1. "Raman Study of Hydrogenated RBa2Cu3O7-x (R = Y, Gd)"
V. G. Hadjiev, M. V. Abrashev, M. N. Iliev , and L. N. Bozukov

Interaction of YBa2Cu3O6.8 with atmospheric moisture during low-temperature annealing
PHYSICS OF THE SOLID STATE 56 (8) pp. 1536-1541 AUG 2014

6. Ponosov, Yu S.; Bobylev, I. B.; Zyuzeva, N. A.
Antiferromagnetic fluctuations in water-intercalated YBa2Cu3O6.8
JETP LETTERS 99 (6), pp. 340-345 MAY 2014

Diagnostics of sputtering plasma variations affecting Y-Ba-Cu-O thin film growth and properties

4. Hirata T
Hydrogen in high-T-c superconductors
PHYS STATUS SOLIDI A 156: (2) 227-250 AUG 16 1996

3. GOREN SD, KORN C, VOLterra V, et al.
NMR OF H-1 AND 2D IN HYDROGEN-DOPED AND DEUTERIUM-DOPED YBA2CU3O7
PHYS REV B 46: (21) 14142-14149 DEC 1 1992

2. KAMEI M, YOSHIDA I, TAKAHASHI H, et al.
RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL Y1BA2CU3O7-X FILMS
J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

Raman and IR spectroscopy of hydrogen-charged YBa2Cu3O7-Delta films
J ALLOY COMPD 187: (1) 59-66 AUG 27 1992

2. "Destruction of Non-Superconducting YBa2Cu3O6.3 and PrBa2Cu3O6.8 due to the Hydrogenation: Raman Scattering and X-Ray Diffraction Study"
M. V. Abrashev, L. N. Bozukov and M. N. Iliev

1ST RESULTS ABOUT HYDROGEN LOADING BY MEANS OF PULSED ELECTROLYSIS OF Y1BA2CU3O7 PELLETS
PHYS LETT A 189: (5) 395-402 JUN 27 1994

2. KAMEI M, YOSHIDA I, TAKAHASHI H, et al.
RESIDUAL HYDROGEN GAS INDUCED DEFECTS IN HETEROEPITAXIAL Y1BA2CU3O7-X FILMS
J APPL PHYS 72: (8) 3622-3625 OCT 15 1992

SEARCH FOR ENHANCEMENT OF NEUTRON EMISSION FROM NEUTRON-IRRADIATED, DEUTERIDED, HIGH-TEMPERATURE SUPERCONDUCTORS IN A VERY LOW BACKGROUND ENVIRONMENT
FUSION TECHNOL 22: (1) 181-186 AUG 1992

3. "Polarized Raman Spectra of Y2BaCuO5: Normal Mode Assignment from Substitution for Y and Ba"
M. V. Abrashev and M. N. Iliev

10. Shi, Y., Hasan, T., Babu, N.H., Torrisi, F., Milana, S., Ferrari, A.C., Cardwell, D.A.
Synthesis of YBa2Cu3O7-δ and Y2BaCuO5 nanocrystalline powders for YBCO superconductors using carbon nanotube templates

9. Gupta, H.C., Sharma, V.
Interatomic forces in Pnma, Immm, P4/mmb and I4/mcm phase of R 2BaMO5 (R= yttrium or lanthanides; M= Ni, Cu or Zn)

8. Gouadec, G., Colomban, P.
Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties
7. Gupta HC, Sharma V
Lattice dynamic investigation of the Raman and infrared wavenumbers of orthorhombic R2BaCuO5 (R = Y, Ho, Gd) oxides

Micro-Raman and X-ray diffraction study of Y2BaNi-xMxO5 (M = Mg, Zn) polymorphs
SOLID STATE COMMUN 122 (7-8): 367-372 2002

Stress analysis in melt processed RBa2Cu3O7 (R = Y, Nd) by micro-Raman spectroscopy
APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998

Crystal-field transitions of Nd3+ and Er3+ in perovskite-type crystals

Observation of local variations of stress in fast melt processed YBa2Cu3O7 superconductors at Y2BaCuO5 inclusions
INST PHYS CONF SER (158) 1595-1598 1997

Stress release at Y2BaCuO5 inclusions in fast melt processed YBa2Cu3O7-x observed by micro-Raman spectroscopy
APPL PHYS LETT 70: (21) 2897-2899 MAY 26 1997

OPTICAL PHONONS IN R2BAMO5 OXIDES WITH M = CO, NI, CU, AND R = A RARE-EARTH
PHYS REV B 47: (22) 14898-14904 JUN 1 1993

4. "Raman Spectroscopy of (Pb(1+x)/2 Cu(1-x)/2 )Sr2 (Y1-x Cax)Cu2 O7+y (x = 0; 0.35)"  
M. V. Abrashev, M. N. Iliev and L. N. Bozukov  

5. "Raman-active phonons in R2 BaCuO5 (R = La, Nd)"  
M. V. Abrashev, G. A. Zlateva and E. Dinolova  

FT-IR and FT-Raman study of Nasicon type phosphates, ASnFe(PO(4))(3) [A = Na(2), Ca, Cd]  
spectrochimica acta part a-molecular and biomolecular spectroscopy 78 (1) Pages: 415-419, JAN 2011.

5. Gupta, H.C., Sharma, V.  
Interatomic forces in Pnma, Immm, P4/mmb and I4/mcm phase of R 2BaMOS (R= yttrium or lanthanides; M= Ni, Cu or Zn)  

4. Gupta, H.C., Sharma, V.  
Lattice dynamics of tetragonal R2BaCuO5 (R = La, Nd) oxides in the P4/mmb structure  

Stress analysis in melt processed RBa2Cu3O7 (R = Y, Nd) by micro-Raman spectroscopy  
APPL SUPERCOND 6: (2-5) 185-192 FEB-MAY 1998

Luminescence properties of Nd2BaZnO5  

EFFECT OF THE RARE-EARTH SUBSTITUTION ON THE OPTICAL PHONONS OF LARBCUCO(5) (R=ND AND EU) OXIDES  
J ALLOY COMPD 225: (1-2) 216-219 JUL 15 1995

6. "Micro-Raman, SEM and X-ray characterization of (Pb0.5 Cu0.5 )LaSrCan-1 Cun Ox (n = 1, 2) ceramics"  
M. V. Abrashev, V. N. Hadjimitov, E. Dinolova, and L. N. Bozukov  

Raman scattering study of the spin ladder compound Sr-14(Cu1-yFey)(24)O-41  
ACTA PHYSICA SINICA 57 (8) 5267-5271 AUG 2008

Structural transition, electrical and magnetic properties of the B-site Co doped Sr14Cu24O41 compounds

5. Carvalho CL, Guedes I
Spectroscopic characterization of BPSCCO thin films grown by dip-coating technique
PHYSICA C 390 (3): 239-242 JUL 1 2003

Raman scattering study of Sr14-xCaxCu24O41
J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000

Raman-active phonons and their doping dependence in spin-ladder Sr14Cu24O41
PHYSICA C 338: (1-2) 161-165 AUG 1 2000

Raman scattering study of Sr14-xCaxCu24O41

1. Leonyuk L, Babonas GJ, Maltsev V
Regularities of cation sublattice structure in crystals of layered cuprates
INT J APPL ELECTROM 8: (3) 229-242 SEP 1997

7. "Preparation of a Calcium-substituted Copper-rich Yttrium Barium Copper Oxide Superconductor from a spray-dried nitrate precursor"
G. Gyurov, I. Khristova, P. Peshev and M. V. Abrashev

7. Nonarattaviciene G, Jasaitis D, Kareiva A.
Sol-gel synthesis and characterization of YBa2(Cu1-xCrx)(4)O-8 superconductor

Characterization of sol-gel process in the Y-Ba-Cu-O acetate-tartrate system using IR spectroscopy

Sol-gel synthesis route for the preparation of Y(Ba1-xSrx)(2)Cu4O8 superconducting oxides
J SOL-GEL SCI TECHN 24 (1): 57-68 MAY 2002

Sol-gel preparation and characterization of manganese-substituted superconducting YBa2(Cu1-xMnx)(4)O-8 compounds
J EUR CERAM SOC 21 (3): 399-408 MAR 2001

Influence of calcium substitution on the formation and thermal stability of the YBa2Cr4O8 superconductor
THERMOCHIM ACTA 341: 407-416 Sp. Iss. SI DEC 14 1999

Enhancement of Tc by substituting strontium for barium in the YBa2Cu4O8 superconductor prepared by a sol-gel method

Influence of complexing agents on properties of YBa2Cu4O8 superconductors prepared by the sol-gel method
J SOLID STATE CHEM 121 (2): 356-361 FEB 1 1996

8. "Morphological and compositional changes of the target surface during RF magnetron sputtering of the Y-Ba-Cu-O system"
R. Chakalov and M. V. Abrashev

9. "Optical Phonons in Nd2 BaMO5 (M = Zn,Cu)"
M. V. Abrashev, G. A. Zlateva, M. N. Iliev, and M. Gyulmezov

8. Cao, Renping; Cao, Chunyan; Yu, Xiaoguang; et al.
Visible to near-infrared luminescence properties of Nd3+-doped La2BaZnO5 phosphor
JOURNAL OF SOLID STATE CHEMISTRY 215, pp. 22-25 JUL 2014

7. Rosli, A.N., Kassim, H.A., Shrivastava, K.N.
DFT calculation of vibrations in the clusters of zinc and oxygen atoms

6. Gupta, H.C., Sharma, V.
Interatomic forces in Pnmm, I4/mmm and I4/mcm phase of R2BaMO5 (R = yttrium or lanthanides; M= Ni, Cu or Zn)

5. Gupta, H.C., Sharma, V.
Lattice dynamics of tetragonal Nd2BaZnO5

4. Gupta, H.C., Sharma, V.
Lattice dynamics of tetragonal R2BaCuO5 (R = La, Nd) oxides in the P4/nmbm structure

Crystal-field transitions of Nd3+ and Er3+ in perovskite-type crystals

Luminescence properties of Nd2BaZnO5

Nd3+ crystal-field transitions studied by raman and FIR spectroscopies in Nd2BaZnO5
PHYS REV B 55: (6) 3568-3573 FEB 1 1997

10. "Raman-active Phonons in R2 BaMO5 (R - rare earth, M = Cu,Zn)"
M. V. Abrashev, G. A. Zlateva, and M. N. Iliev

11. "Raman Study of R0.5 Pr0.5 Ba2 Cu3 O7 (R = Y, Rare Earth)"

Infrared transmission study of crystal-field excitations in Al- and Sr-doped Pr1+xBa2-xCu3O6
PHYS REV B 69 (2): Art. No. 024528 JAN 2004

Phase formation and lattice strain in superconducting compound Y1-xLaxBa2Cu3Oy (0 <= x <= 1)
PHYS REV B 68 (6): Art. No. 064502 AUG 1 2003

Phase separation and internal strains in the mixed La0.5R0.5Ba2Cu3Oy compounds (R = rare-earth element)
PHYS REV B 58: (22) 15238-15246 DEC 1 1998

Ion size effect on the charge transfer and Raman spectrum of the (Pb0.65Sr0.35)Sr-2(R0.5Ca0.5)Cu2Oy compound
PHYSICA C 292: (3-4) 211-217 DEC 20 1997

6. Faulques E, Ivanov VG
Raman line shapes from sputtered thin films of Y(Pr)Ba2Cu3O6+delta: Fine structures and oxygen ordering
PHYS REV B 55: (6) 3974-3986 FEB 1 1997

5. Mayer M, Knoll P, HolzingerSchweiger E
Phononic and spin excitations in Y1-xPrxBa2Cu3O6.9 crystals
J SUPERCOND 9: (4) 463-465 AUG 1996

Phonon Raman scattering in Y1-xPrxBa2Cu3O408 (x=0-1) and (Y1-xPrx)(2)Ba4Cu7O15-delta (x=0-0.6)
PHYS REV B 53: (6) 3590-3597 FEB 1 1996

3. CHRYSSIKOS GD, KAMITSOS EI, KAPOUTSIS JA, et al.
X-RAY-DIFFRACTION AND INFRARED INVESTIGATION OF RBA(2)CU(3)O(7) AND R(0.5)PR(0.5)BA(2)CU(3)O(7)
COMPOUNDS (R = Y AND LANTHANIDES)
PHYSICA C 254: (1-2) 44-62 NOV 10 1995
EPR STUDY OF LOCALIZED CU2+ PARAMAGNETIC-IONS AND CU2+ PAIRS IN THE OXYGEN-DEFICIENT 
PRBa2Cu3O6+X AND PR(0.5)R(0.5)Ba2(2)Cu3(3)O(6+X) (R= Y, ER) COMPOUNDS 
PHYS REV B 52: (10) 7682-7688 SEP 1 1995

1. SHIN HS, YANG IS, LEE WC 
RAMAN-STUDY OF Y1-XPRXBA2CU3O7-DELTA AND YBA2CU3-XZNXO7-DELTA SINGLE-CRYSTALS 
PHYSICA C 250: (3-4) 275-281 AUG 15 1995

12. "Mossbauer, Crystal Structure, Magnetic and Raman Study of (Y, Ce)2 Sr2 CuFeO8 Isomorphic with T Structure Superconductors" 

13. "Raman Study of the 1222 Compound (Bi, Cu)Sr2 (R, Ce)2 Cu2 O9-x (R = Y, Ho)" 
M. V. Abrashev, V. N. Hadjimitov, L. N. Bozukov, and M. N. Iliev 

Raman spectroscopy of RuSr2(Eu1.5Ce0.5)Cu2010 magneto-superconductor 

3. Xu GJ, Pu QR, Ding ZL, et al. 
Microstructure and phonon vibration of the Fe-doped Bi2201 system 
PHYSICA C 340: (2-3) 178-184 DEC 1 2000

2. Chen XH, Ruan KQ, Qian GY, et al. 
effects of doping on phonon Raman scattering in the Bi-based 2212 system 
PHYS REV B 58: (9) 5868-5872 SEP 1 1998

1. Choy JH, Hwang SJ, Kim DK 
Raman spectroscopic evidence on molecular mercuric bromide in the two-dimensional lattice of (HgBr2)(0.5)Bi2Sr2CaCu2Oy 
PHYS REV B 55: (9) 5674-5677 MAR 1 1997

14. "Raman-active phonons in La4 BaCu5 O13 : polarized Raman spectroscopy and lattice dynamical calculations" 
M. V. Abrashev and V. N. Popov 

15. "Preparation of a YBa2 Cu4O8 high-temperature superconductor from a spray dried nitrate precursor" 
G. Gyurov, I. Khristova, and M. V. Abrashev 

16. "Raman spectroscopy and lattice dynamical calculations of mixed copper-titanium oxides" 
M. V. Abrashev, C. Thomsen, V. N. Popov, and L. N. Bozukov 

1. Lim, G.H 
Vibration of plates and shells using finite elements (1996-1997) 

17. "Optical properties of Nd 3+ in Nd2 BaZnO5 “ 
B. Dareys, P. Thurian, M. Dietrich, M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, A. de Andres, and S. Taboada 

5. Gupta, H.C., Sharma, V. 
Lattice dynamics of tetragonal Nd2BaZnO5 

4. Klimin SA, Popova MN, Mill BV 
Infrared spectroscopy of the Nd3+ ion in Nd2BaCuO5 and Nd2BaZnO5
1. Cruz GK, Basso HC, Terrile MC, et al.
Spectroscopic properties of Y2BaZnO5 : Er3+
J LUMIN 86: (2) 155-160 MAR 2000

18. "Optical phonons in the orthorhombic double-chain Sr1-x Cax CuO2  (x = 0, 0.5)"
M. V. Abrashev, A. P. Litvinchuk, C. Thomsen, and V. N. Popov

12. Khan, Afzal; Jimenez, Carmen; Chaix-Pluchery, Odette; et al.
Effect of thermal annealing on electrical and optical properties of Ba-doped SrCuO2 oxide thin films on glass substrates
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE  210  (12), pp. 2569-2574 DEC 2013

Phonon-magnon interaction in low dimensional quantum magnets observed by dynamic heat transport measurements
Physical Review Letters 110 (14), art. no. 147206, 2013

10. Cheng Li, Xiong Rui; Shi Jing
Raman scattering study of the spin ladder compound Sr(14) Cu(24) O(41+delta)

Phonon-assisted magnetic absorption of (La,Ca)(14)Cu24O41: Contribution of different phonon modes

Optical studies of gap, hopping energies, and the Anderson-Hubbard parameter in the zigzag-chain compound SrCuO2
PHYS REV B 63 (16): art. no. 165105 APR 15 2001

Polarized far-infrared and Raman spectra of SrCuO2 single crystals
PHYSICA C 351 (4): 386-394 APR 15 2001

Polarization-dependent infrared phonon spectra of quasi-one-dimensional Sr2CuO3 and SrCuO2
PHYS REV B 62: (9) 5285-5288 SEP 1 2000

Optical properties of the spin-ladder compound Sr14Cu24O41
PHYS REV B 62: (8) 4963-4972 AUG 15 2000

Raman scattering study of Sr14-xCaxCu24O41

Optical properties of Sr14-xCaxCu24O41 and Sr0.73CuO2
PHYSICA C 318: 282-285 MAY 1999

Phonons in SrCuO2 single crystals

1. Popovic ZS, Vukajlovic FR
Coulomb correlated band structure of one-dimensional SrCuO2
SOLID STATE COMMUN 106: (7) 415-420 MAY 1998

19. "Frohlich-interaction induced multi-phonon Raman scattering in SrCuO2  and Sr0.5 Ca0.5 CuO2 
M. V. Abrashev, A. P. Litvinchuk, and C. Thomsen

15. de la Flor, G.; Welber, M.; Rohrbeck, A.; et al.
Resonance Raman scattering of perovskite-type relaxor ferroelectrics under nonambient conditions


5. Popovic ZS, Vukajlovic FR Coulomb-correlated band structure of one-dimensional spin-Peierls alpha '-NaV$_2$O$_5$ PHYS REV B 59: (8) 5333-5340 FEB 15 1999


2. Lin Y, Eldridge JE Fluctuation effects on the Raman scattering from the charge-density-wave system TTF-TCNQ PHYS REV B 58: (7) 3477-3481 AUG 15 1998

1. Popovic ZS, Vukajlovic FR Coulomb correlated band structure of one-dimensional SrCuO$_2$ SOLID STATE COMMUN 106: (7) 415-420 MAY 1998


105. Basisty, R.; Stanislawchuk, T. N.; Sirenko, A. A.; et al. Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO$_3$ (R = Ho, Er, Tm, Yb, and Lu) PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014

104. Massa, Nestor E.; del Campo, Leire; Meneses, Domingos De Sousa; et al.
Phonons and hybrid modes in the high and low temperature far infrared dynamics of hexagonal TmMnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (27), Art. No. 275901 JUL 9 2014

103. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.
MOCVD selective growth of orthorhombic or hexagonal YMnO3 phase on Si(100) substrate
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014

102. Cano, A.
Hidden order in hexagonal RMnO3 multiferroics (R = Dy-Lu, In, Y, and Sc)
PHYSICAL REVIEW B 89 (21), Art. No. 214107 JUN 17 2014

101. Chernyshev, V. A.; Petrov, V. P.; Nikiforov, A. E.
Phonon Spectra of YTiO3 and Y2Ti2O7: Ab Initio Calculations
OPTICS AND SPECTROSCOPY 116 (6), 864-867 JUN 2014

100. Chaix, L.; de Brion, S.; Petit, S.; et al.
Magneto-to Electroactive Transmutation of Spin Waves in ErMnO3
PHYSICAL REVIEW LETTERS 112 (13), Art. No. 137201 APR 2 2014

Lattice and spin excitations in multiferroic h-YMnO3
PHYSICAL REVIEW B 89 (9), Art. No. 094415 MAR 19 2014

98. Wang ShiFa; Zhang ChuanFei; Sun GuangAi; et al.
Chelating agents role on phase formation and surface morphology of single orthorhombic YMn2O5 nanorods via modified polyacrylamide gel route
SCIENCE CHINA-CHEMISTRY 57 (3), pp. 402-408 MAR 2014

97. Nakayama, Masaaki; Furukawa, Yoshiaki; Maeda, Kazuhiro; et al.
Correlation between the intra-atomic Mn3+ photoluminescence and antiferromagnetic transition in an YMnO3 epitaxial film
APPLIED PHYSICS EXPRESS 7 (2), Art. No. 023002 FEB 2014

96. Xie, Miao; Winkler, Bjoern; Mao, Zhu; et al.
Raman scattering from superhard rhenium diboride under high pressure
APPLIED PHYSICS LETTERS 104 (1), Art. No. 011904 JAN 6 2014

Study of crystal-field excitations and infrared active phonons in the multiferroic hexagonal DyMnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (47), Art. No. 475403 NOV 27 2013

94. Shukla, Rakesh; Grover, Vinita; Deshpande, S. K.; et al.
Synthesis and Structural and Electrical Investigations of a Hexagonal Y1-xGdxInO3 (0.0 <= x <= 1.0) System Obtained via Metastable C-Type Intermediates
INORGANIC CHEMISTRY Volume: 52 Issue: 22 Pages: 13179-13187 Published: NOV 18 2013

93. Du, Yi; Wang, Xiaolin; Chen, Dapeng; et al.
Manipulation of domain wall mobility by oxygen vacancy ordering in multiferroic YMnO3
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 15 (46), pp. 20010-20015 2013

92. Lin, C., Liu, J., Li, Y., Li, X., Li, R.
Pressure-induced structural and vibrational evolution in ferroelectric RhO3 (R=Eu, Gd,Dy)

91. Ranesh, B., Saha, A., Kalarikkal, N.
Effect of gamma radiation on the structural, dielectric and magnetoelectric properties of nanostructured hexagonal YMnO3
Radiation Physics and Chemistry 89, pp. 28-32, 2013

90. Kumar, M., Choudhary, R.J., Phase, D.M.
Valence band structure of YMnO3 and the spin orbit coupling
Applied Physics Letters 102 (18), art. no. 182902, 2013

89. Namdeo, S., Sinha, A.K., Singh, M.N., Awasthi, A.M.
Investigation of charge states and multiferroicity in Fe-doped h-YMnO3
Journal of Applied Physics 113 (10), art. no. 104101, 2013

A raman study of the origin of oxygen defects in hexagonal manganite thin films

Lattice and spin excitations in multiferroic h-YbMnO3
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184410, 2012

86. El An阻ani, M., Ta Phuc, V., Annmar, M.R., Zaghibou, M., Gervais, F.
Structural modifications of disordered YMn 1-xIn xO 3 solid solutions evidenced by infrared and Raman spectroscopies
85. Rushchanskii, K.Z., Leai, M. 
Ab initio phonon structure of h-YMnO3 in low-symmetry ferroelectric phase 

Magnons and crystal-field transitions in hexagonal RMnO3 (R = Er, Tb, Yb, Lu) single crystals 

83. Vermette, J., Jandl, S., Orlita, M., Gospodinov, M.M. 
Role of the apical oxygen in the low-temperature magnetoelectric effect in RMnO3 (R=Ho and Lu) 

82. Jiang, N., Zhang, X. 
Atomistic simulation of Mn-site substitution in multiferroic h-YMnO3 

81. Vieira, L.G., Ribeiro, J.L., Santo, O., Tavares, P.B. 
Infrared anisotropy averaging in polycrystalline samples and resonant scattering: The example of YMnO3 

80. Ji, Y., Cao, J., Zhu, Z., Li, J., Wang, Y., Tu, C. 
Synthesis and white light emission of Dy3+ ions doped hexagonal structure YAlO3 nanocrystalline 

First-principles calculations of the structural and dynamical properties of ferroelectric YMnO3 

78. Zaghrioui, M., Ta Phuoc, V. 
Phonon dynamics of hexagonal YMn1-xFexO3 
Solid State Communications 151 (22), 1704-1707 (2011).

77. Hien, N.T.M., Oh, S.-Y., Chen, X.-B., Lee, D., Jang, S.-Y., Noh, T.W., Yang, I.-S. 
Raman scattering studies of hexagonal rare-earth RMnO3 (R = Tb, Dy, Ho, Er) thin films 

76. Zhou Shuang; Mao Shao-Yu; Xie Zhao-Xiong; et al. 
Preparation and gas sensing properties of Fe-doped yttrium manganate nanoparticles 

Exchange bias in multiferroic BiFeO3 and YMnO3 multilayers: One more parameter for magnetoelectric manipulation 
SCRIPTA MATERIALIA 65 (3) Pages: 249-252, AUG 2011.

High-pressure structural stability of multiferroic hexagonal RMnO3 (R = Y, Ho, Lu) 
PHYSICAL REVIEW B 83 (22) Article Number: 224113, JUN 27 2011.

73. Zhang ChengGuo; Zhang XiaoZong; Sun YongHao; et al. 
Atomistic simulation of dynamical and defect properties of multiferroic hexagonal YMnO3 

Structural Evolution and Properties of Solid Solutions of Hexagonal InMnO3 and InGnO3 
INORGANIC CHEMISTRY 50 (8) Pages: 3559-3566, APR 18 2011.

71. Zhang Chengguo; Zhang X.; Sun Yonghao; et al. 
Atomistic simulation of Y-site substitution in multiferroic h-YMnO3 
PHYSICAL REVIEW B 83 (5) Article Number: 054104, FEB 15 2011.

Raman study of the antiferromagnetic phase transitions in hexagonal YMnO3 and LuMnO3 

69. Nguyen Thi Minh Hien; Chen Xiang-Bai; Lue Huy Hoang; et al. 
Raman scattering studies of the magnetic ordering in hexagonal HoMnO3 thin films 

68. Das Raja; Jaiswal Adhish; Adyanthaya Suguna; et al. 
Origin of Magnetic Anomalies below the Neel Temperature in Nanocrystalline LuMnO3 

Strong spin-lattice coupling in multiferroic hexagonal manganite YMnO(3) probed by ultrafast optical spectroscopy

APPLIED PHYSICS LETTERS 97 (3) Article Number: 031914, JUL 19 2010.

