state population transfer using composite stimulated Raman adiabatic passage
NUCLEAR PHYSICS A Volume: 1007 Article Number: 122119 Published: MAR 2021
22. Gong, Ting; Ji, Zhonghua; Du, Jiaqi; Zhao, Yanting; Xiao, Liantuan; Jia, Suotang
Microwave-assisted coherent control of ultracold polar molecules in a ladder-type configuration of rotational states
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 23 Issue: 7 Pages: 4271-

4276 Published: FEB 21 2021

21. Liu, Bao-Jie; Yung, Man-Hong
Coherent control with user-defined passage
QUANTUM SCIENCE AND TECHNOLOGY Volume: 6 Issue: 2 Article Number: 025002 Published: APR 2021

20. Stefanatos, D.; Paspalakis, E.
A shortcut tour of quantum control methods for modern quantum technologies
EPL Volume: 132 Issue: 6 Article Number: 60001 Published: DEC 2020

19. Wang, H., Lekavicius, I.
Coupling spins to nanomechanical resonators: Toward quantum spin-mechanics
Applied Physics Letters 117(23),230501 (2020)

18. Ahmadiouri, Fatemeh; Hosseini, Mehdi; Sarreshtedari, Farrokh
Stimulated Raman adiabatic passage: Effects of system parameters on population transfer
CHEMICAL PHYSICS Volume: 539 Article Number: 110960 Published: NOV 1 2020

17. Saadati-Niari, M.; Kiazand, M.
Quantum State Engineering in Multi-Level Systems Using Shortcut to Adiabatic Passage
ACTA PHYSICA POLONICA A Volume: 138 Issue: 6 Pages: 794-800 Published: DEC 2020

16. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Jie; Zhu, Xue-Feng
Acoustic topological adiabatic passage via a level crossing
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY Volume: 64 Issue: 4 Special Issue: SI Article Number: 244302 Published: APR 2021

15. Yan, Run-Ying; Feng, Zhi-Bo
Fast generation of microwave photon Fock states in a superconducting nanocircuit
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES Volume: 127 Article Number: 114522 Published: MAR 2021

14. Dey, Amit; Kulkarni, Manas
Emergence of chaos and controlled photon transfer in a cavity-QED network
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 4 Article Number: 042004 Published: OCT 9 2020

13. Magnard, P.; Storz, S.; Kurpiers, P.; Schaer, J.; Marxer, F.; Luetolf, J.; Walter, T.; Besse, J-C; Gabureac, M.; Reuer, K.; Akin, A.; Royer, B.; Blais, A.; Wallraff, A.
Microwave Quantum Link between Superconducting Circuits Housed in Spatially Separated Cryogenic Systems
PHYSICAL REVIEW LETTERS Volume: 125 Issue: 26 Article Number: 260502 Published: DEC 21 2020

12. Huang, Wei; Zhu, Baohua; Wu, Wei; Yin, Shan; Zhang, Wentao; Guo, Chu
Population transfer via a finite temperature state
PHYSICAL REVIEW A Volume: 102 Issue: 4 Article Number: 043714 Published: OCT 21 2020

11. Sarma, Bijita; Busch, Thomas; Twamley, Jason
Optomechanical cooling by STIRAP-assisted energy transfer: an alternative route towards the mechanical ground state
NEW JOURNAL OF PHYSICS Volume: 22 Issue: 10 Article Number: 103043 Published: OCT 2020

10. Blekos, Kostas; Stefanatos, Dionisis; Paspalakis, Emmanuel
Performance of superadiabatic stimulated Raman adiabatic passage in the presence of dissipation and Ornstein-Uhlenbeck dephasing
PHYSICAL REVIEW A Volume: 102 Issue: 2 Article Number: 023715 Published: AUG 24 2020

9. Beterov, I. I.; Tretyakov, D. B.; Entin, V. M.; Yakshina, E. A.; Ryabtsev, I. I.; Saffman, M.; Bergamini, S.
Application of adiabatic passage in Rydberg atomic ensembles for quantum information processing
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS Volume: 53 Issue: 18 Article Number: 182001 Published: SEP 28 2020