THz and infrared studies of multiferroic hexagonal Y1-xExMnO3 (x=0-0.2) ceramics

65. Kovachev, S., Wesselinowa, J.M.
Impact of the spin-phonon interaction on the phonon properties of multiferroic hexagonal RMnO3 thin films

Temperature-dependent raman spectrum of hexagonal YMnO3 films synthesized by chemical solution method

63. Dixit, A., Smith, A.E., Subramanian, M.A., Lawes, G.
Suppression of multiferroic order in hexagonal YMn1 - x Inx O3 ceramics

Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic LuMnO3
New Journal of Physics 12, art. no. 023017 (2010).

61. Wang, W.-R., Song, G.-X., Zhao, Y., Han, X.-Y.
Raman active phonons in RMnO3 (R=Lr, Pr, Nd, Sm ) manganites

Lattice dynamics of manganites RMnO3 (R = Sm, Eu or Gd): Instabilities and coexistence of orthohombic and hexagonal phases

Multiferroicity: The coupling between magnetic and polarization orders

58. Zhong, C., Jiang, Q., Zhang, H., Jiang, X.
Effect of spin frustration and spin-orbit coupling on the ferroelectric polarization in multiferroic Y MnO3

Femtosecond laser excitation of coherent optical phonons in ferroelectric LuMnO3

56. Loshkareva, N.N., Moskvin, A.S., Balbashov, A.M.
Optical 4f-4f transitions in multiferroic HoMnO3

First-principles studies of the magnetic structure and exchange interactions in the frustrated multiferroic YMnO3

54. Fukumura, H., Hasuike, N., Harima, H., Kisoda, K., Fukae, K., Yoshimura, T., Fujimura, N.
Spin-phonon coupling in multiferroic YbMnO3 studied by Raman scattering

53. Zaghrioui, M., Ta Phuoc, V., Souza, R.A., Gervais, M.
Polarized reflectivity and lattice dynamics calculation of multiferroic YMnO3

52. Vermette, J., Jandl, S., Gospodinov, M.M.
Raman study of spin-phonon coupling in ErMnO3

51. Lü, W., Ma, X., Zhou, H., Chen, G., Li, J., Zhu, Z., You, Z., Tu, C.
White up-conversion luminescence in rare-earth-ion-doped YAlO3 nanocrystals

Structural domain and finite-size effects of the antiferromagnetic S=1/2 honeycomb lattice in InCu2/3 V1/3 O3

Pressure-induced phase transition in Ho0.8Dy 0.2MnO3 multiferroic compound
Magnetic materials containing LaSr manganite phase
SOLID STATE SCIENCE 6 (1): 47-51 JAN 2004

Variation of triangular antiferromagnetic order in ferroelectromagnetic Sc1-xLuxMnO3 manganites
CHINESE J PHYSICS 41 (6): 652-661 DEC 2003

27. Souchkov AB, Simpson JR, Quijada M, et al.
Exchange interaction effects on the optical properties of LuMnO3
PHYSICAL REVIEW LETTERS 91 (2): Art. No. 027203 JUL 11 2003

Electron magnetic resonance study of a YMnO3/Si ferroelectric gate structure

Neutron-diffraction studies of YMnO3
APPLIED PHYSICS LETTERS 74: S796-S798 Part 1 Suppl. S DEC 2002

24. Jiang Q, Zhong CG
The magnetoelectric properties study for system with the coexistence of the ferroelectric and antiferromagnetic orders
PHYSICAL REVIEW LETTERS 90 (2): 166-174 DEC 30 2002

23. Takahashi J, Kohn K, Hanamura E
Luminescence spectrum from hexagonal YMnO3
J LUMINESCENCE 100 (1-4): 141-145 DEC 2002

Ultrafast optical spectroscopy of hexagonal manganites RMnO3 (R = Y, Er, Sc)
FERROELECTRICS 279: 135-146 2002

Anomalously broad Raman scattering spectrum due to two-magnon excitation in hexagonal YMnO3
PHYSICAL REVIEW LETTERS 89 (7): Art. No. 076404 AUG 12 2002

20. Zhong CG, Jiang Q
Theoretical study on perpendicular magnetoelectric coupling in ferroelectromagnet system

19. Filippetti A, Hill NA
Coexistence of magnetism and ferroelectricity in perovskites
PHYSICAL REVIEW B 65 (19): Art. No. 195120 MAY 15 2002

18. Yoshii K, Abe H
Magnetic properties of LnMnO3 (3) (Ln=Ho, Er,Tm,Yb, and Lu)
J SOLID STATE CHEMISTRY 165 (1): 131-135 APR 2002

Crystallization behavior of ferroelectric YMnO3 thin films on Si(100) substrates

16. Iizuka-Sakano, T., Hanamura, E., Tanabe, Y.
Second-harmonic-generation spectra of the hexagonal manganites RMnO3

Time-resolved nonlinear optical spectroscopy of Mn3+ ions in rare-earth hexagonal manganites RMnO3 (R = Sc, Y, Er)
PHYSICAL REVIEW B 64 (20): Art. no. 201103 NOV 15 2001

Effects of post-annealing on the microstructure and ferroelectric properties of YMnO3 thin films on Si

Nonlinear optical spectroscopy of electronic transitions in hexagonal manganites
APPLIED PHYSICS B-LASERS AND OPTICS 73 (2): 139-144 AUG 2001

Raman phonons and light scattering in RMnO3 (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites
J ALLOY AND COMPOUNDS 323: 494-497 JUL 12 2001

The magnetic susceptibility, specific heat and dielectric constant of hexagonal YMnO3, LuMnO3 and ScMnO3
Optical properties of the ferroelectromagnet YMnO(3) studied from first principles

PHYS REV B 63 (15): art. no. 155101 MAR 22 2001

Magnetic structure of hexagonal RMnO3 (R = Y, Sc): Thermal evolution from neutron powder diffraction data

PHYS REV B 62: (14) 9498-9510 OCT 1 2000

Study on the electronic structure of hexagonal and orthorhombic YMnO3

J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000

Electronic structure of the ferroelectromagnet YMnO3

PHYS LETT A 270: (1-2) 96-101 MAY 22 2000

A generalized Ginzburg-Landau approach to second harmonic generation

EUR PHYS J B 14: (2) 301-305 MAR 2000

Growth, ferroelectric properties, and phonon modes of Y MnO3 single crystal

CRYST RES TECHNOL 35: (1) 19-27 2000

Ferroelectric switching properties of highly c-axis oriented YMnO3 gate capacitors

J KOREAN PHYS SOC 35: S1260-S1263 Suppl. S DEC 1999

Nonlinear optical spectroscopy of electronic transitions and domains in ferroelectric antiferromagnet YMnO3

FERROELECTRICS 218: (1-4) 375-380 1998

Raman, infrared and x-ray diffraction study of phase stability in La1-xBaxMnO3 doped manganites

J APPL PHYS 85: (6) 3124-3131 MAR 15 1999

Nonlinear optical spectroscopy of the two-order-parameter compound YMnO3

PHYS REV LETT 81: (15) 3239-3242 OCT 12 1998

"Doping Effects in the Sr14Cu24O41 - type structure: A Raman scattering study"

M. V. Abrashev, C. Thomsen and M. Surtchev


In-situ Raman spectroscopy and X-ray diffraction studies of the structural transformations leading to the SrCu2O2 phase from strontium-copper oxide thin films deposited by metalorganic chemical vapor deposition


Thermal conductivity due to magnons in high-quality single crystals of the two-leg spin-ladder system (Ca,Sr,La)14Cu24O41


Raman scattering study of the spin ladder compound Sr(14) Cu(24) O(41+delta)


Resonant two-phonon Raman scattering as a probe of hole crystal formation in Sr14-xCaCu24O41


Raman scattering study of the spin ladder compound Sr(14) Cu(24) O(41+delta)

(1-x)SrCO3-xCaCO3-24CuO system to synthesize spin-ladder compounds Sr14-xCaxCu24O41 using DTA and XRD techniques 
CHINESE JOURNAL OF CHEMICAL PHYSICS 18 (4): 614-618 AUG 2005

Magnetic excitations in SrCu2O3: A Raman scattering study 
PHYSICAL REVIEW B 67 (5): Art. No. 052403 FEB 1 2003

Thermal behavior during the synthesis of spin-ladder compound Sr14-xCaxCu24O41 
MATERIALS LETTERS 59 (6): 662-666 MAR 2005

Magnetic light scattering in low-dimensional quantum spin systems 
PHYS REP 375 (1): 1-103 FEB 2003

The origin of the asymmetric shape for the exchange-scattering peak of 2 Delta(g) in the ladder antiferromagnet CaV2O5 with the singlet ground state 
J PHYS CHEM SOLIDS 63 (6-8): 1361-1364 JUN-AUG 2002

12. Schmidt KP, Knetter C, Uhrig GS 
Raman response in antiferromagnetic two-leg S=1/2 Heisenberg ladders 
EUROPHYS LETT 56 (6): 877-883 DEC 2001

11. Tada S, Natsume Y, Suzuki T 
Numerical study of magnetic Raman scattering spectra in ladder antiferromagnets - Exchange scatterings from the singlet ground state 
J PHYS SOC JPN 70 (8): 2443-2447 AUG 2001

10. Cabra DC, Dobry A, Rossini GL 
Nonperturbative effective-field theory for two-leg antiferromagnetic spin ladders 
PHYS REV B 63 (14): art. no. 144408 APR 1 2001

Hole distribution in (Sr,Ca,Y,La)(14)Cu24O41 ladder compounds studied by x-ray absorption spectroscopy 
PHYS REV B 62: (21) 14384-14392 DEC 1 2000

Raman scattering study of (Sr,Ca)(10)Cu17O29 single crystals 
ACTA PHYS POL A 98: (4) 429-439 OCT 2000

7. Orignac E, Citro R 
Raman scattering cross section of spin ladders 
PHYS REV B 62: (13) 8622-8625 OCT 1 2000

Raman scattering study of Sr14-xCaxCu24O41 
J PHYS SOC JPN 69: (8) 2684-2690 AUG 2000

Optical properties of the spin-ladder compound Sr14Cu24O41 
PHYS REV B 62: (8) 4963-4972 AUG 15 2000

Raman-active phonons and their doping dependence in spin-ladder Sr14Cu24O41 
PHYSICA C 338: (1-2) 161-165 AUG 1 2000

Raman scattering study of Sr14-xCaxCu24O41 

2. Sugai S, Suzuki M 
Magnetic raman scattering in two-leg spin ladder Sr14-x-yCaxYyCu24O41 
PHYS STATUS SOLIDI B 215: (1) 653-659 SEP 1999

1. Natsume Y, Watabe Y, Suzuki T 
Numerical study of magnetic Raman spectra by the exchange-scattering in the antiferromagnetic ladder with two-legs 
J PHYS SOC JPN 67: (9) 3314-3315 SEP 1998

22. "Raman Spectroscopy of Orthorhombic Perovskite-Like YMnO3 and LaMnO3 " 
Anomalous multi-order Raman scattering in LaMnO3: A signature of quantum lattice effects in a Jahn-Teller crystal
Journal of Physics Condensed Matter 25 (15), art. no. 155602, 2013

Structural transition and magnetic property of Bi1-xYbxFeO3

Subsolidus phase relations of the BaO - Y2 O3- MnO2 system in air

Microwave-assisted synthesis, microstructure, and physical properties of rare-earth chromites

259. Srinu Bhadram, V., Rajeswaran, B., Sundaresan, A., Narayana, C.
Spin-phonon coupling in multiferroic RCrO3 (R-Y, Lu, Gd, Eu, Sm): A Raman study
EPL 101 (1), art. no. 17008, 2013

258. Harada, T., Takahashi, R., Lippmaa, M.
Nonmagnetic Sc substitution in a perovskite ferromagnetic insulator Pr 0.8Ca0.2MnO3
Journal of the Physical Society of Japan 81 (2), art. no. 014801, 2013

Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure La0.5Ba0.5MnO3
REVISTA MEXICANA DE FISICA 58 (2), Suppl. S, 19-23, DEC 2012

256. Wdowik, U.D., Koza, M.M., Chatterji, T.
Phonons in lanthanum manganese: Inelastic neutron scattering and density functional theory studies
Physical Review B - Condensed Matter and Materials Physics 86 (17), art. no. 174305, 2012

Structural and magnetic properties of isovalently substituted multiferroic BiFeO3: Insights from Raman spectroscopy
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

254. Mir, F.A., Ikram, M., Kumar, R.
Amorphization and disorder of PrFeO3 thin films after heavy ion irradiation
Applied Radiation and Isotopes 70 (10), pp. 2409-2415, 2012

A-site-doping enhanced B-site ordering and correlated magnetic property in La 2-xBi xCoMnO 6

252. Mishra, D.K., Sathe, V.G.
Evidence of the Fano resonance in a temperature dependent Raman study of CaCu3Ti4O12 and SrCu3Ti4O12

251. Runka, T., Berkowski, M.
Perovskite La1-xSr1-xGdy-yMnyO3 solid solution crystals: Raman spectroscopy characterization

250. Abdel-Latif, I.A., Saleh, S.A.
Effect of iron doping on the physical properties of europium manganites

Electromagnon and phonon excitations in multiferroic TbMnO3

248. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.
Nanocomposite Structure and Reactivity of Perovskites Based on Lanthanum Manganites
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.

Structural, microwave dielectric properties and dielectric resonator antenna studies of Sr(Zr xTi 1-x)O 3 ceramics

Magnetic enhancement across a ferroelectric-antiferroelectric phase boundary in Bi1-xNdxFeO3
Phonon Raman scattering of RCrO₃ perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu) 

244. Lee, Y.-L., Morgan, D. 
Ab initio and empirical defect modeling of LaMnO₃±δ for solid oxide fuel cell cathodes 

243. Roberge, B., Jandl, S., Nugroho, A.A., Palstra, T.T.M. 
Micro-Raman study of orbiton-phonon coupling in YbVO₃ 

Phase evolution and magnetic property of Bi₁₋ₓHoxFeO₃ powders 

241. Casu, A., Ricci, P.C. 
Raman and structural characterization of LuAlO₃ 

240. Chopelas, A. 
Single-crystal Raman spectra of YAlO₃ and GdAlO₃: Comparison to several orthorhombic ABO₃ perovskites 

239. Dhiman, I., Das, A., Priolkar, K.R., Murthy, P.S.R. 
Infrared absorption study of charge ordered La₀.₅CaₓSrₓMnO₃ (0.1≤x≤0.5) manganites 

Spin-Reorientation, Ferroelectricity, and Magnetodielectric Effect in YFe₁₋ₓMnₓO₃(0.1 <= x <= 0.4) 
PHYSICAL REVIEW LETTERS 107 (13) Article Number: 137202, SEP 19 2011. 

237. Noked, O., Yakovlev, S., Greenberg, Y., Garbarino, G., Shuker, R., Avdeev, M., Sterer, E. 
Pressure-induced amorphization of La₁₋ₓNbO₃(0) 

Strain modulated magnetization and colossal resistivity of epitaxial La₂/₃Ca₃/₃MnO₃ film on BaTiO₃(3) substrate 
APPLIED PHYSICS LETTERS 99 (9) Article Number: 092103, AUG 29 2011. 

Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements 

234. Varshney Dinesh; Dodiya N. 
Interpretation of metallic and semiconducting temperature dependent resistivity of La₀.₉₁Rb₀.₀₆Mn₀.₉₄O₃ manganites 
SOLID STATE SCIENCES 13 (8) Pages: 1623-1632, AUG 2011. 

The electrical and magnetic properties of epitaxial orthorhombic YMnO₃ thin films grown under various oxygen pressures 
APPLIED SURFACE SCIENCE 257 (18) Pages: 8033-8037, JUL 1 2011. 

A-site ion-size effect on the transport and magnetic properties of Ce doping Pr₀.₃Ce₀.₂CaₓSr₀.₇MnO₃(0) (0 <= x <= 0.25) 

Unipolar resistive switching in high-resisitivity Pr₀.₇Ca₀.₃MnO₃(3) junctions 

Strain induced phase separation on La₀.₅Ca₀.₅MnO₃(3) thin films 

229. Baldini, M., Struzhkin, V.V., Goncharov, A.F., Postorino, P., Mao, W.L. 
Persistence of Jahn-Teller Distortion up to the Insulator to Metal Transition in LaMnO₃(3) 
PHYSICAL REVIEW LETTERS 106 (6) Article Number: 066402, FEB 11 2011. 

228. Glowacki, M., Runka, T., Domukhovski, V., Didusko, R., Mirkowska, M., Berkowski, M., Dabrowski, B. 
Growth and characterization of perovskite LaGaO₃(3) crystals doped with Sr and Mn 

Direct Hydrothermal Synthesis and Physical Properties of Rare-Earth and Yttrium Orthochromite Perovskites 
CHEMISTRY OF MATERIALS 23 (1) Pages: 48-56, JAN 11 2011.


201. Varshney, D., Choudhary, D., Shaikh, M.W. Interpretation of metallic and semiconducting temperature-dependent resistivity of La1-xNaxMnO3 (x = 0.07, 0.13) manganites Computational Materials Science 47 (3), pp. 839-847 (2010).


190. Wall, S., Prabhakaran, D., Boothroyd, A.T., Cavalleri, A.
Ultrafast coupling between light, Coherent lattice vibrations, and the magnetic structure of semicovalent LaMnO3
Physical Review Letters 103 (9), art. no. 097402 (2009).

189. Phase-separated states in high-pressure LaMn1-x Gax O3 manganites
Phase-separated states in high-pressure LaMn1-x Gax O3 manganites

188. Baldini, M., Di Castro, D., Cestelli-Guidi, M., Garcia, J., Postorino, P.
Phase-separated states in high-pressure LaMn1-x Gax O3 manganites

187. Chaboy, J.
Relationship between the structural distortion and the Mn electronic state in La1-xCaxMnO3: A Mn K-edge XANES study

Lattice dynamics of manganites RMnO3 (R = Sm, Eu or Gd): Instabilities and coexistence of orthorhombic and hexagonal phases

Crystal symmetry breaking of wurtzite to orthorhombic in nonpolar a-ZnO epifilms

184. Chaix-Pluchery, O., Kreisel, J.
Raman scattering of perovskite DyScO3 and GdScO3 single crystals

183. Hao, L., Sheng, L.
Formation and temperature evolution of correlated polarons in colossal magnetoresistive manganites

Photo-induced insulator-metal transition probed by Raman spectroscopy

181. Moskvin, A.S.
Disproportionation and electronic phase separation in parent manganite LaMnO3

Pressure and magnetic field effects on Pr1-xCaxMnO3 thin films

179. Antonakos, A., Filippi, M., Aydogdu, G.H., Prellier, W., Habermeier, H.-U., Liarokapis, E.
Tuning of the charge ordered state in the manganite thin films by internal or external strains

178. Varshney, D., Mansuri, I., Kaurav, N.
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La0.83Sr0.17MnO3 manganites: Scattering of phonons and magnons

177. Siranidi, E., Lampakis, D., Palles, D., Liarokapis, E., Colin, C., Palstra, T.T.M.
Raman studies of vanadates at low temperatures and high pressures

Infrared reflectivity spectra of manganite thin films grown on different substrates

Structural and magnetic properties of polycrystalline La0.77Sr0.23Mn1-xCuxO3 (0 ≤ x ≤ 0.5) manganites

Dipole-active optical phonons in YTiO3: Ellipsometry study and lattice-dynamics calculations

173. Popa, M., Calderón-Moreno, J.M.
Lanthanum cobaltite thin films on stainless steel

Magnetic ordering anisotropy in epitaxial orthorhombic multiferroic YMnO3 films
Pressure effects on the phase separation of Pr0.6Ca 0.4MnO3 thin films

169. Yang, Y.-F., Held, K.
Localization of strongly correlated electrons as Jahn-Teller polarons in manganites

168. Vali, R.
Vibrational, dielectric and scintillation properties of YAlO3

167. Gupta, R.K., Whang, C.M.
Effects of anion and synthesis route on the structure of (La0.9 Sr0.1) (Cr0.85 Fe0.05 Co0.05 Ni0.05)O3 - δ perovskite and removal of impurity phases

166. Choi, Y., Mebane, D.S., Wang, J.-H., Liu, M.
Continuum and quantum-chemical modeling of oxygen reduction on the cathode in a solid oxide fuel cell
Topics in Catalysis 46 (3-4), pp. 386-401 (2007)

Strain effects on La0.5Ca0.5MnO3 thin films

164. Ying, Y., Fan, J., Pi, L., Hong, B., Tan, S., Zhang, Y.
The effect of Ga doping in Nd0.7Sr0.3MnO3 system
Solid State Communications 144 (7-8), pp. 300-304 (2007)

Impact of Co Mn cation ordering on phonon anomalies in La2 CoMn O6 double perovskites: Raman spectroscopy

162. Fukumura, H., Matsui, S., Harima, H., Takahashi, T., Itoh, T., Kisoda, K., Tamada, M., (...), Miyayama, M.
Observation of phonons in multiferroic BiFeO3 single crystals by Raman scattering
Journal of Physics Condensed Matter 19 (36), art. no. 365224 (2007)

161. Zinenko, V.I., Pavlovskii, M.S.
Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the LaMnO3 crystal within the polarizable-ion model

160. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.
Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of La(2+x)3Sr(1-x)3Mn1-xCrxO3 perovskites

159. Kawasazi, T., Ogimoto, Y., Ogawa, N., Miyano, K., Tamaru, H., Izumi, M.
Charge- and orbital-ordering patterns in Bi1/2Sr 1/2MnO3 thin films studied by Raman scattering

158. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites

Phonon dynamics of lanthanum manganite LaMn O3 using an interatomic shell model potential

156. Gupta, R.K., Whang, C.M.
Structural study of a sol-gel derived novel solid oxide fuel cell perovskite: (La1-xSr)x(0.85Fe 0.05Co0.05Ni0.05)O3-δ

155. Asokan, K., Dong, C.L., Bao, C.W., Tsai, H.M., Chiou, J.W., Chang, C.L., Pong, W.F., (...), Peña, O.
Electronic structures of hexagonal manganites HoMnO3 studied by X-ray absorption near-edge structure

Understanding the insulating phase in colossal magnetoresistance manganites: Shortening of the Jahn-Teller long-bond across the phase diagram of La1-xCaxMnO3
137. Sartbaeva, A., Wells, S.A., Thorpe, M.F., Božin, E.S., Billinge, S.J.L.
Geometric simulation of perovskite frameworks with Jahn-Teller distortions: Applications to the cubic manganites
Physical Review Letters 97 (6), art. no. 065501 (2006)

138. Talati, M., Jha, P.K.
Structure dependent phonon properties of LaMnO3
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

139. Mondal, P., Bhattacharya, D., Choudhury, P.
Dielectric anomaly at the orbital order-disorder transition in LaMnO3+δ

138. Hotta, T.
Orbital ordering phenomena in d- and f-electron systems

Raman and infrared quest for orbitons in Nd1-xSrxCnxO3

136. Sacchetti, A., Baldini, M., Postorino, P., Martin, C., Maignan, A.
Raman spectroscopy on cubic and hexagonal SrMnO3
135. Sugai, S., Kikuchi, A., Mori, Y. 
Raman scattering of orbital waves in YTiO3 

BiInO3: A polar oxide with GdFeO3-type perovskite structure 

Magneto-optical properties of La0.7Sr0.3MnO3 thin films with perpendicular magnetic anisotropy 

132. Kartopu G, Es-Souni M 
Microstructural properties of solution-deposited La0.7Sr0.3MnO3 and LaMnO3 thin films 

131. Sugai S, Hirota K 
Orbital waves in YVO3 studied by Raman scattering 
PHYSICAL REVIEW B 73 (2): Art. No. 020409 JAN 2006

Pressure dependence of the phonon spectrum of La1-xCa xMnO3-δ manganites 

Thickness-dependent optical properties of La0.7 Sr0.3 MnO3 thin films 

Raman measurements on thin films of the La0.7Sr0.3MnO3 manganite: a probe of substrate-induced effects 
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

127. Zhao BC, Song WH, Ma YQ, et al. 
Reentrant metal-insulator transition in the Cu-doped manganites La1-xPbMnO3 (x similar to 0.14) single crystals 
PHYSICAL REVIEW B 72 (13): Art. No. 132401 OCT 2005

126. Varshney D, Kaurav N 
Interpretation of temperature-dependent resistivity of La-Pb-MnO3: Role of electron-phonon interaction 
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

Consequences of pressure-instigated spin crossover in RFeO3 perovskites; a volume collapse with no symmetry modification 
EUROPHYSICS LETTERS 71 (2): 228-234 JUL 2005

Orbital-mediated multiphonon scattering in La1-xSrMnO3 
PHYSICAL REVIEW B 72 (2): Art. No. 024301 JUL 2005

Raman-active phonons and Nd3+ crystal-field studies of weakly doped Nd1-xSrMnO3 
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005

Fully reflective deep ultraviolet to near infrared spectrometer and entrance optics for resonance Raman spectroscopy 
REVIEW OF SCIENTIFIC INSTRUMENTS 76 (7): Art. No. 073107 JUL 2005

Raman scattering in CaFeO3 and La0.33Sr0.67FeO3 across the charge-disproportionation phase transition 
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JUN 2005

120. Aliaga H 
Time-dependent local Green's operator and its applications to manganites 
PHYSICAL REVIEW B 71 (18): Art. No. 184404 MAY 2005

Raman scattering studies of single-crystal La1-xSrMnO3 
CHINESE JOURNAL OF PHYSICS 43 (3): 763-766 Suppl. 2 JUN 2005

Existence of orbital polarons in ferromagnetic insulating La1-xSrMnO3 (0.11 <= x <= 0.14) revealed by giant phonon softening 
PHYSICAL REVIEW B 71 (17): Art. No. 174402 MAY 2005

Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La1-xCaxMnO3
98. Tatsi A, Papadopoulou EL, Lampakis D, et al. Raman study in Pr0.5Ca0.5MnO3 thin films ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004

97. Gnezdilov VP, Yeremenko AV, Pashkevich YG, et al. Phonon Raman scattering in LaMn1-xCoxO3 (x = 0, 0.2, 0.3, 0.4, and 1.0) TEMP PHYS+ 29 (11): 963-966 NOV 2003


92. Liu Y, Li G, Feng SJ, et al. Jahn-Teller distortions cooperating with magnetic interaction in the Raman spectra of La(0.75)Ca(0.25)MnO(3) thin film CHINESE PHYS LETT 20 (9): 1603-1606 SEP 2003

91. Tatsi A, Papadopoulou EL, Lampakis D, et al. Raman study of anharmonic effects in Pr0.5Ca0.5MnO3 thin films PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

90. Kreisel J, Bouvier P High-pressure Raman spectroscopy of nano-structured ABO(3) perovskites: a case study of relaxor ferroelectrics J RAMAN SPECTROSC 34 (7-8): 524-531 JUL-AUG 2003


84. Van Minh N, Kim SJ, Yang IS Effect of Ni on structure and Raman scattering of LaMn1-xNixO3+delta PHYSICA B 327 (2-4): 208-210 APR 2003

83. Popa M, Van Hong L, Kakihana M Nanopowders of LaMeO3 perovskites obtained by a solution-based ceramic processing technique PHYSICA B 327 (2-4): 233-236 APR 2003

82. Souza AG, Faria JLB, Guedes I, et al. Evidence of magnetic polaronic states in La0.7S0.3Mn1-xFexO3 manganites PHYS REV B 67 (5): Art. No. 052405 FEB 1 2003


80. Guttlter B, Amelitcheva VA, Gorbenko OY, et al. Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study
79. Popa M, Frantti J, Kakhilana M
Characterization of LaMeO3 (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method

78. Sada J, Mori T, Saito H, et al.
First-order Raman spectra and lattice dynamics of a NdGaO3 crystal
PHYS REV B 66 (17): Art. No. 174302 NOV 1 2002

Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002

Raman spectrum and ESR of Pr0.5Ca0.4Sr0.1MnO3
SOLID STATE COMMUN 124 (3): 83-87 2002

Micro-Raman study of perovskites in the CaTiO3-SrTiO3 system
J CHEM SOC DALTON (19): 3751-3755 2002

74. Moskvin AS, Avvakumov IL
Doped manganites beyond conventional double-exchange model
PHYSICA B 322 (3-4): 371-389 SEP 2002

73. Hill NA
Density functional studies of multiferroic magnetoelectrics
ANNU REV MATER RES 32: 1-37 2002

Effects of composition on crystallographic properties of alkoxy-derived (Y,Yb)MnO3 thin films
KEY ENG MAT 228-2: 141-146 2002

71. Gontchar, L.E., Nikiforov, A.E.
Superexchange interaction in insulating manganites R1-xAxMnO3 (x=0, 0.5)

70. Okamoto S, Ishihara S, Maekawa S
Theory of Raman scattering from orbital excitations in manganese oxides
PHYS REV B 66 (1): Art. No. 014435 JUL 1 2002

Synthesis of YMnO3 thin films from alkoxy-derived precursors
FERROELECTRICS 263 (1-4): 1585-1590 2001

Polarized Raman scattering in single crystals of Nd0.7Sr0.3MnO3
PRAMANA-J PHYS 58 (5-6): 1013-1017 MAY-JUN 2002

High-pressure behavior of La0.5Sr0.5-xMnO4 layered manganites investigated by Raman spectroscopy and x-ray diffraction
PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002

Phase transitions and magnetic order in La1-xSrMnO3+delta(x <= 0.2; 2.85 <= 2-delta <= 3.00)
FERROELECTRICS 269: 1157-1162 2002

Suppression of Jahn-Teller distortion and insulator-to-metal transition in LaMnO3 at high pressures
HIGH PRESSURE RES 22 (2): 325-329 Sp. Iss. SI MAY 2002

Low-frequency excitations in the charge-ordered phase of (Nd0.5Sr0.5)MnO3
PHYSICA B 316: 575-578 MAY 2002

Raman scattering study of La0.7Sr0.3MnO3/SrTiO3 multilayers
J PHYS-CONDENS MAT 14 (20): 5201-5210 MAY 27 2002

Raman scattering in charge-ordered Pr0.63Ca0.37MnO3: Anomalous temperature dependence of linewidth
EUROPHYS LETT 58 (5): 778-784 JUN 2002
61. Bala J, Oles AM, Sawatzky GA
Orbital-lattice polarons in ferromagnetic LaMnO3
PHYS REV B 65 (18): Art. No. 184414 MAY 1 2002

60. Filippetti A, Hill NA
Coexistence of magnetism and ferroelectricity in perovskites
PHYS REV B 65 (19): Art. No. 195120 MAY 15 2002

Role of orbital correlation in colossal magnetoresistance
J MAGN MAGN MATER 239 (1-3): 170-172 Sp. Iss. SI FEB 2002

Lattice dynamics and charge ordering in La1-xCaxMnO3 (0.45 <= x <= 0.76)
PHYS REV B 65 (9): art. no. 092401 MAR 1 2002

A Raman scattering investigation of tensile strain in La0.7Sr0.3MnO3/SrTiO3 multilayers
J PHYS IV 11 (PR11): 227-231 DEC 2001

Synthesis of ferroelectric YMnO3 thin film by chemical solution deposition
KEY ENG MAT 7: 151-156 2002

A neutron powder diffraction and inelastic light scattering study of (La, Sr)MnO3+delta

Raman spectra from isotope substituted La0.67Ca0.33MnO3
PHYSICA C 364: 647-651 NOV 2001

Isotope effect on Raman spectra of polycrystalline La0.67Ca0.33MnO3
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001

52. Filippetti A, Hill NA
First principles study of structural, electronic and magnetic interplay in ferroelectric yttrium manganite
J MAGN MAGN MATER 236 (1-2): 176-189 OCT 2001

Pressure-induced quenching of the Jahn-Teller distortion and insulator-to-metal transition in LaMnO3
PHYS REV LETT 87 (12): art. no. 125501 SEP 17 2001

50. Perebeinos V, Allen PB
Multiphonon resonant Raman scattering predicted in LaMnO3 from the Franck-Condon process via self-trapped excitons
PHYS REV B 64 (8): art. no. 085118 AUG 15 2001

49. Martin-Carron L, de Andres A
Melting of the cooperative Jahn-Teller distortion in LaMnO3 single crystal studied by Raman spectroscopy
EUR PHYS J B 22 (1): 11-16 JUL 2001

48. Yin WG, Lin HQ, Gong CD
Single hole motion in LaMnO3
PHYS REV LETT 87 (4): art. no. 047204 JUL 23 2001

47. Martin-Carron L, de Andres A
Raman phonons and the Jahn-Teller transition in RMnO3 manganites
J ALLOY COMPD 323: 417-421 JUL 12 2001

Raman phonons and light scattering in RMnO3 (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites
J ALLOY COMPD 323: 494-497 JUL 12 2001

45. Nikiforov AE, Popov SE
Lattice dynamics of LaMnO3: Coupling of the lattice and orbital degrees of freedom
PHYS SOLID STATE+ 43 (6): 1132-1140 JUN 2001

44. Pantoja AE, Trodahl HJ, Buckley RG, et al.
Raman spectroscopy of orthorhombic La1-xCaxMnO3, x=0.1-0.3

43. Dagotto E, Hotta T, Moreo A
Colossal magnetoresistive materials: The key role of phase separation
PHYS REP 344 (1-3): 1-153 APR 2001
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering 
PHYS REV B 63 (13): art. no. 132406 APR 1 2001

Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry 
PHYS REV B 63 (10): art. no. 104430 FEB 21 2001

Observation of orbital waves as elementary excitations in a solid 
NATURE 410: (6825) 180-183 MAR 8 2001

Anomalous high pressure dependence of the Jahn-Teller phonon in La0.75Ca0.25MnO3 
PHYS REV B 63 (2): art. no. 024416 JAN 1 2001

High pressure behavior of manganites by infrared and Raman spectroscopy 
INT J MOD PHYS B 14: (29-31) 3418-3423 DEC 20 2000

37. Li JM, Huan CHA, Du YW, et al. 
Magnetic-field-tunable charge carrier localization in sintered polycrystalline La0.75Ca0.25MnO3 
PHYS REV B 63 (2): art. no. 024416 JAN 1 2001

36. Perebeinos V, Allen PB 
Franck-condon-broadened angle-resolved photoemission spectra predicted in LaMnO3 
PHYS REV LETT 85: (24) 5178-5181 DEC 11 2000

Oxygen stoichiometry in Sr3Mn2O7-delta: A Raman scattering investigation 
PHYS REV B 62: (21) 13809-13811 DEC 1 2000

Raman phonons in La2-2xSr1+2xMn2O7 layered manganites 
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000

Order-disorder in the Jahn-Teller transition of LaMnO3: A Raman scattering study 
PHYS REV B 62: (17) 11304-11307 NOV 1 2000

32. Hotta T, Malvezzi AL, Dagotto E 
Charge-orbital ordering and phase separation in the two-orbital model for manganites: Roles of Jahn-Teller phononic and Coulombic interactions 
PHYS REV B 62: (14) 9432-9452 OCT 1 2000

Directional ordering and collective fluctuation of orbital in a colossal magnetoresistive manganite 
J PHYS SOC JPN 69: (8) 2403-2406 AUG 2000

30. Yi WC, Kwun SI, Yoon JG 
Study on the electronic structure of hexagonal and orthorhombic YMnO3 
J PHYS SOC JPN 69: (8) 2706-2707 AUG 2000

Effects of cation vacancies in the phonon Raman spectra of LaMnO3 
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000

28. Ishihara S, Maekawa S 
Theory of orbital excitation and resonant inelastic x-ray scattering in manganites 
PHYS REV B 62: (4) 2338-2345 JUL 15 2000

27. Hill NA 
Why are there so few magnetic ferroelectrics? 
J PHYS CHEM B 104: (29) 6694-6709 JUL 27 2000

Charge ordering and phase competition in the layered perovskite LaSr2Mn2O7 
PHYS REV B 61: (22) 15269-15276 JUN 1 2000

Raman spectroscopy of the charge-orbital ordering in layered manganites 
PHYS REV B 61: (21) 14706-14715 JUN 1 2000

24. Gonchar' LE, Nikiforov AE
Effect of orbital ordering on the magnetic-structure formation in the LaMnO$_3$ Jahn-Teller magnet

PHYS SOLID STATE+ 42: (6) 1070-1074 2000

Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy
PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000

Infrared phonon spectrum of pure and doped LaMnO$_3$
PHYS REV B 61: (17) 11255-11258 MAY 1 2000

Transport mechanism in polycrystalline La$_{0.825}$Sr$_{0.175}$Mn$_1$-xCu$_x$O$_3$
PHYS REV B 61: (13) 8917-8921 APR 1 2000

Lattice and charge excitations in La$_1$-xSr$_x$MnO$_3$
PHYS REV B 61: (2) 1193-1197 JAN 1 2000

A-type antiferromagnetic and C-type orbital-ordered states in LaMnO$_3$ using cooperative Jahn-Teller phonons
PHYS REV B 60: (22) R15009-R15012 DEC 1 1999

Local lattice distortions and Raman spectra in the La$_{1-x}$Ca$_x$MnO$_3$ system
PHYS. REV. B 60: (18) 12758 –12763 NOV 1 (1999)

17. Allen PB, Perebeinos V
Self-trapped exciton and Franck-Condon spectra predicted in LaMnO$_3$
PHYS REV LETT 83: (23) 4828-4831 DEC 6 1999

Infrared-active phonons of LaMnO$_3$ and CaMnO$_3$
PHYS REV B 60: (17) 11875-11878 NOV 1 1999

Magnetic ordering effects in the Raman spectra of La$_1$-xMn$_1$-xO$_3$
PHYS REV B 60: (17) 11879-11882 NOV 1 1999

Correlation of microstructure and magnetotransport properties of epitaxially grown La-Ca-Mn-O-3 thin films
PHYS STATUS SOLIDI B 215: (1) 679-683 SEP 1999

13. Gupta HC, Ashdhir P
Zone center phonons of orthorhombic perovskite YAlO$_3$
J SOLID STATE CHEM 146: (2) 287-290 SEP 1999

Probing charge/orbital correlation in La$_1$.2Sr$_1$.8Mn$_2$O$_7$ by Raman spectroscopy
J PHYS SOC JPN 68: (8) 2538-2541 AUG 1999

Raman phonons in orthorhombic manganites
J MAGN MAGN MATER 197: 453-454 MAY 1999

10. Irwin JC, Chrzanowski J, Franck JP
Oxygen isotope effect on the vibrational modes of La$_1$-xCa$_x$MnO$_3$
PHYS REV B 59: (14) 9362-9371 APR 1 1999

9. Smirnova IS
Normal modes of the LaMnO$_3$ Prima phase: comparison with La$_2$CuO$_4$ Cmca phase
PHYSICA B 262: (3-4) 247-261 APR 1 1999

8. Roy C, Budhani RC
Raman, infrared and x-ray diffraction study of phase stability in La$_1$-xBa$_x$MnO$_3$ doped manganites
J APPL PHYS 85: (6) 3124-3131 MAR 15 1999

7. Gupta HC, Ashdhir P
Lattice dynamics of orthorhombic perovskite YMnO$_3$
PHYSICA B 262: (1-2) 1-4 FEB 1999

Infrared absorption from charge density waves in magnetic manganites
PHYS REV LETT 81: (20) 4504-4507 NOV 16 1998
5. Granado E, Moreno NO, Garcia A, et al.  
Phonon Raman scattering in R(1-x)A(x)MnO(3+delta) (R = La,Pr; A = Ca,Sr)  
PHYS REV B 58: (17) 11435-11440 NOV 1 1998

Stabilization of YMnO3 in a perovskite structure as a thin film  
CHEM MATER 10: (10) 2592-2595 OCT 1998

3. De Teresa JM, Dorr K, Muller KH, et al.  
Strong influence of the Mn3+ content on the binding energy of the lattice polarons in manganese perovskites  
PHYS REV B 58: (10) R5928-R5931 SEP 1 1998

Raman and optical spectroscopic studies of small-to-large polaron crossover in the perovskite manganese oxides  
PHYS REV B 58: (5) 2795-2801 AUG 1 1998

Effect of structural and magnetic transitions in La1-xMxMnO3 (M=Sr, Ca) single crystals in Raman scattering  
PHYS REV B 58: (1) 43-46 JUL 1 1998

23. "Raman-active phonons in the quasi-one dimensional conductor La8-x Srx Cu8 O20-y (x = 1.6, 2.0): polarized Raman spectroscopy and lattice dynamical calculations"  
M. V. Abrashev, C. Thomasen, and V. N. Popov  

24. "Raman-active phonons in orthorhombic YMnO3 and LaMnO3"  

6. Iliescu, I.; Boudard, M.; Rapenne, L.; et al.  
MOCVD selective growth of orthorhombic or hexagonal YMN3 phase on Si(100) substrate  
APPLIED SURFACE SCIENCE 306, pp. 27-32 JUL 1 2014

Polar and magnetic Mn2FeM06 (M=Nb, Ta) with LiNbO3-type structure: High-pressure synthesis  

Phonon Raman scattering of RCrO3 perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  

3. Chopelas, A.  
Single-crystal Raman spectra of YAlO3 and GdAlO3: Comparison to several orthorhombic ABO3 perovskites  

2. Weisse A, Fehske H  
Interplay of charge, spin, orbital and lattice correlations in colossal magnetoresistance manganites  

1. Irwin JC, Chzranowski J, Franck JP  
Oxygen isotope effect on the vibrational modes of La1-xCaxMnO3  
PHYS REV B 59: (14) 9362-9371 APR 1 1999

25. "Raman spectroscopy of YSr2 Cu3 O7+y"  

5. Galstyan, E., Xue, Y., Iliev, M., Sun, Y., Chu, C.-W.  
Origin of the superconductivity in the Y-Sr-Ru-O and Y-Sr-Cu-O systems  

4. Su HB, Welch DO, Wong-Ng W  
Strain effects on point defects and chain-oxygen order-disorder transition in 123 cuprate compounds  
PHYSICAL REVIEW B 70 (5): Art. No. 054517 AUG 2004

Observation of the epitaxial satellite phase in the superconducting RuSr2Eu1.5Ce0.5Cu2O10 ceramic samples
CHEM MATER 15 (23): 4417-4423 NOV 18 2003

T-c reduction in Sr-substituted Y(Ba1-xSr)xCu3O7-delta investigated by Cu-63,Cu-65 nuclear quadrupole resonance
PHYS REV B 66 (1): Art. No. 012506 JUL 1 2002

The effect of strain on the low-temperature internal friction of Y(Ba1-xSr)xCu3O7-delta
J PHYS-CONDENS MAT 13 (43): 9813-9819 OCT 29 2001

26. "Raman spectroscopy of SrRuO3 near the paramagnetic-to-ferromagnetic phase transition"

41. Tripathy, Satya Narayan; Mishra, Karuna Kara; Sen, Shrabanee; et al
Dielectric and Raman Spectroscopic Studies of Na0.5Bi0.5TiO3-BaSrO3 Ferroelectric System
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (6), pp. 1846-1854 JUN 2014

40. Tsai, C. Y.; Chen, H. R.; Chang, F. C.; et al.
Anisotropic strain, magnetic properties, and lattice dynamics in self-assembled multiferroic CoFe2O4-PbTiO3 nanostructures
JOURNAL OF APPLIED PHYSICS 115 (13), Art. No. 134317 APR 7 2014

39. Behera, B. C.; Ravindra, A. V.; Padhan, P.; et al.
Raman spectra and magnetization of all-ferromagnetic superlattices grown on (110) oriented SrTiO3
APPLIED PHYSICS LETTERS 104 (9), Art. No. 092406 MAR 3 2014

38. Miao, Naihua; Bristowe, Nicholas C.; Xu, Bin; et al.
First-principles study of the lattice dynamical properties of strontium ruthenate
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (3), Art. No. 035401 JAN 22 2014

37. Lu, W., He, K., Song, W., Sun, C.-J., Chow, G.M., Chen, J.-S.
Effect of oxygen vacancies on the electronic structure and transport properties of SrRuO3 thin films
Journal of Applied Physics 113 (17), art. no. 17E125, 2013

Signature of spin-phonon coupling in Sr2CoO4 thin film: A Raman spectroscopic study
Applied Physics Letters 102 (14), art. no. 142401, 2013

35. Li, T., Shen, J., Li, N., Ye, M.
One-pot self-catalyzed synthesis and properties of multiferroic BiFeO3 3 single-phase crystallites by sucrose-assisted combustion
Journal of Alloys and Compounds 548, pp. 89-95, 2013

34. Tai, T., Nishide, M., Matsuoka, M., Kamo, T., Funakubo, H., Katoda, T., Shima, H., (...), Yamamoto, T.
Investigation of sputtering damage in SrRuO 3 films prepared by sputtering with raman and x-ray photoemission spectroscopies
Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012

Structure, physical properties, and applications of SrRuO3 thin films

Vibrational, magnetic, and dielectric behavior of La-substituted BiFeO 3-PbTiO3

Dielectric relaxation near 25 K in multiferroic BiFeO3 ceramics
Journal of Applied Physics 110 (10), art. no. 104105, 2011.

30. Chopelas, A.
Single-crystal Raman spectra of YAlO3 and GdAlO3: Comparison to several orthorhombic ABO3 perovskites

Raman scattering from La-substituted BiFeO(3)-PbTiO3

Effects of post-growth annealing on physical properties of SrRuO3 thin film grown by MOCVD

Temperature-dependent raman spectrum of hexagonal YMnO3 films synthesized by chemical solution method
Ultrafast IR spectroscopic study of coherent phonons and dynamic spin-lattice coupling in multiferroic LuMnO3  

25. Rout, D., Moon, K.-S., Suk-Joong L Kang  
Temperature-dependent Raman scattering studies of polycrystalline BiFeO3 bulk ceramics  

Spin-phonon coupling in multiferroic YbMnO3 studied by Raman scattering  

23. Hsu, H.C., Chou, F.C., Koyama, K., Watanabe, K., Liu, H.L.  
Spin-phonon coupling in antiferromagnetic Bi2Se2CoO6+δ: An infrared reflectance study  

22. Singh, M.K., Dussan, S., Sharma, G.L., Katiyar, R.S.  
Raman scattering measurements of phonon anharmonicity in CuAlO2 thin films  

Kramers-Kronig-constrained variational dielectric fitting and the reflectance of a thin film on a substrate  

Infrared active phonons in SrRuO3 and SrRu xMg1-xO3 thin films  

Effect of disorder on the temperature dependence of the resistivity of SrRuO3  

18. Mangalam, R.V.K., Pradhan, G.K., Narayana, C., Sundaresan, A.  
Spin state transition in the ferromagnet Sr0.9Ce0.1CoO2.85  

17. Fukumura, H., Matsu, S., Harima, H., Kisoda, K., Takahashi, T., Yoshimura, T., Fujimura, N.  
Raman scattering studies on multiferroic YMnO3  
Journal of Physics Condensed Matter 19 (36), art. no. 365239 (2007)

16. Popa, M., Crespo, D., Calderon-Moreno, J.M., Prada, S., Fruth, V.  
Synthesis and structural characterization of single-phase BiFeO3 powders from a polymeric precursor  
Journal of the American Ceramic Society 90 (9), pp. 2723-2727 (2007)

15. Maiti, K., Singh, R.S., Medicherla, V.R.R.  
Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates  
Europhysics Letters 78 (1), ar. no. 17002 (2007)

Spin-induced variations of phonon frequencies in ferromagnetic metals  

13. Haumont, R., Kreisel, J., Bouvier, P.  
Raman scattering of the model multiferroic oxide BiFeO3: Effect of temperature, pressure and stress  

12. Łazewski, J., Piekarz, P., Oleś, A.M., Parlinski, K.  
Influence of local electron interactions on phonon spectrum in iron  

Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal CaRuO3  

10. Lee, J.-H., Hsue, Y.-C., Freeman, A.J.  
Magnetically induced variations in phonon frequencies  

9. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.  
Phonon anomalies and the ferroelectric phase transition in multiferroic BiFeO3  

PHYSICAL REVIEW B 71 (17): Art. No. 174411 MAY 2005

6. Rykov AI, Nomura K, Sawada T, et al. Phonon density of states in Sr2FeCoO6-delta and BaSrFeCoO6-delta: Effects induced by magnetic order and transport coherence
PHYS REV B 68 (22): Art. No. 224401 DEC 2003

5. Yu T, Shen ZX, Sun WX, et al. Spin-phonon coupling in rod-shaped half-metallic CrO2 ultrafine particles: a magnetic Raman scattering study


3. Cooper SL Optical spectroscopic studies of metal-insulator transitions in perovskite-related oxides
STRUCT BOND 98: 161-219 2001

PHYS REV B 61: (22) 15468-15473 JUN 1 2000

PHYS REV B 60: (17) 11879-11882 NOV 1 1999

27. "Comparative study of optical phonons in the rhombohedrally distorted perovskites LaAlO3 and LaMnO3"
M. V. Abrashev, A. P. Litvinchuk, M. N. Iliev, R. L. Meng, V. N. Popov, V. G. Ivanov, R. A. Chakalov, and C. Thomsen

135. Wang, Q.; Duan, P.; Wang, J. Y.; et al. Effects of different sintering temperatures on microstructural, transport, and magnetic properties of La0.93Sb0.07MnO3 compound

134. Marcondes, S. P.; Figueiredo Soares Rodrigues, Joao Elias; Andreetab, M. Rubens Barsi; et al. Resonance Raman spectroscopy of NdAlO3 single-crystal fibers grown by the laser-heated pedestal growth technique
VIBRATIONAL SPECTROSCOPY 73, 144-149 JUL 2014

133. Othmen, Z.; Schulman, A.; Daoudi, K.; et al. Structural, electrical and magnetic properties of epitaxial La0.7Sr0.3CoO3 thin films grown on SrTiO3 and LaAlO3 substrates
APPLIED SURFACE SCIENCE 306, pp. 60-65 JUL 1 2014

132. Elkhoury, T.; Amami, M.; Colin, C. V.; et al. The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr1-xMxO2 (M=Mn and Rh) compounds
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014

131. Lloyd-Hughes, J.; Jones, S. P. P.; Castro-Camus, E.; et al. Modifying the polarization state of terahertz radiation using anisotropic twin-domains in LaAlO3
OPTICS LETTERS 39 (5), pp. 1121-1124 MAR 1 2014

130. Lemanski, K.; Deren, P. J. Luminescent properties of LaAlO3 nanocrystals, doped with Pr3+ and Yb3+ ions
JOURNAL OF LUMINESCENCE 146, 239-242 FEB 2014

129. Bachar, N.; Faber, E.; Zhukova, E.; et al. Direct evidence of a bulk nodal gap in the overdoped regime of Y0.9Ca0.1Ba2Cu3O7-delta thin films from THz spectroscopy
EPL 104 (6), Art. No. 67006 DEC 2013

128. Fu, Jianhui; Zhao, Jianxiong; Sa, Tongliang; et al. Photoluminescent and dielectric properties of Eu3+-doped LaAlO3 thin films fabricated by chemical solution deposition method
APPLIED SURFACE SCIENCE 286, pp. 1-6 DEC 1 2013

APPLIED PHYSICS LETTERS 103 (19), Art. No. 191903 NOV 4 2013
Influence of oxygen content in oriented LaCoO3-δ thin films: Probed by X-ray diffraction and Raman spectroscopy 

Structural phase transition in lanthanum gallate as studied by Raman and X-ray diffraction measurements 

Evolution of the phonon density of states of LaCoO(3) over the spin state transition 
PHYSICAL REVIEW B 83 (21) Article Number: 214305, JUN 30 2011.