8. Shen, Ya-Xi; Zeng, Long-Sheng; Geng, Zhi-Guo; Zhao, De-Gang; Peng, Yu-Gui; Zhu, Xue-Feng
Acoustic Adiabatic Propagation Based on Topological Pumping in a Coupled Multicavity Chain Lattice
PHYSICAL REVIEW APPLIED Volume: 14 Issue: 1 Article Number: 014043

Published: JUL 15 2020

7. Chang, H-S; Zhong, Y. P.; Bienfait, A.; Chou, M-H; Conner, C. R.; Dumur, E.; Grebel, J.; Peairs, G. A.; Povey, R. G.; Satzinger, K. J.; Cleland, A. N.
Remote Entanglement via Adiabatic Passage Using a Tunably Dissipative Quantum Communication System
PHYSICAL REVIEW LETTERS Volume: 124 Issue: 24 Article Number: 240502 Published: JUN 17 2020

6. Tschernig, Konrad; Leon-Montiel, Roberto de J.; Perez-Leija, Armando; Busch, Kurt
Multiphoton synthetic lattices in multiport waveguide arrays: synthetic atoms and Fock graphs
PHOTONICS RESEARCH Volume: 8 Issue: 7 Pages: 1161-1170 Published: JUL 1 2020

5. Stefanatos, Dionisis; Blekos, Kostas; Paspalakis, Emmanuel
Robustness of STIRAP Shortcuts under Ornstein-Uhlenbeck Noise in the Energy Levels
APPLIED SCIENCES-BASEL Volume: 10 Issue: 5 Article Number: 1580 Published: MAR 2020

4. Paparelle, Iris; Moro, Lorenzo; Prati, Enrico
Digitally stimulated Raman passage by deep reinforcement learning
PHYSICS LETTERS A Volume: 384 Issue: 14 Article Number: 126266 Published: MAY 18 2020

3. Run-Ying Yan, Zhi-Bo Feng, Ming Li, Chun-Li Zhang, Zheng-Yin Zhao
Speeding up the Generation of Entangled State between a Superconducting Qubit and Cavity Photons via Counterdiabatic Driving
ANNALEN DER PHYSIK Article Number: 1900613 Early Access: FEB 2020

2. Yuan, H. Y.; Zheng, Shasha; Ficek, Zbigniew; He, Q. Y.; Yung, Man-Hong
Enhancement of magnon-magnon entanglement inside a cavity
PHYSICAL REVIEW B Volume: 101 Issue: 1 Article Number: 014419 Published: JAN 14 2020

1. Huang, Wei; Yin, Shan; Zhu, Baohua; Zhang, Wentao; Guo, Chu
Population transfer via a dissipative structural continuum
PHYSICAL REVIEW A Volume: 100 Issue: 6 Article Number: 063430 Published: DEC 30 2019

=====
208. B. D. Militello and N. V. Vitanov
Master equation approach to the three-state open Majorana model
Phys. Rev. A 100, 053497(7pp) (2019)

=====
209. K. N. Zlatanov and N. V. Vitanov
Generation of arbitrary qubit states by adiabatic evolution split by a phase jump
Phys. Rev. A 101, 013426 (2020)

4. Tabatabaei, S., Haas, H., Rose, W., (...), Dalacu, D., Budakian, R.
Numerical Engineering of Robust Adiabatic Operations
Physical Review Applied 15(4),044043 (2021)

3. Spin dynamics during chirped pulses: applications to homonuclear decoupling and broadband excitation
Foroozandeh, M.
Journal of Magnetic Resonance 318, 106768 (2020)

2. Genov, Genko T.; Ben-Shalom, Yachel; Jelezko, Fedor; Retzker, Alex; Bar-Gill, Nir
Efficient and robust signal sensing by sequences of adiabatic chirped pulses
PHYSICAL REVIEW RESEARCH Volume: 2 Issue: 3 Article Number: 033216 Published: AUG 7 2020