104. Ma T. P. 
Inelastic electron tunneling spectroscopy (IETS) study of high-k gate dielectrics 

103. Bachar, N., Zhukova, E., Gorshunov, B., Farber, E., Roth, M. 
Anomaly in the Complex Conductivity of Overdoped Y(1-x)Ca(x)Ba2Cu3O7-delta Thin Films from THz Spectroscopy 
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 24 (3) Pages: 1225-1228, APR 2011.

102. Deren P. J.; Lemanski K. 
On tuning the spectroscopic properties of LaAlO(3):Pr(3+) nanocrystallites 

101. Mir Feroz Ahmad; Ikram M.; Kumar Ravi 
Temperature-dependent Raman study of PrFeO(3) thin film 
JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.

100. Nomura, K.-I., Okami, S., Xie, X., Mizuno, M., Fukunaga, K., Ohki, Y. 
Effect of Annealing on Optical Absorption of LaAlO(3) at Terahertz Frequencies 
JAPANESE JOURNAL OF APPLIED PHYSICS 50 (2) Article Number: UNSP 021502, FEB 2011.

99. Chaix-Pluchery O.; Kreisel J. 
Raman scattering of perovskite SmScO3 and NdScO3 single crystals 
PHASE TRANSITIONS 84 (5-6) Pages: 542-554, 2011.

Raman study of Cu3(2)O(6) single crystals 

97. Deren P. J.; Lemanski K.; Gagor A.; et al. 
Symmetry of LaAlO(3) nanocrystals as a function of crystal size 

Inelastic Electron Tunneling Spectroscopy Study of Thin Gate Dielectrics 

Phonon Raman scattering of perovskite LaNiO(3) thin films 
APPLIED PHYSICS LETTERS 97 (3) Article Number: 031915, JUL 19 2010.

94. Varshney D.; Choudhary D.; Shaikh M. W.; et al. 
Electrical resistivity behaviour of sodium substituted manganites: electron-phonon, electron-electron and electron-magnon interactions 

93. Laref, A., Luo, S.J. 
Magnetic excitation and phonon dispersion in LaCoO3 compound 
Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).

92. Samal, D.; Venkataswarlu, D., Anil Kumar, P.S. 
Influence of finite size effect on magnetic and magnetotransport properties of La0.5 Sr0.5 CoO3 thin films 

Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO3 
Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).

90. Malavasi, L., Baldini, M., Di Castro, D., Nucara, A., Crichton, W., Mezouar, M., Blasco, J., Postorino, P. 
High pressure behavior of Go-doped LaMnO3: A combined X-ray diffraction and optical spectroscopy study 
89. Gupta, R.K., Kim, E.Y., Kim, Y.H., Whang, C.M.
Effect of strontium ion doping on structural, thermal, morphological and electrical properties of a co-doped lanthanum manganite system

88. Varshney, D., Choudhary, D., Shaiik, M.W.
Interpretation of metallic and semiconducting temperature-dependent resistivity of La1-xNaxMnO3 (x = 0.07, 0.13) manganites

87. Liu, X.-Q., Han, G.-J., Huang, C.-K., Lan, W.
Thickness dependence of microstructure for La0.95Sr0.05MnO3/Si films determined by micro-Raman spectroscopy

86. Talati, M., Jha, P.K.
Temperature effect on vibrational properties of La0.7Sr0.3MnO3

Electrical properties and interfacial structure of epitaxial LaAlO 3 on Si (001)

84. Orlovskaya, N., Lugovy, M., Carpenter, C., Pathak, S., Steinmetz, D., Lara-Curzio, E., Klemenz, C., Radovic, M.
On thermal and vibrational properties of LaGaO3 single crystals

La(1-x)SrxCa1-yFeO3 perovskites prepared by sol-gel method: Characterization and relationships with catalytic properties for total oxidation of toluene

82. Varshney, D., Mansuri, I., Kaurav, N.
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La0.83Sr0.17MnO3 manganites: Scattering of phonons and magnons

Characterization of perovskite-type cathode, La0.75Sr0.25 Mn0.95-xCox Ni0.05O3+δ (0.1 ≤ x ≤ 0.3), for intermediate-temperature solid oxide fuel cells

80. Dereń, P.J., Mahiou, R., Goldner, P.
Multiphonon transitions in LaAlO3 doped with rare earth ions

79. Vali, R.
Phonons and heat capacity of LaAlO3

78. Dubey, A., Sathe, V.G., Rawat, R.
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO3+δ thin films

IR-active optical phonons in Pnma-1, Pnma-2 and R over(3, - c) phases of LaMnO3 + δ

Magnetic properties of β-MnO2 thin films grown by plasma-assisted molecular beam epitaxy

75. Van Minh, N., Kim, S.-J., Yang, L-S.
A Raman Spectroscopy Study of Disorder and Local Vibrational Modes in la0.7Sr0.3Mn1-xMxO3 (M=Fe, Co)

74. Jandl, S., Mukhin, A.A., Ivanov, V.Yu., Balbashov, A.
Micro-Raman and magnetization studies of Nd1-xCa xMnO3 phase transitions

Studies of the activation process over Pd perovskite-type oxides used for catalytic oxidation of toluene
Applied Catalysis B: Environmental 75 (3-4), pp. 157-166 (2007)

72. Sathe, V.G., Dubey, A.
Broken symmetry in LaAlO3 single crystal probed by resonant Raman spectroscopy
Journal of Physics Condensed Matter 19 (38), art. no. 382201 (2007)
71. Zinenko, V.I., Pavlovskii, M.S.
Lattice dynamics and the phase transition from the cubic phase to the tetragonal phase in the LaMnO3 crystal within the polarizable-ion model

70. Li, W.J., Zhang, B., Lu, W., Sun, Y.P., Zhang, Y.
Cr-doping effect on the structural, magnetic, transport properties and Raman spectroscopy of La(2+x)/3Sr(1-x)/3Mn1-xCrxO3 perovskites

69. Fan, J., Pi, L., He, Y., Ling, L., Dai, J., Zhang, Y.
Griffiths phase and magnetic polaronic behavior in B-site disordering manganites

Synthesis and properties of nanocomposites with mixed ionic-electronic conductivity on the basis of oxide phases with perovskite and fluorite structures

67. Varshney, D., Mansuri, I., Kaurav, N.
Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO3

66. Varshney, D., Kaurav, N.
Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La0.80Ca0.20MnO3 manganites

65. Li, W.J., Zhang, B., Lu, W.
Structural properties and Raman spectroscopy of La(2+4x)/3Sr(1-4x)/3Mn1-xCux O3(0 ≤ x ≤ 0.2)

64. Wang, M., He, W., Ma, T.P., Edge, L.F., Schlom, D.G.
Electron tunneling spectroscopy study of amorphous films of the gate dielectric candidates LaAlO3 and LaScO3

63. Varshney, D., Kaurav, N., Choudhary, K.K., Singh, R.K.
Analysis of low temperature resistivity in the ferromagnetic metallic state of Pb-doped manganites

62. Zhang, T., Li, G., Qian, T., Qu, J.F., Xiang, X.Q., Li, X.G.
Effect of particle size on the structure and magnetic properties of La0.6Pb0.4MnO3 nanoparticles
Journal of Applied Physics 100 (9), art. no. 094324 (2006)

Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO3

60. Minh, N.V., Hoc, N.Q., Ha Phuong, I.T., Yang, I.-S.
The effect of Fe substitution on the structural transition of LaMn1-xFexO3 manganites: A raman spectroscopy study

59. Aruta, C., Angeloni, M., Balestrino, G., Boggio, N.G., Medaglia, P.G., Tebano, A., Davidson, B., (...), De Renzi, R.
Preparation and characterization of LaMnO3 thin films grown by pulsed laser deposition
Journal of Applied Physics 100 (2), art. no. 023910 (2006)

58. Talati, M., Jha, P.K.
Structure dependent phonon properties of LaMnO3
Computational Materials Science 37 (1-2), pp. 64-68 (2006)

57. Lunkenheimer, P., Mayr, F., Loidl, A.
Dynamic conductivity from audio to optical frequencies of semiconducting manganites approaching the metal-insulator transition

Raman and infrared quest for orbitons in Nd1-xSrxCnxMnO3

Neutron scattering study of phonons in LaCoO3

Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

Low-temperature mixed spin state of Co$^{3+}$ in LaCoO$_3$ evidenced from Jahn-Teller lattice distortions

LOW TEMPERATURE PHYSICS 32 (2): 162-168 FEB 2006

Raman measurements on thin films of the La$_{0.7}$Sr$_{0.3}$MnO$_3$ manganite: a probe of substrate-induced effects
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H$_2$S from gas streams in the presence of H-2, CO$_2$, and H$_2$O
JOURNAL OF CATALYSIS 236 (2): 205-220 DEC 10 2005

Inelastic neutron scattering study of phonons and magnetic excitations in LaCoO$_3$
PHYSICAL REVIEW B 72 (17): Art. No. 174405 NOV 2005

49. Varsney D, Kaurav N
Interpretation of temperature-dependent resistivity of La-Pb-MnO$_3$: Role of electron-phonon interaction
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

Resonant micro-Raman study of Nd$_{0.5}$Sr$_{0.5}$MnO$_3$
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005

47. Hayward SA, Morrison FD, Redfern SAT, et al.
Transformation processes in LaAlO$_3$: Neutron diffraction, dielectric, thermal, optical, and Raman studies
PHYSICAL REVIEW B 72 (5): Art. No. 054110 AUG 2005

Detection of temperature- and stress-induced modifications of LaCoO$_3$ by micro-Raman spectroscopy
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005

Raman-active phonons and Nd$^{3+}$ crystal-field studies of weakly doped Nd$_{1-x}$Sr$_x$MnO$_3$
PHYSICAL REVIEW B 72 (2): Art. No. 024423 JUL 2005

Raman measurements on thin films of the La$_{0.7}$Sr$_{0.3}$MnO$_3$ manganite: a probe of substrate-induced effects
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

43. Ishikawa A, Nohara J, Sugai S
Raman study of the orbital-phonon coupling in LaCoO$_3$
PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 2004
34. Varshney D, Kaurav N
Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO3: Role of electron-phonon interaction
EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004

Vibrational studies of A(B'B'-1/3(1/3))O-3 perovskites (A = Ba, Sr; B' = Y, Sm, Dy, Gd, In; B'' = Mo, W)
JOURNAL OF PHYSICS-CONDENSED MATTER 16 (13): 2297-2310 APR 7 2004

32. Busani, T., Devine, R.A.B.
Substrate/oxide interface interaction in LaAlO3/Si structures

31. Nikiforov AE, Popov SE
Cooperative dynamical effect in rhombohedral LaMnO3
ADV QUANTUM CHEM 44: 587-598 2003

30. Tan S, Yue S, Zhang YH
Jahn-Teller distortion induced by Mg/Zn substitution on Mn sites in the perovskite manganites
PHYS LETT A 319 (5-6): 530-538 DEC 15 2003

Phonon Raman scattering in LaMn1-xCoxO3 (x = 0, 0.2, 0.3, 0.4, and 1.0)
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003

Raman study of anharmonic effects in Pr0.5Ca0.5MnO3 thin films
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

Effect of A-site and B-site substitution on the infrared reflectivity spectra of La1-yAyMn1-xBxO3 (A=Ba,Sr; B=Cu,Zn,Sc; 0 < y <= 0.3; 0 <= x <= 0.1) manganites
PHYS REV B 68 (6): Art. No. 064302 AUG 1 2003

26. Devine RAB
Infrared and electrical properties of amorphous sputtered (LaxAl1-x)(2)O-3 films
J APPL PHYS 93 (12): 9938-9942 JUN 15 2003

Preparation, structural and magnetic characterisation of RF-sputtered La1-xNaxMnO3 +/-delta thin films manganites

24. Deren PJ, Krupa JC
Spectroscopic investigations of LaAlO3 : Eu3+
J LUMIN 102: 386-390 MAY 2003

23. Popa M, Van Hong L, Kakihana M
Nanopowders of LaMeO3 perovskites obtained by a solution-based ceramic processing technique
PHYSICA B 327 (2-4): 233-236 APR 2003

Evidence of magnetic polaronic states in La0.7Sr0.3Mn1-xFeO3 manganites
PHYS REV B 67 (5): Art. No. 052405 FEB 1 2003

Static and dynamic Jahn-Teller distortions in CMR manganites: A Raman spectrometric study
PHASE TRANSIT 76 (1-2): 63-72 Part B JAN-FEB 2003

Organic-inorganic hybrid spin-valve: A novel approach to spintronics
PHASE TRANSIT 75 (7-8): 1049-1058 Part B OCT-NOV 2002

19. Popa M, Frantti J, Kakihana M
Characterization of LaMeO3 (Me : Mn, Co, Fe) perovskite powders obtained by polymerizable complex method

Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002

17. Hayward SA, Redfern SAT, Salje EKH
Order parameter saturation in LaAlO3
J PHYS-CONDENS MAT 14 (43): 10131-10144 NOV 4 2002
16. Bouvier P, Kreisel J
Pressure-induced phase transition in LaAlO3

15. Nagaev EL
Off-stoichiometry mechanism of the isotope effect in manganites
PHYS REV B 64 (14): art. no. 144409 OCT 1 2001

Raman phonons and light scattering in RMnO3 (R=La, Pr, Nd, Ho, ErTb and Y) orthorhombic and hexagonal manganites
J ALLOY COMPD 323: 494-497 JUL 12 2001

O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering

12. Nagaev EL
Colossal-magnetoresistance materials: manganites and conventional ferromagnetic semiconductors
PHYS REP 346 (6): 388-531 JUN 2001

Structural and chemical analysis of colossal magnetoresistance manganites by Raman spectrometry
PHYS REV B 63 (10): art no. 104430 MAR 1 2001

Observation of orbital waves as elementary excitations in a solid
NATURE 410: (6825) 180-183 MAR 8 2001

High-frequency conductivity and phonon properties of La7/8Sr1/8MnO3
PHYS REV B 62: (23) 15673-15679 DEC 15 2000

Raman phonons in La2-2xSr1+2xMn2O7 layered manganites
J RAMAN SPECTROSC 31: (11) 1013-1015 NOV 2000

effects of cation vacancies in the phonon Raman spectra of LaMnO3
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000

Raman spectroscopy of the charge-orbital ordering in layered manganites
PHYS REV B 61: (21) 14706-14715 JUN 1 2000

Jahn-Teller dynamics in charge-ordered manganites from Raman spectroscopy
PHYS REV LETT 84: (19) 4489-4492 MAY 8 2000

The phase diagram and optical properties of La2-xSr2xMnO3 for x <= 0.2
J MAGN MAGN MATER 211: (1-3) 118-127 Sp. Iss. SI MAR 2000

Lattice and charge excitations in La1-xSrXMnO3
PHYS REV B 61: (2) 1193-1197 JAN 1 2000

2. Rubhausen M
Study of the interplay between spin, charge, and lattice degrees of freedom by inelastic light scattering
PHYS STATUS SOLIDI B 215: (1) 489-493 SEP 1999

1. Nagaev EL
Polarons and isotope effect in manganites
PHYS LETT A 258: (1) 65-73 JUL 12 1999

28. "Raman Study of the Variations of the Jahn-Teller Distortions through the Metal-Insulator Transition in Magnetoresitive La0.7 Ca0.3 MnO3 Thin Films"
M. V. Abrashev, V. G. Ivanov, M. N. Iliev, R. A. Chakalov, R. I. Chakalova, and C. Thomsen

24. Mir Feroz Ahmad; Ikram M.; Kumar Ravi
Symmetry breaking in Ni-doped PrFeO(3) thin films established by Raman study
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.

23. Talati, M., Jha, P.K.
Temperature effect on vibrational properties of La$_{0.7}$Sr$_{0.3}$MnO$_3$

22. Varshney, D., Mansuri, I., Kaurav, N.
Interpretation of thermal conductivity in the ferromagnetic metallic phase of La$_{0.83}$Sr$_{0.17}$MnO$_3$ manganites: Scattering of phonons and magnons

Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO$_3$+δ thin films

20. Kim, M., Barath, H., Cooper, S.L., Abbanomte, P., Fradkin, E., Rübhausen, M., Zhang, C.L., Cheong, S.-W.
Raman scattering studies of the temperature- and field-induced melting of charge order in La$_{x}$Pr$_{y}$Ca$_{1-x-y}$MnO$_3$

19. Talati, M., Jha, P.K.
Phonons and Jahn-Teller distortion in manganites

18. Varshney, D., Mansuri, I., Kaurav, N.
Effect of electron/hole doping on the transport properties of lanthanum manganites LaMnO$_3$

17. Varshney, D., Kaurav, N.
Numerical analysis of heat transport behavior in the ferromagnetic metallic state of La$_{0.80}$Ca$_{0.20}$MnO$_3$ manganites

16. Gouadec, G., Colomban, P.
Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties

15. Talati, M., Jha, P.K.
Pressure-dependent phonon properties of La$_{0.7}$Sr$_{0.3}$MnO$_3$

Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO$_3$

Annealing effect on the structural and magnetic properties of La$_{0.7}$Sr$_{0.3}$MnO$_3$ films
JOURNAL OF APPLIED PHYSICS 98 (12): Art. No. 123505 DEC 15 2005

12. Varshney D, Kaurav N
Interpretation of temperature-dependent resistivity of La-Pb-MnO$_3$: Role of electron-phonon interaction
JOURNAL OF LOW TEMPERATURE PHYSICS 141 (3-4): 165-178 NOV 2005

Raman spectra in epitaxial thin films of La$_1$-xCa$_x$MnO$_3$ (x=0.33, 0.5) grown on different substrates
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004

10. Varshney D, Kaurav N
Electrical resistivity in the ferromagnetic metallic state of La-Ca-MnO$_3$: Role of electron-phonon interaction
EUROPEAN PHYSICAL JOURNAL B 40 (2): 129-136 JUL 2004

9. Liu, Y., Li, G., Feng, S.-J., Li, X.-G.
Jahn-Teller Distortions Cooperating with Magnetic Interaction in the Raman Spectra of La$_{0.75}$Ca$_{0.25}$MnO$_3$ Thin Film

Preparation, structural and magnetic characterisation of RF-sputtered La$_1$-xNa$_x$MnO$_3$ +/-delta thin films manganites

High-pressure behavior of La$_x$Sr$_2$-xMnO$_4$ layered manganites investigated by Raman spectroscopy and x-ray diffraction
PHYS REV B 65 (22): Art. No. 224102 JUN 1 2002

Isotope effect on Raman spectra of polycrystalline La$_0.67$Ca$_{0.33}$MnO$_3$
J RAMAN SPECTROSC 32 (10): 812-816 OCT 2001

Raman spectroscopy of orthorhombic La$_1$-xCa$_x$MnO$_3$, x=0.1-0.3
O(Mn) vibrational bands in double-layered manganites: First and second order Raman scattering 
PHYS REV B 63 (13): art. no. 132406 APR 1 2001

Effects of phase separation on the magnetization, x-ray diffraction, and Raman scattering of (La1-yNd)y(1-x)CaxMnO3 
(y=0.5,1.0; x=1/3)
PHYS REV B 63 (6): art. no. 064404 FEB 1 2001

Effects of cation vacancies in the phonon Raman spectra of LaMnO3 
PHYS STATUS SOLIDI B 220: (1) 609-613 JUL 2000

Raman spectroscopy of the charge-orbital ordering in layered manganites 
PHYS REV B 61: (21) 14706-14715 JUN 1 2000

29. "Raman Scattering Study of Heavily Oxygenated YSr2 Cu3 O7+y and AuBa2YCux O7+y Superconductors" 

30. "Raman Monitoring of Dynamical Jahn-Teller Distortions in Rhombohedral Antiferromagnetic LaMnO3 and Ferromagnetic Magnetoresistive La0.93 Mn0.98 O3 "

5. Jiang Shaoqun; Ma Xinxin; Tang Guangze; et al. 
Microstructure and nano-scratch behaviors of La(0.7)Sr(0.3)MnO3 films 
THIN SOLID FILMS 519 (15) Pages: 4800-4883, MAY 31 2011.

Modeling, simulation, and in-situ characterization of functionally graded porous electrodes for solid oxide fuel cells 

Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb1-xNax)MnO3-y (0 <= x <= 0.3) system 
INORGANIC CHEMISTRY 46 (11), pp. 4575-4582 (2007)

2. Li WJ, Zhang B, Lu W 
Structural properties and Raman spectroscopy of La(2+4x)/Sr-3((1-4x))/Mn-3(1-x) CuxO3(O <= x <= 0.2) 

1. Talati M, Jha PK 
Structure dependent phonon properties of LaMnO3 
COMPUTATIONAL MATERIALS SCIENCE 37 (1-2): 64-68 AUG 2006

31. "Nanosize gold catalysts promoted by vanadium oxide supported on titania and zirconia for complete benzene oxidation" 
D. Andreeva, T. Tabakova, L. Ilieva, A. Naydenov, D. Mehanjiev, and M. V. Abrashev 
Applied Catalysis A - General 209 (1-2) 291 – 300 Feb 28 (2001)
Photocatalytic hydrogen production by water/methanol decomposition using Au/TiO$_2$ prepared by deposition-precipitation with urea
JOURNAL OF HAZARDOUS MATERIALS 263, pp. 2-10 Part: 1 DEC 15 2013

64. Oros-Ruiz, Socorro; Zanella, Rodolfo; Prado, Blanca
Photocatalytic degradation of trimethoprim by metallic nanoparticles supported on TiO$_2$-P25
JOURNAL OF HAZARDOUS MATERIALS 263, pp. 28-35 Part: 1 DEC 15 2013

63. Delaigle, R.; Joseph, M. M. F.; Debecker, D. P.; et al.
An Alternative Method for the Incorporation of Silver in Ag-VO$_x$/TiO$_2$ Catalysts for the Total Oxidation of Benzene
TOPICS IN CATALYSIS 56 (18-20) SI, pp. 1867-1874 DEC 2013

Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO$_2$(1-x)Cu$_x$
Journal of the Brazilian Chemical Society 24 (10), pp. 1592-1598, 2013

61. Einaga, H., Maeda, N., Teraoka, Y.
Effect of catalyst composition and preparation conditions on catalytic properties of unsupported manganese oxides for benzene oxidation with ozone
Applied Catalysis B: Environmental 142-143, pp. 406-413, 2013

Au/3DOM La$_{0.6}$Sr$_{0.4}$MnO$_3$: Highly active nanocatalysts for the oxidation of carbon monoxide and toluene
Journal of Catalysis 305, pp. 146-153, 2013

59. Wang, C.-T., Chen, H.-Y., Chen, Y.-C.
Gold/vanadium-tin oxide nanocomposites prepared by co-precipitation method for carbon monoxide gas sensors
Sensors and Actuators, B: Chemical 176, pp. 945-951, 2013

58. Barakat, T., Rooke, J.C., Genty, E., Cousin, R., Siffert, S., Su, B.-L.
Gold catalysts in environmental remediation and water-gas shift technologies

57. Rezaei, E., Soltan, J., Chen, N., Lin, J.
Effect of noble metals on activity of MnO$_x$/γ-alumina catalyst in catalytic ozonation of toluene
Chemical Engineering Journal 214, pp. 219-228, 2013

56. Delaigle, R., Eloy, P., Gaigneaux, E.M.
Influence of the impregnation order on the synergy between Ag and V 2O$_5$/TiO$_2$ catalysts in the total oxidation of Cl-aromatic VOC
Catalysis Today 192 (1), pp. 2-9, 2012

55. Scirè, S., Liotta, L.F.
Supported gold catalysts for the total oxidation of volatile organic compounds
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.

54. Zanella, R., Rodríguez-González, V., Arzola, Y., Moreno-Rodriguez, A.
Au/Y-TiO$_2$ catalyst: High activity and long-term stability in CO oxidation

Catalytic oxidation of toluene and p-xylene using gold supported on Co3O4 catalyst prepared by colloidal precipitation method

The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation
Catalysis Science and Technology 1 (8), pp. 1367-1375, 2011.

51. Jiang, X., Deng, H.
Synthesis of Au-CeO$_2$/SiO$_2$ catalyst via adsorbed-layer reactor technique combined with alcohol-thermal treatment

Metal (Co, Mn)-amine-functionalized mesoporous silica SBA-15: synthesis, characterization and catalytic properties in hydroxylation of benzene

49. Sandoval Alberto; Aguilar Antonio; Louis Catherine; et al.
Bimetallic Au-Ag/TiO$_2$ catalyst prepared by deposition-precipitation: High activity and stability in CO oxidation

48. Luciani Silvia; Cavani Fabrizio; Dal Santo Vladimiro; et al.
The mechanism of surface doping in vanadyl pyrophosphate, catalyst for n-butane oxidation to maleic anhydride: The role of Au promoter

Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst

46. Einaga Hisahiro; Teraoka Yasutake; Ogat Atsushi
Benzene oxidation with ozone over manganese oxide supported on zeolite catalysts
Catalysis Today 164 (1) Pages: 571-574, Apr 30 2011.

Deep oxidation of pollutants using gold deposited on a high surface area cobalt oxide prepared by a nanocasting route

44. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O(2) catalysts
Applied Catalysis B: Environmental 103 (1-2) Pages: 143-148, Mar 14 2011.

The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane
Applied Catalysis B: Environmental 101 (3-4) Pages: 388-396, Jan 14 2011.

42. Hong, Y.-C.; Sun, K.-Q.; Han, K.-H.; Liu, G.; Xu, B.-Q.
Comparison of catalytic combustion of carbon monoxide and formaldehyde over Au/ZrO(2) catalysts

41. Li, W.B.; Wang, J.X.; Gong, H.
Catalytic combustion of VOCs on non-noble metal catalysts

40. Hernández, W.Y.; Romero-Sarria, F.; Centeno, M.A.; Ondrizola, J.A.
In situ characterization of the dynamic gold-support interaction over ceria modified Eu3+. Influence of the oxygen vacancies on the co oxidation reaction

39. Einaga, H.; Ogata, A.
Catalytic oxidation of benzene in the gas phase over alumina-supported silver catalysts

38. Hongjing, W.; Qin, S.; Zhenli, Z.; Shenghong, H.
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide

37. Song, C.; Chen, M.; Ma, Y.; Ma, C.; Zhang, X.
The effect of preparation parameters on the structure and catalytic performance of Ce-Pt-Pd/SSWM stainless steel wire mesh catalyst

36. Ma, T.-Y.; Cao, J.-L.; Shao, G.-S.; Zhang, X.-J.; Yuan, Z.-Y.
Hierarchically structured squama-like cerium-doped titania: Synthesis, photoactivity, and catalytic CO oxidation

Total oxidation of VOCs on Pd and/or Au supported on TiO2/ZrO2 followed by "operando" DRIFT

34. Einaga, H.; Ogata, A.
Benzene oxidation with ozone over supported manganese oxide catalysts: Effect of catalyst support and reaction conditions

33. Einaga, H.; Harada, M.; Ogata, A.
Relationship between the structure of manganese oxides on alumina and catalytic activities for benzene oxidation with ozone

32. Della Pina C, Dimitratos N, Falletta E, et al.
Catalytic performance of gold catalysts in the total oxidation of VOCs


15. Alvim-Ferraz MDM, Gaspar CMTB Catalytic activity of active carbons impregnated before activation of pinewood sawdust and nutshell to be used on the control of atmospheric emissions JOURNAL OF HAZARDOUS MATERIALS 119 (1-3): 135-143 MAR 17 2005


Oxidation of CO and C-3 hydrocarbons on gold dispersed on oxide supports 
CATALYSIS TODAY 91-92: 131-135 JUL 15 2004

Microstructure of precipitated Au nanoclusters in TiO2 
JOURNAL OF APPLIED PHYSICS 95 (12): 8185-8193 JUN 15 2004

8. De M, Kanzru D 
Oxidative dehydrogenation of propane on V2O5/ZrO2 catalyst 
CATALYSIS LETTERS 96 (1-2): 33-42 JUL 2004

7. Einaga H, Futamura S 
Comparative study on the catalytic activities of alumina-supported metal oxides for oxidation of benzene and cyclohexane with ozone 
REACT KINET CATAL L 81 (1): 121-128 2004

6. Alvim-Ferraz MCM, Gaspar CMTB 
Active carbons impregnated before activation of olive stones: catalytic activity to remove benzene from gaseous emissions 
J PHYS CHEM SOLIDS 65 (2-3): 655-659 FEB-MAR 2004

5. Wang, C.M., Shutthanandan, V., Zhang, Y., Baer, D.R., Thomas, L.E., Thevuthasan, S. 
Microstructure of precipitated Au nanoclusters in TiO2 

Preparation of Au/TiO2 catalysts by suspension spray reaction method and their catalytic property for CO oxidation 
APPL CATAL A-GEN 246 (1): 87-95 JUN 25 2003

3. Dutta H, Pradhan SK 
Microstructure characterization of high energy ball-milled nanocrystalline V(2)O(5) by Rietveld analysis 
MATER CHEM PHYS 77 (3): 868-877 JAN 30 2003

Catalytic combustion of volatile organic compounds on Au/CoO2/Al2O3 and Au/Al2O3 catalysts 
APPL CATAL A-GEN 234 (1-2): 65-78 AUG 8 2002

1. Gupta NM, Tripathi AK 
The role of nanosized gold particles in adsorption and oxidation of carbon monoxide over Au/Fe2O3 catalyst 
GOLD BULL 34 (4): 120-128 2001

32. "About the possible diminution of the sp3 C presence along with the increase of the nitrogen enclosure in the CNx thin films produced by reactive pulsed laser deposition" 
E. Gyorgy, I. N. Mihai, M. Baleva, E. P. Trifonova, M. Abrashev, V. Darakchieva, A. Zocco, and A. Perrone 

33. "Impact of MOCVD-GaN "templates" on the spatial non-uniformities of strain and doping distribution in hydride vapour phase epitaxial GaN" 
34. “Investigations of the crystal distortions in perovskites using Raman spectroscopy”
M. V. Abrashev, V. G. Ivanov and M. N. Iliev

35. "Defect and stress relaxation in HVPE-GaN films using high temperature reactively sputtered AlN buffer”

Modulation of anisotropic crystalline in a-plane GaN on HT-AlN buffer layer

10. Weyher, J.L., Ucznik, B., Grzegory, I., Smale-Koziorowska, J., Paskova, T.
Revealing extended defects in HVPE-grown GaN
JOURNAL OF CRYSTAL GROWTH 312 (18) Pages: 2611-2615, SEP 1 2010.

Luminescent properties of GaN films grown on porous silicon substrate

8. Li, X., Qiu, K., Zhong, F., Yin, Z., Ji, C., Wang, Y.
Preparation of porous GaN buffer and its influence on the residual stress of GaN epilayers grown by hydride vapor phase epitaxy

7. Medjani, F., Sanjinés, R., Aliidi, G., Karimi, A.
Effect of substrate temperature and bias voltage on the crystallite orientation in RF magnetron sputtered AlN thin films

Growth of AlN films on Si(100) and Si(111) substrates by reactive magnetron sputtering
SURFACE & COATINGS TECHNOLOGY 198 (1-3): 68-73 AUG 1 2005

Porous GaN/SiC templates for homoepitaxial growth: effect of the built-in stress on the formation of porous structures

Interface study of AlN grown on Si substrates by radio-frequency magnetron reactive sputtering
THIN SOLID FILMS 471 (1-2): 336-341 JAN 3 2005

Characterization of thick HVPE GaN films
SUPERLATTICES AND MICROSTRUCTURES 36 (4-6): 417-424 OCT-DEC 2004

2. Starikov, E., Gruinskis, V., Shiktorov, P.
Strain evolution in high temperature AlN buffer layers for HVPE-GaN growth

A photoluminescence study of laser ablated gallium nitride thin films

36. "Raman spectroscopy of the charge- and orbital-ordered state in La0.5Ca0.5MnO3”
M. V. Abrashev, J. Bäckstrom, L. Börjesson, M. Pissas, N. Kolev, and M. N. Iliev

44. Norpoth, Jonas; Mildner, Stephanie; Scherff, Malte; et al.
In situ TEM analysis of resistive switching in manganite based thin-film heterostructures
NANOSCALE 6 (16), 9852-9862 AUG 21 2014

Thin film substrates from the Raman spectroscopy point of view
JOURNAL OF RAMAN SPECTROSCOPY 45 (6), pp. 465-469 JUN 2014

42. Chaturvedi, Aditi; Sathe, V. G.
Raman spectroscopy and X-ray diffraction study of PrMnO3 oriented thin films deposited on LaAlO3 and SrTiO3 substrates
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234, OCT 2013


38. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al. Investigation of the Properties of Ba-Substituted La0.7Sr0.3-x Ba (x) MnO3 Perovskite Manganite Films for Resistive Switching Applications. JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201, JUN 2013.

37. Phong, P.T., Jang, S.J., Huy, B.T., Lee, Y.-I., Lee, I.-J. Structural, magnetic, infrared and Raman studies of La0.85Sr x Ca0.2-x MnO3 (0 ≤ x ≤ 0.2). Journal of Materials Science: Materials in Electronics 24 (7), pp. 2292-2301, 2013.


35. Dodiya, N., Varshney, D. Structural properties and Raman spectroscopy of rhombohedral La 1-xNaxMnO3 (0.075 ≤ x ≤ 0.15). Journal of Molecular Structure 1031, pp. 104-109, 2013.


32. Lavarenc J.; Jandl S.; Fournier P. Colossal magnetoresistance of Nd(2/3)Sr(1/3)MnO3 ultrathin films grown on charge-ordered Nd(1/2)Ca(1/2)MnO(3) manganite. PHYSICAL REVIEW B 84 (10) Article Number: 104434, SEP 19 2011.

31. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al. Strain induced phase separation on La(0.5)Ca(0.5)MnO(3) thin films. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.


29. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al. Thickness dependence of microstructure for La(0.9)Sr(0.1)MnO(3)/Si films determined by micro-Raman spectroscopy. ACTA PHYSICA SINICA 58 (11) Pages: 8008-8013, NOV 2009.


Experimental confirmation of Zener-polaron-type charge and orbital ordering in Pr1-x Ca_x MnO_3

Strain effects on La0.5Ca0.5MnO3 thin films

Impact of Co Mn cation ordering on phonon anomalies in La2 CoMn O6 double perovskites: Raman spectroscopy

Polaron melting and ordering as key mechanisms for colossal resistance effects in manganites

Charge- and orbital-ordering patterns in Bi1/2Sr 1/2MnO3 thin films studied by Raman scattering

Pressure-induced monoclinic distortion and charge and orbital ordering in La0.5 Ca0.5 Mn O3
Physical Review B - Condensed Matter and Materials Physics 75 (10), art. no. 104408 (2007)

17. Antonakos, A., Lampakis, D., Palles, D., Liarokapis, E., Prellier, W., Mercey, B.
Low temperature micro-Raman measurements under magnetic field of Pr1 - x Ca_x MnO3 thin films

16. Huang, S., Ruan, K., Pang, Z., Lv, Z., Wu, H., Shen, Z., Cao, L., Li, X.
Molecular vibrations of the layered-perovskite cobalt oxides characterized by infrared and Raman spectroscopies coupled with crystal structure refinement

15. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P.
Observation of charge ordering by Raman scattering in Nd0.5Ca0.5MnO3 thin films

Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

Novel Fe-Mn-Zn-Ti-O mixed-metal oxides for the low-temperature removal of H2S from gas streams in the presence of H-2, CO2, and H2O
JOURNAL OF CATALYSIS 236 (2): 205-220 DEC 10 2005

Resonant micro-Raman study of Nd0.5Sr0.5MnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005

Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La1- xCa_xMnO3
PHYSICAL REVIEW B 71 (13): Art. No. 134403 APR 2005

Magnetotransport properties in La1- xCa_xMnO3 (x=0.33, 0.5) thin films deposited on different substrates
JOURNAL OF APPLIED PHYSICS 97 (8): Art. No. 083909 APR 15 2005

Raman spectra in epitaxial thin films of La1- xCa_xMnO3 (x=0.33, 0.5) grown on different substrates
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004

Raman study in Pr0.5Ca0.5MnO3 thin films
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004

Phonon Raman scattering in LaMn1- xCoO3 (x = 0, 0.2, 0.3, 0.4, and 1.0)
LOW TEMP PHYS+ 29 (11): 963-966 NOV 2003

Raman study of anharmonic effects in Pr0.5Ca0.5MnO3 thin films
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

Optical study in the charge-ordered phase of (Nd1-xSrx)MnO3
PHYSICA B 329: 822-823 Part 2 MAY 2003

Raman scattering study of Nd1-xSrxMnO3 (x = 0.3, 0.5)

Optical reflectivity spectra measured on cleaved surfaces of Nd0.5Sr0.5MnO3
J PHYS SOC JPN 71 (12): 3065-3068 DEC 2002

The structure and properties of Mn3O4 thin films grown by MOCVD
SOLID STATE COMMUN 124 (1-2): 15-20 2002

Lattice dynamics and charge ordering in La1-xCaxMnO3 (0.45 <= x <= 0.76)
PHYS REV B 65 (9): art. no. 092401 MAR 1 2002

37. "Raman phonons and Jahn-Teller bands in perovskite-like manganites"
Milko N. Iliev and Miroslav V. Abrashev

68. Lee, Hong-Sub; Choi, Sun Gyu; Yeoong, Geun Young; et al.
The effect of Gd substitution in perovskite lanthanum strontium manganite films for use in resistive switching devices
JOURNAL OF THE CERAMIC SOCIETY OF JAPAN 122 (1428), pp. 622-625 AUG 2014

67. Elkouni, T.; Amami, M.; Colin, C. V.; et al.
The structure, Raman spectroscopy and evidence of ferromagnetic transition in CuCr1-xMxO2 (M=Mn and Rh) compounds
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 355, pp. 158-163 APR 2014

Intrinsic antiferromagnetic coupling underlies colossal magnetoresistance effect: Role of correlated polaron
PHYSICAL REVIEW B 89 (2), Art. No. 024420 JAN 30 2014

65. Zhu, L. P.; Deng, H. M.; Sun, L.; et al.
The optical properties of multiferroic LuFeO3 ceramics

64. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hyejung; et al.
The effect of Ca substitution on the structural and electrical properties of La0.7Sr0.3-xCaxMnO3 perovskite manganite films
JOURNAL OF PHYSICS-D-APPLIED PHYSICS 46 (42), Art. No. 425102 OCT 23 2013

63. Chaturvedi, Aditi; Sathe, V. G.
Raman spectroscopy and X-ray diffraction study of PrMnO3 oriented thin films deposited on LaAlO3 and SrTiO3 substrates
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234 OCT 2013

Displacive lattice excitation through nonlinear phononics viewed by femtosecond X-ray diffraction
SOLID STATE COMMUNICATIONS 169, pp. 24-27 SEP 2013

Structural, magnetic, infrared and Raman studies of La0.8Sr0.2-xMnO3 (0 <= x <= 0.2)
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (7), pp. 2292-2301 JUL 2013

60. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.
Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO3
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), Art. No. 064708 JUN 2013

59. Nikolaev, S. A.; Mazurenko, V. G.; Rudenko, A. N.
Influence of magnetic order on phonon spectra of multiferroic orthorhombic YMnO3
SOLID STATE COMMUNICATIONS 164, pp. 16-21 JUN 2013

58. Choi, Sun Gyu; Lee, Hong-Sub; Yeoong, Geun Young; et al.
Investigation of the Properties of Ba-Substituted La0.7Sr0.3-xBa (x) MnO3 Perovskite Manganite Films for Resistive Switching Applications
JOURNAL OF ELECTRONIC MATERIALS 42 (6), 1196-1201 JUN 2013

57. Islam, Mohammad A.; Rondinelli, James M.; Spanier, Jonathan E.
Normal mode determination of perovskite crystal structures with octahedral rotations: theory and applications
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (17), 175902, MAY 1 2013

56. Khunduri, H.; Dimri, M. Chandra; Vassala, S.; et al.
Magnetic and structural studies of LaMnO3 thin films prepared by atomic layer deposition
55. Dodiya, Neha; Varshney, Dinesh
Structural properties and Raman spectroscopy of rhombohedral La$_{1-x}$Na$_x$MnO$_3$ (0.075 <= x <= 0.15)
JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013

54. Mishra, Dileep K.; Sathe, V. G.
Temperature Dependent Raman Study of Eu0.75Y0.25MnO3
AIP Conference Proceedings 1512, 800-801, 2013

53. Nima Ramirez Fabian Enrique; Ferreira Fabio Furlan; Alves Wendel Andrade; et al.
Magnetic, structural, and transport properties at very high temperature in manganites

52. Himcinschi, Cameliu; Vrejoiu, Ionela; Weissbach, Torsten; et al.
Raman spectra and dielectric function of BiCoO3: Experimental and first-principles studies
JOURNAL OF APPLIED PHYSICS 110 (7) Article Number: 073501, OCT 1 2011.

Effect of hydroxyl group on global and local structures of hydrothermally grown KNbO(3) nanorods
MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.

50. Antokanos A.; Liarokapis E.; Aydogdu G. H.; et al.
Strain induced phase separation on La(0.5)Ca(0.5)MnO(3) thin films

49. Mir Feroz Ahmad; Ikram M.; Kumar Ravi
Temperature-dependent Raman study of PrFeO3(3) thin film
JOURNAL OF RAMAN SPECTROSCOPY 42 (2) Pages: 201-208, FEB 2011.

48. Parhi Nilima; Rout G. C.; Behera S. N.
Study of J-T effect on the self-energy of electrons in manganite systems

47. Liang Shuhui; Xu Tongguang; Teng Fei; et al.
The high activity and stability of La(0.5)Ba(0.5)MnO(3) nanocubes in the oxidation of CO and CH(4)

46. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al.
Coupling between phonons and magnetic excitations in orthorhombic Eu1-xY(x)MnO(3)
PHYSICAL REVIEW B 81 (5) Article Number: 054447, Published: FEB 2010.

45. Issing S.; Fuchs F.; Ziereis C.; et al.
Lattice dynamics of Eu(1-x)Y(x)MnO(3) (0 <= x <= 0.5) studied by Raman and infrared spectroscopy

44. Malavasi Lorenzo; Baldini Maria; di Castro Daniele; et al.
High pressure behavior of Ga-doped LaMnO3: a combined X-ray diffraction and optical spectroscopy study

43. Issing, S.; Fuchs, F.; Ziereis, C.; et al.
Lattice dynamics of Eu(1-x)Y(x)MnO(3) (0 <= x <= 0.5) studied by Raman and infrared spectroscopy

42. Chen C. Z.; Cai C. B.; Liu Z. Y.; et al.
Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La(0.67)Sr(0.33)MnO(3-delta) films
SOLID STATE COMMUNICATIONS 150 (1-2) Pages: 66-69, JAN 2010.

41. Liu Xue-Qin; Han Guo-Jian; Huang Chun-Kui; et al.
Thickness dependence of microstructure for La0.9Sr0.1MnO3/Si films determined by micro-Raman spectroscopy

A micro-Raman study of a Pr0.5Ca0.5MnO3 single crystal and thin films

39. Cao Xian-Sheng; Chen Chang-Le
Phonon spectra of La0.5Ca0.5MnO3

Phase-separated states in high-pressure LaMn1-xGaxO3 manganites
PHYSICAL REVIEW B 80 (4) Article Number: 045123, JUL 2009.

37. Cao, Xian-Sheng; Chen, Chang-Le
Raman spectra of La0.5Ca0.5MnO3
PHYSICA SCRIPTA 79 (4) Article Number: 045701, APR 2009.

36. Antonakos, A.; Filippi, M.; Aydogdu, G. H.; et al.
Tuning of the charge ordered state in the manganite thin films by internal or external strains
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 246 (3) Pages: 635-642, MAR 2009.

35. Sathe, V. G.; Rawat, R.; Dubey, Aditi; et al.
Photo-induced insulator-metal transition probed by Raman spectroscopy
PHYSICAL REVIEW OF PHASE TRANSITIONS 21 (7) Article Number: 075603, FEB 18 2009.

34. Antonakos, A.; Liarokapis, E.; Filippi, M.; et al.
Infrared Reflectivity Spectra of Manganite Thin Films Grown on Different Substrates

Pressure effects on the phase separation of Pr0.6Ca0.4MnO3 thin films
PHYSICA SCRIPTA 79 (4) Article Number: 045701, APR 2009.

32. Sacchetti, A.; Corridoni, T.; Arcangeletti, E.; et al.
High pressure Raman study of La1-xCaxMnO3-delta manganites

31. Andreasson, Jakob; Holmlund, Joakim; Rauer, Ralf; et al.
Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

Phase separation in manganite thin films
PHYSICAL REVIEW OF PHASE TRANSITIONS 20 (43) Article Number: 434232, OCT 29 2008.

29. Nguyen Van Minh; Kim, Sung-Jin; Yang, In-Sang
A Raman spectroscopy study of disorder and local vibrational modes in La0.7Sr0.3Mn1-xMxO3 (M=Fe, Co)

28. Kim, M.; Barath, H.; Cooper, S. L.; et al.
Raman scattering studies of the temperature- and field-induced melting of charge order in La(x)Pr(y)Ca(1-x-y)MnO(3)
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

Strain effects on La0.5Ca0.5MnO3 thin films
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

Effect of jahn-teller distortion in La0.5Sr0.5MnO3 cubes and nanoparticles on the catalytic oxidation of CO and CH4
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

25. Sathe VG, Dubey A
Broken symmetry in LaAlO3 single crystal probed by resonant Raman spectroscopy
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

24. Dubey, Aditi; Sathe, V. G.
The effect of magnetic order and thickness in the Raman spectra of oriented thin films of LaMnO3
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

23. Wesselinowa JM, St Kovachev
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO3 compounds
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

Micro-Raman and magnetization studies of Nd(1-x)Ca(x)MnO3 phase transitions
PHYSICAL REVIEW OF PHASE TRANSITIONS 57 (13) Article Number: 134411, APR 2008.

21. Li WJ, Zhang B, Lu W
Structural properties and Raman spectroscopy of La((2+4x))/Sr-3((1-4x))/Mn-3(1-x) CuxO3(O <= x <= 0.2)

Preparation and characterization of LaMnO3 thin films grown by pulsed laser deposition
JOURNAL OF APPLIED PHYSICS 100 (2), art. no. 023910 (2006).

Raman and infrared quest for orbitons in Nd1-xSrxCuxMnO3

Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 18 (5): 1667-1676 FEB 8 2006

Raman-active phonons and Nd3+ crystal-field studies of weakly doped Nd1-xSrxMnO3

Raman measurements on thin films of the La0.7Sr0.3MnO3 manganite: a probe of substrate-induced effects
EUROPEAN PHYSICAL JOURNAL B 48 (2): 255-258 NOV 2005

Resonant micro-Raman study of Nd0.5Sr0.5MnO3
JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005

Detection of temperature- and stress-induced modifications of LaCoO3 by micro-Raman spectroscopy
PHYSICAL REVIEW B 72 (1): Art. No. 014122 JUL 2005

Raman scattering in CaFeO3 and La0.33Sr0.67FeO3 across the charge-disproportionation phase transition
PHYSICAL REVIEW B 71 (24): Art. No. 245110 JAN 2005

Infrared study of the crystal-field excitations in NdMnO3 in high magnetic fields
PHYSICAL REVIEW B 71 (2): Art. No. 024417 JAN 2005

A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO3

Synthesis and characterisation of La(Co1/2Ti1/2)O3

Sodium doped lanthanum manganites thin films: Influence of the oxygen content on the structural parameters
JOURNAL DE PHYSIQUE IV 118: 165-171 NOV 2004

8. Rao CNR, Seikh M, Narayana C
Spin-state transition in LaCoO3 and related materials
TOPICS IN CURRENT CHEMISTRY 234: 1-21 2004

A Raman study of the temperature-induced low-to-intermediate-spin state transition in LaCoO3
JOURNAL OF MOLECULAR STRUCTURE 706 (1-3): 121-126 NOV 12 2004

Raman spectra in epitaxial thin films of La1-xCaxMnO3 (x=0.33, 0.5) grown on different substrates
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004

Dielectric properties of rare earth cobaltates, LnCoO(3) (Ln = La, Pr, Nd), across the spin-state transition
FERROELECTRICS 306: 227-234 2004

Synthesis and characterisation of La1-xNaxMnO3+ delta thin films manganites
MATERIALS SCIENCE AND ENGINEERING B-SOLID STATE MATERIALS FOR ADVANCED TECHNOLOGY 109 (1-3): 203-206 JUN 15 2004

3. Orlovskaya, N; Steinmetz, D
Raman diagnostics of LACOO(3) based perovskites

2. Nikiforov AE, Popov SE
Cooperative dynamical effect in rhombohedral LaMnO3
ADV QUANTUM CHEM 44: 587-598 2003

Preparation, structural and magnetic characterisation of RF-sputtered La1-xNaxMnO3 +/delta thin films manganites
38. "Elimination of nonuniformities in thick GaN films using chemical vapor deposited GaN templates"

4. Sochacki, Tomasz; Bryan, Zachary; Amilusik, Mikolaj; et al.
HVPE-GaN grown on MOCVD-GaN/sapphire template and ammonothermal GaN seeds: Comparison of structural, optical, and electrical properties
JOURNAL OF CRYSTAL GROWTH 394, pp. 55-60 MAY 15 2014

Roles of V/III ratio and mixture degree in GaN growth: CFD and MD simulation study
Chinese Physics B 22 (1), art. no. 017801, 2013

Characterization of free-standing GaN substrate grown through hydride vapor phase epitaxy with a TiN interlayer

Thick GaN layers grown by hydride vapor-phase epitaxy: hetero- versus homo-epitaxy
J CRYST GROWTH 255 (3-4): 241-249 AUG 2003

39. “Raman spectroscopy of CaMnO3: Mode assignment and relationship between Raman line intensities and structural distortions”

47. Garcia-Saiz, Abel; de Pedro, Imanol; Migowski, Pedro; et al.
Anion-pi and Halide-Halide Nonbonding Interactions in a New Ionic Liquid Based on Imidazolium Cation with Three-Dimensional Magnetic Ordering in the Solid State
INORGANIC CHEMISTRY 53 (16), pp. 8384-8396 AUG 18 2014

46. Muneeswaran, M.; Giridharan, N. V.
Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO3 nanoparticles
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014

45. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al.
Raman and X-ray diffraction study of (Ba,Sr)TiO3/(Bi,Nd)FeO3 multilayer heterostructures
THIN SOLID FILMS 545, pp. 267-271 OCT 31 2013

44. Belik, Alexei A.; Matsushita, Yoshitaka; Tanaka, Masahiko; et al.
High-Pressure Synthesis, Crystal Structures, and Properties of ScRhO3 and InRhO3 Perovskites
INORGANIC CHEMISTRY 52 (20), pp. 12005-12011 OCT 21 2013

43. Kozlenko, D. P.; Dang, N. T.; Kichanov, S. E.; et al.
Pressure-induced structural transformations, orbital order and antiferromagnetism in La0.75Ca0.25MnO3
EUROPEAN PHYSICAL JOURNAL B 86 (8), 360, AUG 2013

42. Tiwari, Brajesh; Surendra, M. Krishna; Rao, M. S. Ramachandra
HoCrO3 and YCrO3: a comparative study
JOURNAL OF PHYSICS-CONDENSED MATTER 25 (21), 216004, MAY 29 2013

41. Kumar, A.; Shahi, P.; Kumar, S.; et al.
Raman effect and magnetic properties of doped TbMnO3
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013

Raman and X-ray diffraction study of (Ba,Sr)TiO3/(Bi,Nd)FeO3 multilayer heterostructures

Structural and magnetic phase transitions occurring in Pr0.7Sr0.3MnO3 manganite at high pressures
JETP Letters 97 (9), pp. 540-545, 2013

38. Pham, D.H.Y., Nguyen, D.T., Pham, D.T., Hoang, N.N., Pham, T.T.
Optical spectra of the colloidal Fe-doped manganate CaMn1-xFxO3 (x = 0, 0.01, 0.03, 0.05)

Crystal structure and properties of high-pressure-synthesized BiRhO\textsubscript{3}, LuRhO\textsubscript{3}, and NdRhO\textsubscript{3}


Hydrothermal synthesis, magnetic susceptibility, electrical transport and vibrational order of the polycrystalline structure La\textsubscript{0.5}Ba\textsubscript{0.5}MnO\textsubscript{3}
REVISTA MEXICANA DE FISICA 58 (2) Suppl. S, 19-23, DEC 2012

Structural and magnetic properties of isovalently substituted multiferroic BiFeO\textsubscript{3}: Insights from Raman spectroscopy
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

Electronic band structure and optical phonons of BaSnO\textsubscript{3} and Ba 0.97La 0.03SnO 3 single crystals: Theory and experiment
Journal of Applied Physics 112 (4), art. no. 044108, 2012

Non-symmetric superparamagnetic clusters in the relaxor manganites Sr2-xBixMnTiO6 (0 ≤ x ≤ 0.75)

32. Runka, T., Berkowski, M.
Perovskite La 1-xSr xGa 1-yMn yO3 solid solution crystals: Raman spectroscopy characterization

31. Kuznetsova T. G.; Sadykov V. A.; Lunin V. V.
Nanostructure and Reactivity of Perovskites Based on Lanthanum Manganites
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A 86 (4), 606-620, APR 2012.