1. Ran, Du; Zhang, Bin; Chen, Ye-Hong; Shi, Zhi-Cheng; Xia, Yan; Ianculescu, Reuven; Scheuer, Jacob; Gover, Avraham
Effective pulse reverse-engineering for strong field-matter interaction
OPTICS LETTERS Volume: 45 Issue: 13 Pages: 3597-3600 Published: JUL 1 2020

=====
210. G.T. Genov, M. Hain, N. V. Vitanov, and T. Halfmann
Universal composite pulses for efficient population inversion with an arbitrary excitation profile
Phys. Rev. A 101, 013827(9pp) (2020)

2. Li, B.-J., Liu, S., Wang, Y., (...), Shi, Z.-C., Xia, Y.
Generation of Three-Atom Singlet State with High-Fidelity by Lyapunov Control
International Journal of Theoretical Physics 60(4), pp. 1416-1424 (2021)

1. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

=====
211. N. V. Vitanov
Relations between single and repeated qubit gates: coherent error amplification for high-fidelity quantum-gate tomography
New J. Phys. 22, 023015(13pp) (2020)

=====
212. B. D. Militello and N. V. Vitanov
Open multistate Majorana model
Phys. Lett. A 384, 126196(5pp) (2020)

=====
213. P. A. Ivanov and N. V. Vitanov
Two-qubit quantum gate and entanglement protected by circulant symmetry
Scient. Rep. 10, 5030 (2020)

2. Mohamed, Abdel-Baset A.; Khalil, Eied M.; Selim, Mahmoud M.; Eleuch, Hichem
Quantum Fisher Information and Bures Distance Correlations of Coupled Two Charge-Qubits Inside a Coherent Cavity with the Intrinsic Decoherence
SYMMETRY-BASEL Volume: 13 Issue: 2 Article Number: 352 Published: FEB 2021

1. Mohamed, A.-B.A., Farouk, A., Yassen, M.F., Eleuch, H.
Dynamics of two coupled qubits interacting with two-photon transitions via a nondegenerate parametric amplifier: Nonlocal correlations under intrinsic decoherence
Journal of the Optical Society of America B: Optical Physics 37(11), pp. 3435-3442 (2020)

=====
214. B. T. Torosov, M. Drewsen and N. V. Vitanov
Efficient and robust chiral resolution by composite pulses
Phys. Rev. A 101, 063401(7pp) (2020)

1. Ye, Chong; Liu, Bo; Chen, Yu-Yuan; Li, Yong
Enantio-conversion of chiral mixtures via optical pumping
PHYSICAL REVIEW A Volume: 103 Issue: 2 Article Number: 022830
Published: FEB 25 2021

=====
215. B. T. Torosov, S. S. Ivanov and N. V. Vitanov
Narrowband and passband composite pulses for variable rotations
Phys. Rev. A 102, 013105(6pp) (2020)

1. Shi, Zhi-Cheng; Wu, Hai-Ning; Shen, Li-Tuo; Song, Jie; Xia, Yan; Yi, X. X.; Zheng, Shi-Biao
Robust single-qubit gates by composite pulses in three-level systems
PHYSICAL REVIEW A Volume: 103 Issue: 5 Article Number: 052612
Published: MAY 25 2021

=====
216. R. Grimaudo, H. Nakazato, A. Messina and N. V. Vitanov
Dzyaloshinskii-Moriya and dipole-dipole interaction affect coupling-based Landau-Majorana-Stueckelberg-Zener transitions
Phys. Rev. Res. 2, 033092(9pp) (2020)

=====
217. N. V. Vitanov
High-fidelity multistate stimulated Raman adiabatic passage assisted by shortcut fields

Phys. Rev. A 102, 023515(12pp) (2020)

2. Setiawan, I., Sugihakim, R., Gunara, B.E.
Fast forward Adiabatic Quantum Dynamics on Two Dimensional Dirac Equation
Journal of Physics: Conference Series 1842(1),012057 (2021)

1. Stefanatos, D.; Paspalakis, E.
A shortcut tour of quantum control methods for modern quantum technologies
EPL Volume: 132 Issue: 6 Article Number: 60001 Published: DEC 2020