Effect of high pressure on the crystal and magnetic structure and on the Raman spectra in Pr0.7Ba0.3MnO3

29. Chopelas, A.
Single-crystal Raman spectra of YAlO3 and GdAlO3: Comparison to several orthorhombic ABO3 perovskites

High-pressure Raman studies and heat capacity measurements on the MgSiO(3) analogue CaIr(0.5)Pt(0.5)O(3)

Strain induced phase separation on La0.5Ca0.5MnO3 thin films

Structural and magnetic phase transitions in Pr(0.7)Ca(0.3)MnO3 at high pressures
JETP LETTERS 92 (9) Pages: 590-594, Published: JAN 2011.

25. Guennou, M., Bouvier, P., Krikler, B., Kreisel, J., Haumont, R., Garbarino, G.
High-pressure investigation of CaTiO(3) up to 60 GPa using x-ray diffraction and Raman spectroscopy
PHYSICAL REVIEW B 82 (13) Article Number: 134101, OCT 4 2010.

24. Rout G. C.; Panda Saswati; Behera S. N.
Theoretical study of the Raman active CDW gap mode in manganites
JOURNAL OF PHYSICS-CONDENSED MATTER 22 (37) Article Number: 376003, SEP 22 2010.

23. Liu Ying-Xin; Qin Shan; Jiang Jian-Zhong; et al.
High pressure X-ray diffraction study of CaMnO3 perovskite

Lattice parameters and orthorhombic distortion of CaMnO3

Infrared study of the phonon modes in PrMnO3 and CaMnO3

Evaluation of the strains in charge-ordered Pr1-xCa xMnO3 thin films using Raman spectroscopy

19. Bhattacharjee, S., Bousquet, E., Ghosez, P.
First-principles study of the dielectric and dynamical properties of orthorhombic CaMnO3
18. Kim, M., Barath, H., Cooper, S.L., Abbaumonte, P., Fradkin, E., Rübhause, M., Zhang, C.L., Cheong, S.-W. 
Raman scattering studies of the temperature- and field-induced melting of charge order in \( \text{La}_{x}\text{Pr}_{y}\text{Ca}_{1-x-y}\text{MnO}_{3} \) 

Structural and elastic properties of Ca-substituted LaMnO3 at 300 K 

Charge-ordering in La0.333Ca0.667MnO3 

Structural and elastic properties of Ca-substituted LaMnO3 at 300 K 

Franck-Condon higher order lattice excitations in the LaFe1-xCrO3 (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects 

Influence of oxygen defects on the crystal structure and magnetic properties of the (Tb1-xNax)MnO3-y (0 <= x <= 0.3) system 
INORGANIC CHEMISTRY 46 (11), 4575-4582 (2007).

12. Charpentier, S., Gill-Comeau, M., Jandl, S., Fournier, P. 
Observation of charge ordering by Raman scattering in Nd0.5Ca0.5MnO3 thin films 

Micro-Raman study and phase transitions of Nd0.5Ca0.5MnO3 

Infrared signature of ion displacement in the noncollinear spin state of orthorhombic YMnO3 

Consequences of pressure-instigated spin crossover in RFeO3 perovskites; a volume collapse with no symmetry modification 

8. Cohn, J.L., Chiorescu, C., Neumeier, J.J. 
Polaron transport in the paramagnetic phase of electron-doped manganites 

Raman scattering in CaFeO3 and La0.33Sr0.67FeO3 across the charge-disproportionation phase transition 

Raman spectra in epitaxial thin films of La1-xCaMnO3 (x=0.33, 0.5) grown on different substrates 
PHYSICAL REVIEW B 70 (9): Art. No. 094407 SEP 2004

Revealing polarons with high pressure on low electron-doped manganites 
PHYSICAL REVIEW B 70 (1): Art. No. 014414 JUL 2004

Raman study in Pr0.5Ca0.5MnO3 thin films 
ACTA PHYS POL A 105 (1-2): 99-106 JAN-FEB 2004

Raman study of anharmonic effects in Pr0.5Ca0.5MnO3 thin films 
PHYS REV B 68 (2): Art. No. 024432 JUL 1 2003

2. Wang ZW, Saxena SK, Neumeier JI 
Raman scattering study on pressure-induced phase transformation of marokite (CaMn2O4) 
J SOLID STATE CHEM 170 (2): 382-389 FEB 1 2003

Raman phonons as a probe of disorder, fluctuations, and local structure in doped and undoped orthorhombic and rhombohedral manganites 
PHYS REV B 66 (17): Art. No. 174303 NOV 1 2002
40. “Raman spectroscopy of CaRuO3”

Elastic and thermal properties of Sr1-xCaxRuO 3
International Journal of Modern Physics B 27 (17), art. no. 1350054, 2013

Investigation of sputtering damage in SrRuO 3 films prepared by sputtering with raman and x-ray photoemission spectroscopies
Japanese Journal of Applied Physics 51 (9 PART 2), art. no. 09LA19, 2012

Disorder promotes ferromagnetism: Rounding of the quantum phase transition in Sr1-xCaxRuO3

Muon spin relaxation and susceptibility measurements of an itinerant-electron system Sr1-xCaxRuO3: Quantum evolution from ferromagnet to paramagnet
Physical Review B - Condensed Matter and Materials Physics 84 (22), art. no. 224415, 2011.

9. Chopelas, A.
Single-crystal Raman spectra of YAlO3 and GdAlO3: Comparison to several orthorhombic ABO3 perovskites

8. Yun, B.K., Koo, Y.S., Jung, J.H., Song, M., Yoon, S.
Effect of hydroxyl group on global and local structures of hydrothermally grown KnbO(3) nanorods
MATERIALS CHEMISTRY AND PHYSICS 129 (3) Pages: 1071-1074, OCT 3 2011.

Orbital orderings and optical conductivity of SrRuO3 and CaRuO3: First-principles studies

6. Samata, H., Saeki, Y., Mizusaki, S., Nagata, Y., Ozawa, T.C., Sato, A.
Electrochemical crystal growth of perovskite ruthenates

5. Maiti, K., Singh, R.S., Medicherla, V.R.R.
Observation of particle hole asymmetry and phonon excitations in non-Fermi-liquid systems: A high-resolution photoemission study of ruthenates
Europhysics Letters 78 (1), art. no. 17002 (2007)

Terahertz-frequency carrier dynamics and spectral weight redistribution in the nearly magnetic metal CaRuO3

Interplay between itinerant and localized states in CaMn1-xRuxO3 (x <= 0.5) manganites
PHYSICAL REVIEW B 73 (1): Art. No. 014416 JAN 2006

Lattice dynamics and dielectric response of Mg-doped SrTiO3 ceramics in a wide frequency range
JOURNAL OF APPLIED PHYSICS 97 (4): Art. No. 044104 FEB 15 2005

Scaling of the anomalous Hall effect in Sr1-xCaxRuO3
PHYSICAL REVIEW LETTERS 93 (1): Art. No. 016602 JUL 2 2004

41. “Correlation between the chemical bonding and the physical properties of the CNx films obtained by pulsed laser deposition from C targets in low-pressure N2”
E. György, I. N. Mihailесcu, M. Baleva, M. Abrashev, E. P. Trifonova, A. Szekeres, and A. Perrone

X-ray photoelectron study of Si+ ion implanted polymers

5. Wink, J.D., Gorham, J.M., Fairbrother, D.H.
Growth and microstructure of nanoscale amorphous carbon nitride films deposited by electron beam irradiation of 1, 2-diaminopropane
4. Riascos, H., Zambrano, G., Camps, E., Prieto, P. 
Influence of nitrogen gas pressure on plume-plasma and chemical bonding of carbon nitride films synthesized by pulsed laser deposition

Growth and characterization of self-assembled carbon nitride leaf-like nanostructures
Nanotechnology 17 (23), art. no. 015, pp. 5798-5804 (2006)

Optical models for the ellipsometric characterization of carbon nitride layers prepared by inverse pulsed laser deposition

1. Naydenov, N., Popov, A.
Pre- and post-service microhardness measurements of electrical contacts operating at Kozloduy NPP

42. “Role of Jahn-Teller disorder in Raman scattering of mixed-valence manganites”
M. N. Iliev, M. V. Abrashev, V. N. Popov, and V. G. Hadjieiev

52. Patwe, Sadequa J.; Patra, Atanu; Dey, Rita; et al.
Probing the Local Structure and Phase Transitions of Bi4V2O11-Based Fast Ionic Conductors by Combined Raman and XRD Studies
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (11), pp. 3448-3456 NOV 2013

51. Reshak, A. H.
First Principle Calculations of Transition Metal Oxide, AgAlO2, as Active Photocatalyst: Sustainable Alternative Sources of Energy
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE 8 (7), pp. 9371-9383 JUL 2013

50. Bin, Zhan; Lan Jnie; Lin Yuanhua
Preparation and Characterization of CaMnO3 Thermoelectric Film
RARE METAL MATERIALS AND ENGINEERING 42 Suppl. 1A, 54-56, JUN 2013

49. M’nassri, R.; Cheikhrouhou-Koubaa, W.; Boudjada, N.; et al.
Magnetocaloric Effects in Pr0.6-xErSr0.4MnO3 (0.0 <= x <= 0.2) Manganese Oxides
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM 26 (5) SI, 1429-1435, MAY 2013

Optical properties and photocatalytic activity of marokite-type CaMn2O4

47. Kumar, A.; Shahi, P.; Kumar, S.; et al.
Raman effect and magnetic properties of doped TbMnO3
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (12), 125001, MAR 27 2013

46. Reshak, A.H.
First principle calculations of transition metal oxide, AgAlO2, as active photocatalyst: Sustainable alternative sources of energy

45. Liu, H., Zhang, H., Li, Y., Chen, Y., Chen, L., Dong, X., Chen, K., Li, Q.
Magnetism and resistances of slightly doped LaMnO 3 solid solutions

44. Gu Yijing; Wang Yunfeng; Wang Tao; et al.
Synthesis, structural and magnetic study of polycrystalline LaNi(1-x)Mn(x)O(3) films

43. Mishra Dileep K.; Sathe V. G.
Evidence of orbital excitations in CaCu(3)Ti(4)O(12) probed by Raman spectroscopy
JOURNAL OF PHYSICS-CONDENSED MATTER 23 (7) Article Number: 072203, FEB 23 2011.

Large low field magnetoresistance in La0.67Sr0.33MnO(3) nanowire devices

40. Laref Amel; Luo Shi Jun
Magnetic Excitation and Phonon Dispersion in LaCoO3 Compound

39. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al.
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO3(3)
38. Wang Tao; Shi Wangzhou; Fang Xiaodong; et al.
Fabrication of polycrystalline $\text{La}_2\text{NiMnO}_6$ thin films on Si (100) substrates by chemical solution deposition

37. Sopracase Rodolphe; Gruener Gisele; Olive Enrick; et al.
Infrared study of the phonon modes in PrMnO(3) and CaMnO(3)
PHYSICA B-CONDENSED MATTER 405 (1) Pages: 45-52, JAN 1 2010.

36. Jandl S.; Nugroho A. A.; Palstra T. T. M.
A comparative Raman study between YbVO(3) and YVO(3)

35. Laref, A., Luo, S.J.
Magnetic excitation and phonon dispersion in LaCoO3 compound
Journal of the Physical Society of Japan 79 (6), art. no. 064702 (2010).

Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO3
Journal of Physics Condensed Matter 22 (11), art. no. 115403 (2010).

Stress evolution and lattice distortion induced by thickness variation and lattice misfit in La0.67Sr0.33MnO3 - δ films

32. Sopracase, R., Gruener, G., Olive, E., Soret, J.-C.
Infrared study of the phonon modes in PrMnO3 and CaMnO3

Lattice dynamics of orthorhombic perovskite yttrium manganese, YMnO3

30. Cao, X.-S., Chen, C.-L.
Raman spectra of La0.5Ca0.5MnO3

Size-dependent magnetic properties and Raman spectra of La2NiMnO6 nanoparticles

28. Talati, M., Jha, P.K.
Temperature effect on vibrational properties of La0.7Sr0.3MnO3

27. Cao, X.-S., Chen, C.-L.
Phonon spectra of La0.5Ca0.5MnO3

26. Wang, T., Xu, W., Fang, X., Dong, W., Tao, R., Li, D., Zhao, Y., Zhu, X.
Chemical solution deposition preparation of double-perovskite La2NiMnO6 film on LaAlO3 (0 0 1) substrate

Photo-induced insulator-metal transition probed by Raman spectroscopy

24. Dubey, A., Sathe, V.G., Rawat, R.
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO3+δ thin films

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

IR-active optical phonons in Pmna-1, Pmna-2 and R over(3, -) c phases of LaMnO3 + δ

21. Wang, T., Fang, X., Dong, W., Tao, R., Deng, Z., Li, D., Zhao, Y., (...), Zhu, X.
Fabrication of polycrystalline La2NiMnO6 thin films on LaAlO3 (1 0 0) substrates by chemical solution deposition


9. Kartopu G, Es-Souni M Microstructural properties of solution-deposited La0.7Sr0.3MnO3 and LaMnO3 thin films JOURNAL OF APPLIED PHYSICS 99 (3): Art. No. 033501 FEB 1 2006


6. Asselin S, Jandl S, Fournier P, et al. Resonant micro-Raman study of Nd0.5Sr0.5MnO3 JOURNAL OF PHYSICS-CONDENSED MATTER 17 (34): 5247-5254 AUG 31 2005


2. Xiong YM, Chen T, Wang GY, et al. Raman spectra in epitaxial thin films of La1-xCaxMnO3 (x=0.33, 0.5) grown on different substrates
1. Ishikawa A, Nohara J, Sugai S
Raman study of the orbital-phonon coupling in LaCoO3
PHYSICAL REVIEW LETTERS 93 (13): Art. No. 136401 SEP 24 2004

43. “Nanosize gold-ceria catalysts promoted by vanadia for complete benzene oxidation”
D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev

28. Zuo, Shufeng; Sun, Xuejie; Lv, Ningning; et al.
Rare Earth-Modified Kaolin/NaY-Supported Pd-Pt Bimetallic Catalyst for the Catalytic Combustion of Benzene
ACS APPLIED MATERIALS & INTERFACES 6 (15), pp. 11988-11996 AUG 13 2014

27. Wang, Zhen; Yang, Min; Shen, Genli; et al.
Catalytic removal of benzene over CeO2-MnO (x) composite oxides with rod-like morphology supporting PdO
JOURNAL OF NANOPARTICLE RESEARCH 16 (5), Art. No. 2367 APR 6 2014

26. Jiang, Xin; Hua, Jieliang; Deng, Hui; et al.
Influence of pre-added NaOH on the microstructure of Au-CoO2 catalyst and its activity for benzene oxidation
JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL 383, pp. 188-193 MAR 2014

25. Aw, M. S.; Crnivec, I. G. Osojinik; Pintar, A.
Toward enhanced conversion of model biogas mixtures: parametric tuning and mechanistic study for ceria-zirconia supported nickel-cobalt catalyst
CATALYSIS SCIENCE & TECHNOLOGY 4 (5), pp. 1340-1349 2014

On the promoting effect of the addition of ceria to platinum based alumina catalysts for VOCs oxidation
Applied Catalysis B: Environmental 144 (1), pp. 233-242, 2014

Removal of BTX compounds in air by total catalytic oxidation promoted by catalysts based on SiO2(1-x)Cu
Journal of the Brazilian Chemical Society 24 (10), pp. 1592-1598, 2013

22. Zuo, S., Du, Y., Liu, F., Han, D., Qi, C.
Influence of ceria promoter on shell-powder-supported Pd catalyst for the complete oxidation of benzene

Catalytic oxidation of dichloromethane over Pt/CoO 2-Al 2O 3 catalysts
Applied Catalysis B: Environmental 127, pp. 159-166, 2012

20. Scirè, S., Liotta, L.F.
Supported gold catalysts for the total oxidation of volatile organic compounds
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.

The significance of the order of impregnation on the activity of vanadia promoted palladium-alumina catalysts for propane total oxidation
Catalysis Science and Technology 1 (8), 1367-1375, 2011.

Supported Au catalysts for propane total oxidation: Study of support morphology and gold particle size effects

17. Wu Hongjing; Wang Liuding; Zhang Jiaqiinang; et al.
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst

16. Abbasi Zahra; Haghhighi Mohammad; Fatehifar Esmaeil; et al.
Synthesis and physicochemical characterizations of nanostructured Pt/Al2O(3)-CeO(2) catalysts for total oxidation of VOCs

The effect of gold addition on the catalytic performance of copper manganese oxide catalysts for the total oxidation of propane

Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect

13. Song Haiyan; Li Gang; Wang Xiangzheng
Preparation and Application of Porous Material Supported Gold Catalysts
PROGRESS IN CHEMISTRY 22 (4) Pages: 573-579, APR 2010.
12. Wu Hongjing; Shuai Qin; Zhu Zhenli; et al.
Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide

11. Ying Fang; Wang Shuiju; Au Chak-Tong; et al.
Effect of the oxidation state of gold on the complete oxidation of isobutane on Au/CeO(2) catalysts

10. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H.
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide

Synthesis and properties of CoO2@Au core-shell structure nanoparticles

8. Tang, X., Xu, Y., Shen, W.
Promoting effect of copper on the catalytic activity of MnOx-CeO2 mixed oxide for complete oxidation of benzene

Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria

Catalytic performance of gold catalysts in the total oxidation of VOCs

Reducibility of supported gold (III) precursors: Influence of the metal oxide support and consequences for CO oxidation activity

Supported gold catalysts for the total oxidation of alkanes and carbon monoxide

3. Radhika, T., Sugunan, S.
Structural and catalytic investigation of vanadia supported on ceria promoted with high surface area rice husk silica

2. Lai SY, Qiu YF, Wang SJ
Effects of the structure of ceria on the activity of gold/ceria catalysts for the oxidation of carbon monoxide and benzene

Chemistry and properties of nanocrystals of different shapes
CHEMICAL REVIEWS 105 (4): 1025-1102 APR 2005

44. “Phonons and magnetic excitations in the Mott insulator LaTiO3”
M. N. Iliev, A. P. Litvinchuk, M. V. Abrashev, V. N. Popov, J. Cnaidalka, B. Lorenz, and R. L. Meng

11. Kumar, Pradeep; Bera, Achintya; Muthu, D. V. S.; et al.
Coupled phonons, magnetic excitations, and ferroelectricity in AlFeO3: Raman and first-principles studies
PHYSICAL REVIEW B 85 (13) Article Number: 134449, APR 27 2012.

10. Kowalczyk Radoslaw M.; Kemp Thomas F.; Walker David; et al.
A variable temperature solid-state nuclear magnetic resonance, electron paramagnetic resonance and Raman scattering study of molecular dynamics in ferroelectric fluorides

9. Liu Chun-Mei; Ge Ni-Na; Cheng Yan; et al.
Structural and elastic properties of LaTiO(3) under pressure

Raman scattering investigation across the magnetic and metal-insulator transition in rare earth nickelate RNiO3 (R=Sm, Nd) thin films

Transition from orbital liquid to Jahn-Teller insulator in orthorhombic perovskites RTiO3
6. Haumont, R., Kreisel, J., Bouvier, P.
Raman scattering of the model multiferroic oxide BiFeO₃: Effect of temperature, pressure and stress

5. Ulrich, C., Gössling, A., Grüninger, M., Guennou, M., Roth, H., Cwik, M., Lorenz, T., (…), Keimer, B.
Raman scattering in the Mott insulators LaTiO₃ and YTiO₃: Evidence for orbital excitations

4. Haumont, R., Kreisel, J., Bouvier, P., Hippert, F.
Phonon anomalies and the ferroelectric phase transition in multiferroic BiFeO₃

How chemistry controls electron localization in 3d(1) perovskites: a Wannier-function study
NEW JOURNAL OF PHYSICS 7: Art. No. 188 SEP 2 2005

Magnetic structure of the Jahn-Teller system LaTiO₃
PHYSICAL REVIEW B 71 (14): Art. No. 144412 APR 2005

1. Masahito Mochizuki and Masatoshi Imada
Orbital physics in the perovskite Ti oxides

45. “Photoluminescence depending on the ZnS shell thickness of CdS/ZnS core-shell semiconductor nanoparticles”
Alexandre R. Loukanov, Ceco D. Dushkin, Karolina I. Papazova, Andrey V. Kirov, Miroslav V. Abrashev and Eiki Adachi

32. Zhu, Yingli; Li, Chunsheng; Xu, Ying; et al.
Ultrasonic-assisted synthesis of aqueous CdTe/CdS QDs in salt water bath heating
JOURNAL OF ALLOYS AND COMPOUNDS 608, pp. 141-147 SEP 25 2014

31. Yang, Lin; Zhu, Jianguo; Xiao, Dingquan
Synthesis and characterization of ZnSe:Fe/ZnSe core/shell nanocrystals
JOURNAL OF LUMINESCENCE 148, pp. 129-133 APR 2014

Sonoechemically prepared PbS nanostructures and investigation of their optical and structural properties
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS 8 (3-4), pp. 201-203 MAR-APR 2014

29. Shahi, A. K.; Pandey, B. K.; Gopal, R.
PEG mediated solvothermal synthesis of fine ZnS sub-micro and microspheres and their optical properties
MATERIALS LETTERS 116, pp. 112-115 FEB 1 2014

Biosynthesis and Antimicrobial Activity of Semiconductor Nanoparticles against Oral Pathogens
BIOINORGANIC CHEMISTRY AND APPLICATIONS Art. No.347167 2014

27. Xiong, Gang; Xu, Hang; Cui, Jian-Zhong; et al.
The multiple core-shell structure in Cu(24)Ln(6) cluster with magnetocaloric effect and slow magnetization relaxat
DALTON TRANSACTIONS 43 (15), pp. 5639-5642 2014

26. Xu, L.; Xia, H.
Multi-metal sulfide for absorbing near infrared light

Optical properties of CdS/PVA nanocomposite films synthesized using the gamma-irradiation-induced method
Chinese Physics Letters 30 (5), art. no. 057803, 2013

24. Tripathi, S.K., Sharma, M.
Synthesis and optical study of green light emitting polymer coated CdSe/ZnSe core/shell nanocrystals

Individual inorganic nanoparticles: Preparation, functionalization and in vitro biomedical diagnostic applications

Influence of exposure time on structural, optical and electrical properties of zinc sulphide nanoparticles synthesized by microwave technique
Chalcogenide Letters 10 (1), pp. 27-37, 2013

21. Li, C., Jiang, Z., Yao, Z.
Self-assembly of large scale CdS/TiO$_2$ film photocatalyst

20. Saran, A.D., Mehra, A., Bellare, J.R.
Superposition of Quantum Confinement Energy (SQCE) model for estimating shell thickness in core-shell quantum dots: Validation and comparison

19. Saran Amit D.; Sadanwa Mayur M.; Srivastava Rohit; et al.
An optimized quantum dot-ligand system for biosensing applications: Evaluation as a glucose biosensor
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 384 (1-3) Pages: 393-400, JUL 5 2011.

PbS/CoS-Pani composite semiconductor films
MATRIAL SCIENCES IN SEMICONDUCTOR PROCESSING 14 (2) Pages: 151-156, JUN 2011.

17. Saran Amit D.; Bellare Jayesh R.
Green engineering for large-scale synthesis of water-soluble and bio-taggable CdSe and CdSe-CdS quantum dots from microemulsion by double-capping
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 369 (1-3) Pages: 165-175, OCT 20 2010.

16. Khaorapapong Nithima; Ontam Areeporn; Ogawa Makoto
Formation of ZnS and CdS in the interlayer spaces of montmorillonite
APPLIED CLAY SCIENCE 50 (1) Pages: 19-24, SEP 2010.

15. Heera, T.R., Cindrella, L.
Synthesis and characterization of NiS/MnS core-shell embedded conducting polyaniline composite for photovoltaic application

Microemulsion-based synthesis of nanocrystalline materials

Recent progress in synthesis and properties of the core-shell nanoparticles

Template free preparation and characterization of CuS nanoparticles in aqueous solutions of [EMIM][EtSO4] as a low cost ionic liquid using ultrasonic irradiation

11. Bala, H., Fu, W., Yu, Y., Yang, H., Zhang, Y.
Preparation, optical properties, magnetic properties and thermal stability of core-shell structure cobalt/zinc oxide nanocomposites

10. Bala, H., Yu, Y., Cao, X., Fu, W.
Preparation and characterization of nickel/zinc sulphide: Bifunctional magnetic-optical nanocomposites

A novel sonochemical synthesis and nanostructured assembly of polyvinylpyrrolidone-capped CdS colloidal nanoparticles

8. Khaorapapong, N., Ontam, A., Youngme, S., Ogawa, M.
Solid-state intercalation and in situ formation of cadmium sulfide in the interlayer space of montmorillonite

7. Li, L., Tang, Y., Yang, J., Zhang, Y., Du, B.
Facile synthesis of ZnS hollow submicrospheres with open holes in solution containing ethylenediamine and CS2

Generation of metal oxide nanoparticles in optimised microemulsions

5. Piret, F., Bouvy, C., Marine, W., Su, B.L.
A new series of optoelectronic nanocomposites: CMI-I mesoporous core/ZnS shell
4. Ethayaraja, M., Ravikumar, C., Muthukumaran, D., Dutta, K., Bandyopadhyaya, R.
CdS-ZnS core-shell nanoparticle formation: Experiment, mechanism, and simulation

3. Shakla, D., Mehra, A.
Modeling shell formation in core-shell nanocrystals in reverse micelle systems

2. Fu, W., Yang, H., Hari-Bala, Liu, S., Li, M., Zou, G.
Preparation and magnetic characterization of core-shell structure stainless steel/silica nanoparticles

1. Stroyuk, A.L., Kryukov, A.I., Kuchmii, S.Ya., Pokhodenko, V.D.
Quantum size effects in the photonics of semiconductor nanoparticles
Theoretical and Experimental Chemistry 41 (2), pp. 67-91 (2005)

46. “Gold–vanadia catalysts supported on ceria–alumina for complete benzene oxidation”
D. Andreeva, R. Nedyalkova, L. Ilieva, and M. V. Abrashev

40. Manuel Lopez, Jose; Arenal, Raul; Puertolas, Begona; et al.
Au deposited on CeO2 prepared by a nanocasting route: A high activity catalyst for CO oxidation
JOURNAL OF CATALYSIS 317, pp. 167-175 AUG 2014

39. Tang, Wenxiang; Wu, Xiaofeng; Li, Dongyan; et al.
Oxalate route for promoting activity of manganese oxide catalysts in total VOCs’ oxidation: effect of calcination temperature and preparation method
JOURNAL OF MATERIALS CHEMISTRY A 2 (8), pp. 2544-2554 2014

An Alternative Method for the Incorporation of Silver in Ag-VOx/TiO2 Catalysts for the Total Oxidation of Benzene
TOPICS IN CATALYSIS 56 (18-20) SI, pp. 1867-1874 DEC 2013

Influence of the preparation method on the activity of ceria zirconia mixed oxides for naphthalene total oxidation
Applied Catalysis B: Environmental 132-133, pp. 98-106, 2013

36. Neto, R.C.R., Schmal, M.
Synthesis of CeO2 and CeZrO2 mixed oxide nanostructured catalysts for the iso-syntheses reaction
Applied Catalysis A: General 450 , pp. 131-142, 2013

Oxygen defects: The key parameter controlling the activity and selectivity of mesoporous copper-doped ceria for the total oxidation of naphthalene
Applied Catalysis B: Environmental 127, pp. 77-88, 2012

34. Scirè, S., Liotta, L.F.
Supported gold catalysts for the total oxidation of volatile organic compounds
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.

Influence of Vanadium or Cobalt Oxides on the CO Oxidation Behavior of Au/VOx/CeO2-Al2O3 Systems

Oxidative dehydrogenation of ethane over NiO-CeO2 mixed oxides catalysts

The influence of platinum addition on nano-crystalline ceria catalysts for the total oxidation of naphthalene a model polycyclic aromatic hydrocarbon
Catalysis Letters 141 (12), 1732-1738, 2011.

30. Wu Hongjing; Wang Liuding; Zhang Jiaoqiang; et al.
Catalytic oxidation of benzene, toluene and p-xylene over colloidal gold supported on zinc oxide catalyst

29. Li Ting-Yi; Chiang Shu-Jen; Liaw Biing-Jye; et al.
Catalytic oxidation of benzene over CuO/Ce(1-x)Mn(x)O2 catalysts

28. Abbasi Zahra; Haghighi Mohammad; Fatehifar Esmaeil; et al.
Synthesis and physicochemical characteristics of nanostructured Pt/Al2O3-CeO2 catalysts for total oxidation of VOCs
27. Ribeiro Nielson F. P.; Bonfim Rodrigo P. F.; Souza Mariana M. V. M.; et al. 
Investigation of activity losses of gold nanoparticles in the CO selective oxidation 

26. Xia Yunsheng; Dai Hongxing; Zhang Lei; et al 
Ultrasound-assisted nanocasting fabrication and excellent catalytic performance of three-dimensionally ordered mesoporous chromia for the combustion of formaldehyde, acetone, and methanol 
APPLIED CATALYSIS B-ENVIRONMENTAL 100 (1-2) Pages: 229-237, OCT 11 2010.

25. Yin Hongfeng; Ma Zhen; Zhen Haoguo; et al. 
Evidence for and mitigation of the encapsulation of gold nanoparticles within silica supports upon high-temperature treatment of Au/SiO(2) catalysts: Implication to catalyst deactivation 

24. Gao Xiang; Jiang Ye; Fu Yinchen; et al. 
Preparation and characterization of CeO(2)/TiO(2) catalysts for selective catalytic reduction of NO with NH(3) 

23. Puertolas Begona; Solsona Benjamin; Agouram Said; et al. 
The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene 
APPLIED CATALYSIS B-ENVIRONMENTAL 93 (3-4) Pages: 395-405, JAN 12 2010.

22. Wu Hongjing; Shuai Qin; Zhen Zhenli; et al. 
Complete Benzene Oxidation over Colloidal Gold Catalysts Supported on Nanostructure Zinc Oxide 

Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction 

20. Hongjing, W., Qin, S., Zhenli, Z., Shenghong, H. 
Complete benzene oxidation over colloidal gold catalysts supported on nanostructure zinc oxide 

Preparation and characterization of CeO2/TiO2 catalysts for selective catalytic reduction of NO with NH3 

The catalytic performance of mesoporous cerium oxides prepared through a nanocasting route for the total oxidation of naphthalene 
Applied Catalysis B: Environmental 93 (3-4), pp. 395-405 (2010).

Total oxidation of naphthalene with high selectivity using a ceria catalyst prepared by a combustion method employing ethylene glycol 

Ceria and gold/ceria catalysts for the abatement of polycyclic aromatic hydrocarbons: An in situ DRIFTS study 

Ceria as a catalyst for hydrogen iodide decomposition in sulfur-iodine cycle for hydrogen production 

Promoting effect of copper on the catalytic activity of MnOx-CeO2 mixed oxide for complete oxidation of benzene 

The influence of cerium to urea preparation ratio of nanocrystalline ceria catalysts for the total oxidation of naphthalene 

12. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N. 
Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on β-MnO2 nanorods 

Catalytic combustion of benzene over Au supported on ceria and vanadia promoted ceria 

10. Li, C., Shen, Y., Jia, M., Sheng, S., Adebojo, M.O., Zhu, H. 
Catalytic combustion of formaldehyde on gold/iron-oxide catalysts 


47. “Plasma-assisted deposition of thin carbon films from methane and the influence of the plasma parameters and additional gases”
F. Hamelmann, A. Aschentrup, A. Brechling, U. Heinzmann, M. Abrashev, A. Szekeres and K. Gesheva
Vacuum 76, 139-142 (2004)


48. ”Low-pressure sublimation epitaxy of AlN films—growth and characterization”
M. Beshkova, Z. Zakhariev, M.V. Abrashev, E. Birch, A. Kakanakova and R. Yakimova
Vacuum 76, 143-146 (2004)


49. “Optical and electrochromic properties of CVD mixed MoO3–WO3 thin films”
T. Ivanova, K. Gesheva, F. Hamelmann, G. Popkirov, M. Abrashev, M. Ganchev and E. Tzvetkova
8. Kim, M.H., Kang, T.Y., Jung, Y.S., Kim, K.H.
Electrochromic properties of tungsten oxide films prepared by reactive sputtering
Japanese Journal of Applied Physics 52 (5 PART 3), art. no. 05EC03, 2013

Electronic Properties and Chemical Bonding of O-Rich Clusters MM’O7 - (M, M’ = V, Nb, Ta)

Optical properties of molybdenum oxide thin films deposited by chemical vapor transport of MoO3(OH)2

5. Deki, S., Béléké, A.B., Kotani, Y., Mizuhata, M.
Liquid phase deposition synthesis of hexagonal molybdenum trioxide thin films

Structures of Mox W (3-x) O6 (x=0-3) anion and neutral clusters determined by anion photoelectron spectroscopy and density functional theory calculations
Journal of Chemical Physics 131 (4), art. no. 044310 (2009).

Electronic structures of MoWOy - and MoWOy determined by anion photoelectron spectroscopy and DFT calculations
Journal of Chemical Physics 130 (12), art. no. 124313 (2009).

Electrochromics for smart windows: Thin films of tungsten oxide and nickel oxide, and devices based on these

Electrochromic materials and devices: Brief survey and new data on optical absorption in tungsten oxide and nickel oxide films
THIN SOLID FILMS 496 (1): 30-36 FEB 1 2006

50. “Comparative Raman studies of Sr2RuO4, Sr3Ru2O7 and Sr4Ru3O10”
M. N. Iliev, V. N. Popov, A. P. Litvinchuk, M. V. Abrashev, J. Backstrom, Y. Y. Sun, R. L. Meng, and C. W. Chu

5. Pandey, P.K., Choudhary, R.J., Mishra, D.K., Sathe, V.G., Phase, D.M.
Signature of spin-phonon coupling in Sr2CoO4 thin film: A Raman spectroscopic study
Applied Physics Letters 102 (14), art. no. 142401, 2013

Anisotropic optical conductivity of Sr4Ru3O10

3. Paetet Christoph M.; Rau Jeffrey G.; Kee Hae-Young
Microscopic route to nematicity in Sr(3)Ru(2)O(7)
PHYSICAL REVIEW B 81 (8) Article Number: 081105, FEB 2010 .

Field- and pressure-induced phases in Sr4Ru3O10: A spectroscopic investigation
PHYSICAL REVIEW LETTERS 96 (6): Art. No. 067004 FEB 17 2006

Spin-phonon coupling in orthorhombic RMnO3 (R=Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Y): A Raman study

51. “Optical and electrochromic characterization of multilayered mixed metal oxide thin films”
Hamelmann F, Gesheva K, Ivanova T, Szekeres A, Abrashev M, Heinzmann U

15. Chandrasekhar, Prasanna; Zay, Brian J.; Cai, Chunning; et al.
Matched-Dual-Polymer Electrochromic Lenses, Using New Cathodically Coloring Conducting Polymers, with Exceptional Performance and Incorporated Into Automated Sunglasses
JOURNAL OF APPLIED POLYMER SCIENCE 131 (22), Art. No. 41043 NOV 15 2014

14. Lupan, O.; Trofim, V.; Cretu, V.; et al.
Investigation of optical properties and electronic transitions in bulk and nano-microribbons of molybdenum trioxide
JOURNAL OF PHYSICS D-APPLIED PHYSICS 47 (8), Art. No. 085302 FEB 26 2014
Investigation of the optical and structural properties of WO3 thin films with different sputtering power supplies
Proceedings of SPIE - The International Society for Optical Engineering 8486, art. no. 84861F, 2012

10. Chen Hsi-Chao; Jan Der-Jun; Chen Chien-Han
Investigation of Optical and Electrochromic Properties of Tungsten Oxide Deposited with Horizontal DC and DC Pulse Magnetron Sputtering
JAPANESE JOURNAL OF APPLIED PHYSICS 51 (4) Article Number: 045503, APR 2012.

In-depth multi-technique characterization of chromium-silicon mixed oxides produced by reactive ion beam mixing of the Cr/Si interface

Investigation of the optical property and structure of WO3 thin films with different sputtering depositions
Proceedings of SPIE - The International Society for Optical Engineering 8168, art. no. 1, 2011.

A General Strategy To Fabricate Simple Polyoxometalate Nanostructures: Electrochemistry-Assisted Laser Ablation in Liquid

Structure, Optical, and Catalytic Properties of Novel Hexagonal Metastable h-MoO(3) Nano- and Microrods Synthesized with Modified Liquid-Phase Processes
CHEMISTRY OF MATERIALS 22 (22) Pages: 6202-6208, NOV 23 2010.

Catalyst-free growth of quasi-aligned nanorods of single crystal Cs3Mo2O9 and their catalytic properties

4. Granqvist, C.G
Transparent conductors as solar energy materials: A panoramic review

Direct thermal oxidation evaporation growth, structure, and optical properties of single-crystalline nanobelts of molybdenum trioxide

2. Niklasson GA, Granqvist CG
Electrochromics for smart windows: thin films of tungsten oxide and nickel oxide, and devices based on these

1. Saad, E. A.-F.I.
Dielectric properties of molybdenum oxide thin films

52. “Resonant Raman scattering in ion-beam-synthesized Mg2Si in a silicon matrix”
M. Baleva, G. Zlateva, A. Atanassov, M. Abrashev, and E. Goranova

19. Yu, H.; Xie, Q.; Chen, Q. Effects of annealing on the formation of Mg2Si film prepared by resistive thermal evaporation method JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 24 (10), 3768-3775, OCT 2013

18. Udono, Haruhiko; Yamanaka, Yusuke; Uchikoshi, Masahito; et al. Infrared photoresponse from pn-junction Mg2Si diodes fabricated by thermal diffusion JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 74 (2), 311-314, FEB 2013


14. Zhu, Feng; Wu, Xiang; Qin, Shan; et al. A re-investigation on pressure-induced phase transition of Mg2Si SOLID STATE COMMUNICATIONS 152 (24), 2160-2164, DEC 2012


6. Yu Ben-Hai; Liu Mo-Lin; Chen Dong First principles study of structural, electronic and elastic properties of Mg(2)Si polymorphs ACTA PHYSICA SINICA 60 (8) Article Number: 087105, AUG 2011.


4. Yu Ben-Hai; Chen Dong Phase transition, structural and thermodynamic properties of Mg(2)Si polymorphs CHINESE PHYSICS B 20 (3) Article Number: 030508, MAR 2011.

3. Hao Jun-Hua; Gao Zhi-Guang; Jin Qing-Hua First principles calculation of structural phase transformation in Mg(2)Si at high pressure SOLID STATE COMMUNICATIONS 150 (47-48) Pages: 2299-2302, DEC 2010.

2. Yu Benhai; Chen Dong; Tang Qingbin; et al. Structural, electronic, elastic and thermal properties of Mg(2)Si
1. Hao Jian; Zou Bo; Zhu Pinwen; et al.
In situ X-ray observation of phase transitions in Mg(2)Si under high pressure
SOLID STATE COMMUNICATIONS 149 (17-18), 689-692, MAY 2009.

53. “Low-temperature CVD-process for growing of electrochromic chromium oxide thin films”
T. Ivanova, K. A. Gesheva, E. Steinman, and M. Abrashev

54. “Distortion-dependent Raman spectra and mode mixing in RMnO3 perovskites (R=La,Pr,Nd,Sm,Eu,Gd,Tb,Dy,Ho,Y)”
M. N. Iliev, M. V. Abrashev, J. Lavergièrre, S. Jandl, M. M. Gospodinov, Y.-Q. Wang, and Y.-Y. Sun

72. Romaguera-Barcelay, Y.; Agostinho Moreira, J.; Almeida, A.; et al.
Structural, electrical and magnetic properties of magnetoelectric GdMnO3 thin films prepared by a sol-gel method
THIN SOLID FILMS 564, pp. 419-425 AUG 1 2014

71. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.
Octahedral distortion induced magnetic anomalies in LaMnO.5Co0.5O3 single crystals

70. Romero, M.; Gomez, R. W.; Marquina, V.; et al.
Synthesis by molten salt method of the AFeO(3) system (A= La, Gd) and its structural, vibrational and internal hyperfine magnetic field characterization
PHYSICA B-CONDENSED MATTER 443, pp. 90-94 JUN 15 2014

69. Guennou, Mael; Bouvier, Pierre; Toulemonde, Pierre; et al.
Jahn-Teller, Polarity, and Insulator-to-Metal Transition in BbMnO3 at High Pressure
PHYSICAL REVIEW LETTERS 112 (7), Art. No. 075501 FEB 19 2014

68. Kozlenko, D. P.; Dang, N. T.; Jabarov, S. H.; et al.
Structural polymorphism in multiferroic BbMnO3 at high pressures and temperatures
JOURNAL OF ALLOYS AND COMPOUNDS 585, pp. 741-747 FEB 5 2014

67. Staruch, M.; Jain, M.
Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk TbMn1-xCrxO3
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (4), Art. No. 046005 JAN 29 2014

66. Das, Raja; Poddar, Pankaj
Observation of exchange bias below incommensurate antiferromagnetic (ICAFM) to canted A-type antiferromagnetic (cAAFm) transition in nanocrystalline orthorhombic EuMnO3
RSC ADVANCES 4 (21), pp. 10614-10618 2014

65. Zhou, L. P.; Deng, H. M.; Sun, L.; et al.
Optical properties of multiferroic LuFeO3 ceramics

64. Chaturvedi, Aditi; Sathe, Vasant
Thickness dependent Raman study of epitaxial LaMnO3 thin films
THIN SOLID FILMS 548, pp. 75-80 DEC 2 2013

63. Choi, Sun Gyu; Lee, Hong-Sub; Choi, Hye jung; et al.
The effect of Ca substitution on the structural and electrical properties of La0.7Sr0.3-xCaxMnO3 perovskite manganese films
JOURNAL OF PHYSICS D-APPLIED PHYSICS 46 (42), Art. No. 425102 OCT 23 2013

62. Chaturvedi, Aditi; Sathe, V. G.
Raman spectroscopy and X-ray diffraction study of PrMnO3 oriented thin films deposited on LaAlO3 and SrTiO3 substrates
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 344, 230-234, OCT 2013

61. Dang, N. T.; Kozlenko, D. P.; Kichanov, S. E.; et al.
Structural and magnetic phase transitions occurring in Pr0.7Sr0.3MnO3 manganese at high pressures
JETP LETTERS 97 (9), 540-545, JUL 2013

60. Chou, Ta-Lei; Lee, Jenn-Min; Chen, Shin-An; et al.
Pressure and Temperature Dependence of Local Structure and Electronic Structure of Orthorhombic DyMnO3
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN 82 (6), 064708, JUN 2013

59. Choi, Sun Gyu; Lee, Hong-Sub; Yeom, Geun Young; et al.
Investigation of the Properties of Ba-Substituted La0.7Sr0.3-x Ba (x) MnO3 Perovskite Manganite Films for Resistive Switching Applications
58. Staruch, M.; Violette, D.; Jain, M. Structural and magnetic properties of multiferroic bulk TbMnO3
MATERIALS CHEMISTRY AND PHYSICS 139 (2-3), 897-900, MAY 15 2013

57. Pandey, Pankaj K.; Choudhary, R. J.; Mishra, Dileep K.; et al. Signature of spin-phonon coupling in Sr2CoO4 thin film: A Raman spectroscopic study
APPLIED PHYSICS LETTERS 102 (14), 142401, APR 8 2013

56. Staruch, M.; Lawes, G.; Kumarasiri, A.; et al. Effects of holmium substitution on multiferroic properties in Tb0.67Ho0.33MnO3
APPLIED PHYSICS LETTERS 102 (6), 062908, FEB 11 2013

55. Hu, Y., Stender, D., Medarde, M., Lippert, T., Wokaun, A., Schneider, C.W. Lattice distortion and strain relaxation in epitaxial thin films of multiferroic TbMnO3 probed by X-ray diffractometry and micro-Raman spectroscopy
Applied Surface Science 278, pp. 92-95, 2013

Journal of Physics Condensed Matter 25 (23), art. no. 235602, 2013

53. Caviezel, A., Mariager, S.O., Johnson, S.L., Möhr-Vorobeva, E., Huang, S.W., Ingold, G., Staub, U., (...), Beaud, P. Identification of coherent lattice modulations coupled to charge and orbital order in a manganite
Physical Review B - Condensed Matter and Materials Physics 87 (20), art. no. 205104, 2013


51. Thomasson, A., Kreisel, J., Lefèvre, C., Roulland, F., Versini, G., Barre, S., Viart, N. Raman scattering of magnetoelectric gallium ferrite thin films

EPL 101 (1), art. no. 17008, 2013

49. Do, Dalhyun; Kim, Jin Won; Kim, Sang Su; et al. Electrical properties in lanthanides substituted (Bi-0.9 A (0.1))(Fe0.975Co0.025)O3-delta (A = La, Eu, Gd) thin films
JOURNAL OF THE KOREAN PHYSICAL SOCIETY 61 (9), 1409-1412, NOV 2012

Journal of Physics Condensed Matter 24 (43), art. no. 436002, 2012


44. Lazarević, N., Radonić, M.M., Tanasković, D., Hu, R., Petrović, C., Popović, Z.V. Lattice dynamics of FeSb2

43. Rovillain, P.; Liu, J.; Cazayous, M.; et al. Electromagnon and phonon excitations in multiferroic TbMnO3
PHYSICAL REVIEW B 86 (1) Article Number: 014437, JUL 30 2012.

42. Romaguera-Barcelay Y.; Agostinho Moreira J.; Almeida A.; et al. Dimensional effects on the structure and magnetic properties of GdMnO3 thin films
MATERIALS LETTERS 70, 167-170, MAR 1 2012.


34. Do Dalhyun; Bae Yu Ri; Kim Jin Won; et al. Multiferroic (Bi(0.9)Dy(0.1))(Fe(0.9)Mn(0.1))O(3) Thin Film JOURNAL OF THE KOREAN PHYSICAL SOCIETY 59 (3) Pages: 2462-2465, SEP 2011.

33. Rovillain P.; Cazayous M.; Gallais Y.; et al. Magnetic Field Induced Dehybridization of the Electromagnons in Multiferroic TbMnO3 PHYSICAL REVIEW LETTERS 107 (1) Article Number: 027202, JUL 5 2011.


28. Antonakos A.; Liarokapis E.; Aydogdu G. H.; et al. Strain induced phase separation on La(0.5)Ca(0.5)MnO3 thin films JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (5) Pages: 620-630, MAR 2011.


22. Chaix-Pluchery O.; Sauer D.; Kreisel J.
21. Lazarevic N.; Popovic Z. V.; Hu Rongwei; et al. 
Evidence for electron-phonon interaction in Fe(1-x)M(x)Sb(2) (M=Co and Cr; 0 <= x <= 0.5) single crystals 
PHYSICAL REVIEW B 81 (14) Article Number: 144302, APR 1 2010.

20. Kumar Pradeep; Saha Surajit; Muthu D. V. S.; et al. 
Raman evidence for orbiton-mediated multiphonon scattering in multiferroic TbMnO(3) 

19. Moreira J. Agostinho; Almeida A.; Ferreira W. S.; et al. 
Coupling between phonons and magnetic excitations in orthorhombic Eu(1-x)Y(x)MnO(3) 
PHYSICAL REVIEW B 81(5) Article Number: 054447, FEB 2010.

18. Kumar Pradeep; Saha Surajit; Serrao C. R.; et al. 
Temperature-dependent infrared reflectivity studies of multiferroic TbMnO(3): Evidence for spin-phonon coupling 

17. Issing S.; Pimenov A.; Ivanov V. Yu.; et al. 
Composition-dependent spin-phonon coupling in mixed crystals of the multiferroic manganite Eu(1-x)Y(x)MnO(3) (0 <= x <= 0.5) 
studied by Raman spectroscopy 
PHYSICAL REVIEW B 81 (2) Article Number: 024304, JAN 2010.

16. Sopracase Rodolphe; Grueener Gisele; Olive Enrick; et al. 
Infrared study of the phonon modes in PrMnO(3) and CaMnO(3) 
PHYSICA B-CONDENSED MATTER 405 (1) Pages: 45-52, JAN 1 2010.

Lattice dynamics of Eu1-xYxMnO3 (0 ≤ x ≤ 0.5) 

14. Chaix-Pluchery, O., Kreisel, J. 
Raman scattering of perovskite DyScO3 and GdScO3 single crystals 

Photo-induced insulator-metal transition probed by Raman spectroscopy 

Pressure effects on the phase separation of Pr0.6Ca 0.4MnO3 thin films 

11. Dubey, A., Sathe, V.G., Rawat, R. 
Signature of Jahn-Teller distortion and oxygen stoichiometry in Raman spectra of epitaxial LaMnO3-δ thin films 

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution 

Thermodynamic properties of SmMnO3, Sm0.5Sr0.55MnO3 and Ca0.85Sr0.15MnO3 

8. Barath, H., Kim, M., Cooper, S.L., Abbamonte, P., Fradkin, E., Mahns, I., Rübhausen, M., (...), Argyriou, D.N. 
Domain fluctuations near the field-induced incommensurate-commensurate phase transition of TbMnO3 

Evaluation of the strains in charge-ordered Pr1-xCa xMnO3 thin films using Raman spectroscopy 

Specific heat and transport properties of La1-xGdxMnO3 at 15 K ≤ T ≤ 300 K 

5. Choithrani, R., Gaur, N.K. 
Heat capacity of EuMnO3 and Eu0.7A0.3MnO3 (A=Ca, Sr) compounds 

4. Gupta, R.K., Whang, C.M. 
Structural study of a sol-gel derived novel solid oxide fuel cell perovskite: (La1-xSrx)(Cr0.85Fe0.05Co0.05Ni0.05)O3-δ
3. Wesselinowa JM, St Kovachev
Magnetic ordering effects in the phonon spectra of orthorhombic RMnO3 compounds

Phonon dynamics of lanthanum manganite LaMnO3 using an interatomic shell model potential
PHYSICAL REVIEW B 75 (21), 214301 (2007).

Selective synthesis of TbMn2O5 nanorods and TbMnO3 micron crystals
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 128 (45), 14454-14455 NOV 15 2006

55. “Gold catalysts supported on ceria and ceria-alumina for water-gas shift reaction”
Andreeva, D., Ivanov, I., Ilieva, L., Abrashev, M.V.