=====
218. R. Grimaudo, A. Messina, A. Sergi, N. V. Vitanov, and S. N. Filippov
Two-qubit entanglement generation through non-Hermitian Hamiltonians induced by repeated measurements on an ancilla
Entropy 22, 1184(18pp) (2020)

=====
219. B.T. Torosov and N. V. Vitanov
High-fidelity composite quantum gates for Raman qubits
Phys. Rev. Res. 2, 043194(6pp) (2020)

=====
220. B. T. Torosov, M. Drewsen and N. V. Vitanov
Chiral resolution by composite Raman pulses
Phys. Rev. Res. 2, 043235(8pp) (2020)

=====
221. K. N. Zlatanov, G. S. Vasilev and N. V. Vitanov
Morris-Shore transformation for non-degenerate systems
Phys. Rev. A 102, 063113(8pp) (2020)

=====
222. B. T. Torosov, B. W. Shore and N. V. Vitanov
Coherent control techniques for two-state quantum systems: A comparative study
Phys. Rev. A 103, 033110(9pp) (2021)

=====
223. N. V. Vitanov
Quantum sensing of weak electric and magnetic fields by coherent amplification of energy level shift effects
Phys. Rev. A 103, 063104(9pp) (2021)

ПУБЛИКАЦИИ В СПИСАНИЯ С ИМПАКТ ФАКТОР ОТ ДОКЛАДИ НА КОНФЕРЕНЦИИ

=====

C1. M. Scala, B. Militello, A. Messina, and N. V. Vitanov
Detuning effects in STIRAP processes in the presence of quantum noise
Opt. Sprektr. 111, 623-627 (2011)

5. Luca Giorgi, Gian; Saharyan, Astghik; Guerin, Stephane; Sugny, Dominique;
Bellomo, Bruno
Microscopic and phenomenological models of driven systems in structured
reservoirs
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012122
Published: JAN 24 2020

4. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019

3. Mathisen, Thomas; Larson, Jonas
Liouvillian of the Open STIRAP Problem
ENTROPY, 20 (1):10.3390/e20010020 JAN 2018

2. Shore, Bruce W.
PRE-HISTORY OF THE CONCEPTS UNDERLYING STIMULATED RAMAN ADIABATIC
PASSAGE (STIRAP)
ACTA PHYSICA SLOVACA Volume: 63 Issue: 6 Pages: 361-482 Published: 2013

1. Yatsenko, L. P.; Shore, B. W.; Bergmann, K.
Detrimental consequences of small rapid laser fluctuations on stimulated Raman
adiabatic passage
PHYSICAL REVIEW A Volume: 89 Issue: 1 Article Number: 013831 Published:
JAN 23 2014

=====

C2. V. Yannopoulos and N. V. Vitanov
**Coherent control of surface exciton-polaritons in collections of semiconductor
nanoparticles: A theoretical study**
Photonics and Nanostructures – Fundamentals and Applications 9, 196-200
(2011)

1. Sukharev, Maxim
Control of optical properties of hybrid materials with chirped femtosecond laser
pulses under strong coupling conditions
JOURNAL OF CHEMICAL PHYSICS Volume: 141 Issue: 8 Article Number:
084712 Published: AUG 28 2014

=====

C3. M. Scala, B. Militello, A. Messina, and N. V. Vitanov
Zeno-like phenomena in STIRAP processes
Phys. Scr. T 143, 014019 (2011)

2. Luca Giorgi, Gian; Saharyan, Astghik; Guerin, Stephane; Sugny, Dominique;
Bellomo, Bruno
Microscopic and phenomenological models of driven systems in structured
reservoirs
PHYSICAL REVIEW A Volume: 101 Issue: 1 Article Number: 012122
Published: JAN 24 2020

1. Cao, Hong; Yao, Shao-Wu; Cen, Li-Xiang
Explicit construction of nonadiabatic passages for stimulated Raman transitions
PHYSICAL REVIEW A Volume: 100 Issue: 5 Article Number: 053410
Published: NOV 18 2019