38. Tao, F., Ma, Z.
Water-gas shift on gold catalysts: Catalyst systems and fundamental studies
Physical Chemistry Chemical Physics 15 (37), pp. 15260-15270, 2013

37. Wang, N., Shen, K., Huang, L., Yu, X., Qian, W., Chu, W.
Facile route for synthesizing ordered mesoporous Ni-Ce-Al oxide materials and their catalytic performance for methane dry reforming to hydrogen and syngas
ACS Catalysis 3 (7), pp. 1638-1651, 2013

36. Mandal, S., Santra, C., Bando, K.K., James, O.O., Maity, S., Mehta, D., Chowdhury, B.
Aerobic oxidation of benzyl alcohol over mesoporous Mn-doped ceria supported Au nanoparticle catalyst

35. Ta, N., Liu, J., Shen, W.
Tuning the shape of ceria nanomaterials for catalytic applications

34. Reina, T.R., Xu, W., Ivanova, S., Centeno, M.A., Hanson, J., Rodriguez, J.A., Odrozola, J.A.
In situ characterization of iron-promoted ceria-alumina gold catalysts during the water-gas shift reaction
Catalysis Today 205, pp. 41-48, 2013

Impact of Ce-Fe synergism on the catalytic behaviour of Au/CeO 2-FeOx/Al2O3 for pure H2 production
Catalysis Science and Technology 3 (3), pp. 779-787, 2013

32. Mandal, S., Bando, K.K., Santra, C., Maity, S., James, O.O., Mehta, D., Chowdhury, B.
Sn-CeO2 supported gold nanoparticle catalyst for benzyl alcohol oxidation using molecular O2
Applied Catalysis A: General 452, pp. 94-104, 2013

31. Yazid, H., Adnan, R., Farukh, M.A.
Gold nanoparticles supported on titania for the reduction of p-nitrophenol

Application of gold nanoparticles in catalysis
Frontiers of Nanoscience 3 (1), pp. 249-293, 2012

29. Fonseca, J., Royer, S., Bion, N., Pirault-Roy, L., Rangel, M.C., Duprez, D., Epron, F.
Preferential CO oxidation over nanosized gold catalysts supported on ceria and amorphous ceria-alumina
Applied Catalysis B: Environmental 128, pp. 10-20, 2012

Gold supported calcium deficient hydroxyapatite for room temperature co oxidation

Oxidation of benzyl alcohol by using gold nanoparticles supported on ceria foam

26. Xu, J., Xue, B., Liu, Y.-M., Li, Y.-X., Cao, Y., Fan, K.-N.
Mesoporous Ni-doped ceria as an efficient catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene

25. Kugai Junichiyo; Miller Jeffrey T.; Guo Neng; et al.
Role of metal components in Pd-Cu bimetallic catalysts supported on CeO(2) for the oxygen-enhanced water gas shift
APPLIED CATALYSIS B-ENVIRONMENTAL 105 (3-4) Pages: 306-316, JUN 22 2011.

24. Ousmane M.; Liotta L. F.; Di Carlo G.; et al.
Supported Au catalysts for low-temperature abatement of propene and toluene, as model VOCs: Support effect

High temperature water-gas shift Cu catalysts supported on Ce-Al containing materials for the production of hydrogen using simulated coal-derived syngas

22. Ma Zhen; Yin Hongfeng; Dai Sheng
Performance of Au/MxOy/TiO2 Catalysts in Water-Gas Shift Reaction

21. Ma, Z., Yin, H., Dai, S.
Performance of Au/M x Oy/TiO2 Catalysts in water-gas shift reaction

Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction

A comparative study of the water gas shift reaction over platinum catalysts supported on CeO2, TiO2 and Ce-modified TiO2

18. Xu, J., Wang, L.-C., Liu, Y.-M., Cao, Y., He, H.-Y., Fan, K.-N.
Mesoporous CeO2 as an effective catalyst for styrene synthesis by oxidative dehydrogenation of ethylbenzene

Ceria prepared using supercritical antisolvent precipitation: A green support for gold-palladium nanoparticles for the selective catalytic oxidation of alcohols
CO oxidation catalyzed by Au–Ag bimetallic nanoparticles supported in mesoporous silica

Rare earth oxide modified CuO/CeO2 catalysts for the water-gas shift reaction

14. Zane, F., Trevisan, V., Pinna, F., Signoretto, M., Menegazzo, F.
Investigation on gold dispersion of Au/ZrO2 catalysts and activity in the low-temperature WGS reaction
Applied Catalysis B: Environmental 89 (1-2), pp. 303-308 (2009).

Effect of rare earth oxide on the catalytic performance of Au/CeO2 catalyst for water-gas shift reaction

12. Chen, Y.-C., Chen, K.-B., Lee, C.-S., Lin, M.C.
Direct synthesis of Zr-doped ceria nanotubes

11. Skála, T., Šutara, F., Prince, K.C., Matolin, V.
cerium oxide stoichiometry alteration via Sn deposition: Influence of temperature

Role of water in the CO oxidation reaction on Au/CeO2: Modification of the surface properties

A photoemission study of the interaction of Ga with CeO2(1 1 1) thin films

Water gas shift catalysis using iron aerogels doped with palladium by the gas-phase incorporation method

Structural characterization and oxidehydrogenation activity of CeO2/Al2O3 and V2O5/CeO2/Al2O3 catalysts

Water-gas shift reaction over aluminum promoted Cu/CeO2 nanocatalysts characterized by XRD, BET, TPR and cyclic voltammetry (CV)

Nanocrystalline cerium oxide produced by supercritical antisolvent precipitation as a support for high-activity gold catalysts

4. Hammer, N., Kvande, I., Chen, D., Running, M.
Au-TiO2 catalysts stabilised by carbon nanofibres

3. Shapovalov, V., Metiu, H.
Catalysis by doped oxides: CO oxidation by AuxCe1-xO2

2. Cortic, M., Laguna, A., Thompson, D.

1. Hashmi, A.S.K., Hutchings, G.J.
Gold Catalysis

56. “Raman and infrared studies of La1-ySryMn1-xMxO3 (M=Cr, Co, Zn, Sc or Ga): Oxygen disorder and local vibrational modes”
A. Dubroka, J. Humlček, M. V. Abrashevi, Z. V. Popovic, F. Sapiña, and A. Cantarero

Polaron framework to account for transport properties in metallic epitaxial manganite films
PHYSICAL REVIEW B 89 (21), Art. No. 214411 JUN 12 2014

13. Dodiya, Neha; Varshney, Dinesh
Structural properties and Raman spectroscopy of rhombohedral La1-xNaxMnO3 (0.075 <= x <= 0.15)
JOURNAL OF MOLECULAR STRUCTURE 1031, 104-109, JAN 16 2013

12. Islam, M.A., Rondinelli, J.M., Spanier, J.E.
Normal mode determination of perovskite crystal structures with octahedral rotations: Theory and applications
Journal of Physics Condensed Matter 25 (17), art. no. 175902, 2013

Magnetic structure of La 0.54Ho 0.11Sr 0.35Mn 1-xCu xO 3 manganites

10. Eremina, R. M.; Sharipov, K. R.; Mingalieva, L. V.; et al.
Properties of La1-xSr0.925Zn0.075O3 (x=0.075, 0.095, 0.115) ceramics

Phonon Raman scattering of RCrO3 perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)

8. Mir Feroz Ahmad; Ikram M.; Kumar Ravi
Local symmetry breaking in PrFeO(3) thin films and other similar systems after Ni doping: A brief Raman study

7. Mir Feroz Ahmad; Ikram M.; Kumar Ravi
Symmetry breaking in Ni-doped PrFeO(3) thin films established by Raman study
PHASE TRANSITIONS 84 (2) Pages: 167-178, 2011.

Stress evolution and lattice distortion induced by thickness variation and lattice misfit in \text{La}_0.67\text{Sr}_0.33\text{Mn}_3\text{O}_3\text{-delta} films

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution

Effect of Ga substitution on the optical properties of La-Sr manganites

Characterisation of combinatorial libraries of perovskite materials for SOFC cathode applications

Franck-Condon higher order lattice excitations in the LaFe1-xCrxO3 (x=0, 0.1, 0.5, 0.9, 1.0) perovskites due to Fe-Cr charge transfer effects
PHYSICAL REVIEW B 75 (10), 103402 (2007).

1. Li WJ, Zhang B, Lu W
Stress properties and Raman spectroscopy of La_{(2+4x)}/Sr_{3(1-4x)}/Mn_{3(1-x)}Cu_xO_3(O <= x <= 0.2)

57. “Properties of AlN epitaxial layers on 6H–SiC substrate grown by sublimation in argon, nitrogen, and their mixtures”
M. Beshkova, Z. Zakhariev, M.V. Abrashev, J. Birch, A. Postovit, and R. Yakimova

2. Perng, Ya-Chuan; Kim, Taeseung; Chang, Jane P.
Effect of residual H2O on epitaxial AlN film growth on 4H-SiC by alternating doses of TMA and NH3
APPLIED SURFACE SCIENCE 314, pp. 1047-1052 SEP 30 2014

1. Kangawa, Y., Wakigawa, T., Kakimoto, K.
Possibility of AlN solution growth using Al and Li3N

58. “Gold supported on ceria and ceria-alumina promoted by molybdena for complete benzene oxidation”
Andreeva, D., Petrova, P., Sobczak, J.W., Ilieva, L., and Abrashev, M.
19. Lakshmanan, Pandian; Averseng, Frederic; Bion, Nicolas; et al.
Understanding of the oxygen activation on ceria- and ceria/alumina-supported gold catalysts: a study combining O-18/O-16 isotopic exchange and EPR spectroscopy
GOLD BULLETIN 46 (4), pp. 233-242 2013

18. Lakshmanan, Pandian; Delannoy, Laurent; Louis, Catherine; et al.
Au/xCeO(2)/Al2O3 catalysts for VOC elimination: oxidation of 2-propanol
CATALYSIS SCIENCE & TECHNOLOGY 3 (11), pp. 2918-2925 2013

Zeolite MCM-22 modified with Au and Cu for catalytic total oxidation of methanol and carbon monoxide

16. Farooq, M., Ramii, A., Subbarao, D.
Synthesis and characterization of molybdenum catalysts supported on γ-Al2O3-CeO2 composite oxides

Preparation and application of high-performance catalyst in microwave assisted catalytic oxidation of benzene

14. Scirè, S., Liotta, L.F.
Supported gold catalysts for the total oxidation of volatile organic compounds
Applied Catalysis B: Environmental 125, pp. 222-246, 2012.

13. Wu, P., Loh, P.K., Zhao, X.S.
Supported gold catalysts for selective oxidation of organics

Total oxidation of volatile organic compounds on Au/FeO(x) catalysts supported on mesoporous SBA-15 silica
APPLIED CATALYSIS A-GENERAL 400 (1-2) Pages: 54-60, JUN 30 2011.

11. Bonelli R.; Albonetti S.; Morandi V.; et al.
Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO(2) for total oxidation of VOC

10. Wang Lei; Guo Guangsheng; Gu Fubo; et al.
Preparation of three different sphere-like Au/CeO(2) catalysts and their activity for the CO oxidation

9. Musialik-Piotrowska Anna
Activity of Perovskite-Based Platinum Doped Catalysts in Oxidation of Organic Air Pollutants

8. Yu Qiangqiang; Chen Wei; Li Yang; et al.
The action of Pt in bimetallic Au- Pt/CeO(2) catalyst for water-gas shift reaction
CATALYSIS TODAY 158 (3-4) Pages: 324-328, DEC 22 2010.

7. Scire Salvatore; Riccobene Paolo M.; Crisafuli Carmelo
Ceria supported group IB metal catalysts for the combustion of volatile organic compounds and the preferential oxidation of CO

Preparation of ceria-alumina and catalytic activity of gold catalyst supported on ceria-alumina for water gas shift reaction

5. Delannoy, L., Fajerwerg, K., Lakshmanan, P., Potvin, C., Méthivier, C., Louis, C.
Supported gold catalysts for the decomposition of VOC: Total oxidation of propene in low concentration as model reaction

4. Huang, S., Zhang, C., He, H.
Complete oxidation of o-xylene over Pd/Al2O3 catalyst at low temperature

3. Manzoli, M., Avgouropoulos, G., Tabakova, T., Papavasiliou, J., Ioannides, T., Boccuzzi, F.
Preferential CO oxidation in H2-rich gas mixtures over Au/doped ceria catalysts

2. Wang, L.-C., He, L., Liu, Q., Liu, Y.-M., Chen, M., Cao, Y., He, H.-Y., Fan, K.-N.
Solvent-free selective oxidation of alcohols by molecular oxygen over gold nanoparticles supported on β-MnO2 nanorods
1. Gennequin, C., Lamallem, M., Cousin, R., Siffert, S., Aissi, F., Aboukais, A. 
Catalytic oxidation of VOCs on Au/Ce-Ti-O 

59. “Raman spectroscopy of low-temperature (Pnma) and high-temperature (R-3c) phases of 
LaCrO3”

16. Muneeswaran, M.; Giridharan, N. V. 
Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO3 nanoparticles 
JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 214109 JUN 7 2014

Local symmetry breaking and spin-phonon coupling in SmCrO3 orthochromite 
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp.1-6 JUN 2014

14. Saha, Sujoy; Chanda, Sadhan; Dutta, Ale; et al. 
Dielectric relaxation and phonon modes of NdCrO3 nanostructure 

Structures and Magnetism of the Rare-Earth Orthochromite Perovskite Solid Solution LaxSm1-xCrO3 
INORGANIC CHEMISTRY 52 (21), pp. 12161-12169 OCT 21 2013

12. Jacob, Kallarackel Thomas; Gupta, Sapna; Singh, Prabhakar 
Electrochemical Determination of Gibbs Energy of Formation of LaCrO3 Using a Composition-Graded Bielectrolyte 
JOURNAL OF THE AMERICAN CERAMIC SOCIETY 96 (10), pp. 3272-3278 OCT 2013

Structural and magnetic properties of isovalently substituted multiferroic BiFeO 3: Insights from Raman spectroscopy 
Physical Review B - Condensed Matter and Materials Physics 86 (18), art. no. 184422, 2012

10. Runka, T.; Berkowski, M. 
Perovskite La1-xSrxBi1-yMn O-y(3) solid solution crystals: Raman spectroscopy characterization 

Phonon Raman scattering of RCrO3 perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu) 

8. Martinelli, A., Ferretti, M., Cimberle, M.R., Ritter, C. 
The crystal and magnetic structure of Ti-substituted LaCrO3 

7. Du Yi; Cheng Zhen Xiang; Wang Xiao-Lin; et al. 
Structure, magnetic, and thermal properties of Nd(1-x)La(x)CrO(3) (0 <= x <= 1.0) 

A potential interconnect material for solid oxide fuel cells: Nd0.75Ca0.25Cr0.98O3-delta 

5. Sharma, V.I., Yildiz, B. 
Degradation mechanism in La0.8Sr0.2CoO3 as contact layer on the solid oxide electrolysis cell anode 

4. Shen, Y., Liu, M., He, T., Jiang, S.P. 
Preparation, electrical conductivity, and thermal expansion behavior of dense Nd1-xCaxCrO3 solid solutions 

Thermodynamic assessment of the La-Cr-O system 

Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution 
1. Ong, K.P., Blaha, P., Wu, P.
   Origin of the light green color and electronic ground state of LaCrO3

60. “Sublimation Epitaxy of AlN layers grown by different conditions on 4H-SiC substrates”
   M. Beshkova, K. G. Grigorov, Z. Zakhariev, M. Abrashev, M. Massi, R. Yakimova

61. “Polarized micro-Raman scattering characterization of Mg2Si nanolayers in (001) Si matrix”
   G. Zlateva, A. Atanassov, M. Baleva, I. Nikolova and M. V. Abrashev

2. Morozova, Natalia V.; Ovsyannikov, Sergey V.; Korobeinikov, Igor V.; et al.
   Significant enhancement of thermoelectric properties and metallization of Al-doped Mg2Si under pressure
   JOURNAL OF APPLIED PHYSICS 115 (21), Art. No. 213705 JUN 7 2014

1. Kang, Y., Brockway, L., Vaddiraju, S.
   A simple phase transformation strategy for converting silicon nanowires into metal silicide nanowires: Magnesium silicide
   Materials Letters 100, pp. 106-110, 2013

62. “Raman spectroscopy of ordered double perovskite La2CoMnO6 thin films”
   M. N. Iliev, M. V. Abrashev, A. P. Litvinchuk, V. G. Hadjiev, H. Guo, and A. Gupta

41. Kumar, Dhirendra; Kumar, Satish; Sathe, Vasant G.
   Spin-phonon coupling in ordered double perovskites A2CoMnO6 (A=La, Pr, Nd) probed by micro-Raman spectroscopy
   SOLID STATE COMMUNICATIONS 194, pp. 59-64 SEP 2014

40. Ghosh, Binita; Halder, Saswata; Sinha, Tripurari Prasad
   Dielectric Relaxation and Collective Vibrational Modes of Double-Perovskites A(2)SmTaO(6) (A = Ba, Sr and Ca)
   JOURNAL OF THE AMERICAN CERAMIC SOCIETY 97 (8), pp. 2564-2572 AUG 2014

39. Manna, Kaustuv; Bhadram, Venkata Srinu; Elizabeth, Suja; et al.
   Octahedral distortion induced magnetic anomalies in LaMn0.5Co0.53 single crystals

38. Basisty, R.; Stanislavchuk, T. N.; Sirenko, A. A.; et al.
   Infrared-active optical phonons and magnetic excitations in the hexagonal manganites RMnO3 (R = Ho, Er, Tm, Yb, and Lu)
   PHYSICAL REVIEW B 90 (2), Art. No. 024307 JUL 23 2014

37. Apostolov, A. T.; Apostolova, I. N.; Wesselinowa, J. M.
   The magnetoelastic effect in thin films of ferromagnetic semiconductor La2NiMnO6
   PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 251 (6), pp. 1219-1224 JUN 2014

   Local symmetry breaking and spin-phonon coupling in SmCrO3 orthochromite
   JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 361, pp. 1-6 JUN 2014

35. Kumar, Pradeep; Ghara, Sonath; Rajeswaran, B.; et al.
   Temperature dependent magnetic, dielectric and Raman studies of partially disordered La2NiMnO6
   SOLID STATE COMMUNICATIONS 184, pp. 47-51 APR 2014

34. Garcia-Flores, A. F.; Terashita, H.; Bittar, E. M.; et al.
   Raman scattering in the magnetically frustrated double perovskite Sr2YRuO6
   JOURNAL OF RAMAN SPECTROSCOPY 45 (2), pp. 193-196 FEB 2014

33. Ghosh, Binita; Dutta, Alo; Shannigrahi, Santiranjan; et al.
   Combined XPS and first principles study of double-perovskite Ca2GdTaO6
   JOURNAL OF MATERIALS SCIENCE 49 (2), pp. 819-826 JAN 2014

32. Ghosh, Binita; Dutta, Alo; Sinha, T. P.
   Vibrational modes and electrical transport in Sr2GaTaO6
   MATERIALS CHEMISTRY AND PHYSICS 143 (1), 26-33 DEC 16 2013

31. Silva, R. X.; Reichlova, H.; Marti, X.; et al.
   Spin-phonon coupling in Gd(Co1/2Mn1/2)O-3 perovskite
   JOURNAL OF APPLIED PHYSICS 114 (19), Art. No. 194102 NOV 21 2013

30. Macedo Filho, Raimundo Bezerra; Ayala, Alejandro Pedro; de Araujo Paschoal, Carlos William
   Spin-phonon coupling in Y2NiMnO6 double perovskite probed by Raman spectroscopy
   APPLIED PHYSICS LETTERS 102 (19), 192902, MAY 13 2013
29. Milenov, T. I.; Rafailov, P. M.; Urclay-Olabarria, I.; et al.
Magnetic behavior of La2CoMnO6-delta crystal doped with Pb and Pt
MATERIALS RESEARCH BULLETIN 47 (12), 4001-4005 DEC 2012

A-site-doping enhanced B-site ordering and correlated magnetic property in La 2-xBi xCoMnO 6

27. Mishra, Dileep K.; Sathe, V. G.
Evidence of the Fano resonance in a temperature dependent Raman study of CaCu3Ti4O12 and SrCu3Ti4O12

26. Bai, Yijia; Liu, Xiaojuan; Xia, Yanjie; et al.
B-site ordering induced suppression of magnetic cluster glass and dielectric anomaly in La2-xBixCoMnO6
APPLIED PHYSICS LETTERS 100 (22) Article Number: 222907, MAY 28 2012.

Spin-Electron-Phonon Excitation in Re-based Half-Metallic Double Perovskites

24. Gu Yijing; Wang Yunfeng; Wang Tao; et al.
Structure and current-induced effect on the resistivity of La2CoMnO6 thin films
MATERIALS CHEMISTRY AND PHYSICS 132 (2-3), 466-470, FEB 15 2012.

23. Zhu Min; Lin Yong; Lo Edward W. C.; et al.
Electronic and magnetic properties of La2NiMnO6 and La2CoMnO6 with cationic ordering
APPLIED PHYSICS LETTERS 100 (6) Article Number: 062406, FEB 6 2012.

22. Zhang Zhiqing; Jian Hongbin; Tang Xianwu; et al.
Structural, magnetic and dielectric properties of La(2)NiMnO(6) thin film by chemical solution deposition method
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY 61 (1), 224-228, JAN 2012.

21. Nair Harikrishnan S.; Swain Diptikanta; Hariharan N.; et al.
Griffiths phase-like behavior and spin-phonon coupling in double perovskite Tbt2NiMnO(6)

20. Gu Yijing; Wang Yunfeng; Wang Tao; et al.
Synthesis, structural and magnetic study of polycrystalline LaNi(1-x)Mn(x)O(3) films

Magnetic properties and phonon behavior of Pr(2)NiMnO(6) thin films
APPLIED PHYSICS LETTERS 98 (16) Article Number: 162506, APR 18 2011.

Investigation on the Magnetic Anomaly and the Role of Orbital Moment on the Magnetic Properties of LaMn(0.5)Co(0.5)O(3)

17. Truong K. D.; Singh M. P.; Jandl S.; et al.
Investigation of phonon behavior in Pr(2)NiMnO(6) by micro-Raman spectroscopy

Raman and infrared spectroscopy of Sr(2)B ' UO(6) (B ' = Ni; Co) double perovskites
VIBRATIONAL SPECTROSCOPY 54 (2) Pages: 142-147, NOV 18 2010.

Magnetic properties of La doped Br(2)FeMnO(6) ceramic and film

Influence of lattice distortion on the Curie temperature and spin-phonon coupling in LaMn0.5Co0.5O3
Journal of Physics Condensed Matter 22 (34), art. no. 346006, SEP 1 2010.

Phase formation, phonon behavior, and magnetic properties of novel ferromagnetic La(3)BAlMnO(9) (B=Co or Ni) triple perovskites
JOURNAL OF APPLIED PHYSICS 107 (9) Article Number: 09D916, MAY 1 2010.

12. Wang, T., Shi, W., Fang, X., Dong, W., Tao, R.
Fabrication of polycrystalline La2NiMnO6 thin films on Si (1 0 0) substrates by chemical solution deposition

11. Long-range Ni/Mn structural order in epitaxial double perovskite La2NiMnO6 thin films
Tong W, Yoon WS, Hagh NM, et al


63. “Design of new gold catalysts supported on mechanochemically activated ceria-alumina, promoted by molybdlena for complete benzene oxidation”


9. Long, Bihua; Huang, Jianhui; Wang, Xinchen Photocatalytic degradation of benzene in gas phase by nanostructured BiPO4 catalysts PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL 22 (6), 645-654, DEC 2012


6. Bonelli R.; Albonetti S.; Morandi V.; et al. Design of nano-sized FeO(x) and Au/FeO(x) catalysts supported on CeO(2) for total oxidation of VOC APPLIED CATALYSIS A-GENERAL 395 (1-2) Pages: 10-18, MAR 15 2011.

5. Carolina Gomez-Carrillo Sandra; Guillermo Bolcatto Pablo
Coexistence of root 3 x root 3 and quasi-linear phases of sulfur adsorbed (θ=1/3) on a gold (111) substrate


33. Kumar, Pawan; No-Lee, Heung; Kumar, Rajesh Synthesis of phase pure iron oxide polymorphs thin films and their enhanced magnetic properties JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS 25 (10), pp. 4553-4561 OCT 2014


31. Dadak, Gabriela; Gusz, Malgorzata; Turczyn, Roman; et al. Pervaporation with chitosan membranes containing iron oxide nanoparticles SEPARATION AND PURIFICATION TECHNOLOGY 133, pp. 8-15 SEP 8 2014

30. Prozorov, Tanya; Perez-Gonzalez, Teresa; Valverde-Tercedor, Carmen; et al. Manganese incorporation into the magnetosome magnetite: magnetic signature of doping
Synthesis of nanostructured magnetic photocatalyst by colloidal approach and spray-drying technique

Effect of surface modification on magnetization of iron oxide nanoparticle colloids

Laser photochemical deposition of magnetite nanograins in a-Fe/C/O composite: High-pressure metal oxide polymorph surviving ambient conditions

Effect of the number of iron oxide nanoparticle layers on the magnetic properties of nanocomposite LbL assemblies

8. Li, Y.-S., Church, J.S., Woodhead, A.L.
Infrared and Raman spectroscopic studies on iron oxide magnetic nano-particles and their surface modifications

7. Nawara, K., Romiszewski, J., Kijewska, K., Szczytyno, J., Twardowski, A., Mazur, M., Krysinski, P.
Adsorption of doxorubicin onto citrate-stabilized magnetic nanoparticles

Novel ferrofluids coated with a renewable material obtained from cashew nut shell liquid

5. Tung, T.T., Feller, J.-F., Kim, T., Kim, H., Yang, W.S., Suh, K.S.
Electromagnetic properties of Fe3O4-functionalized graphene and its composites with a conducting polymer

Magnetic nanoparticles for a new drug delivery system to control quercetin releasing for cancer chemotherapy

3. Pu Shengli; Bai Xuekun; Wang Lunwei
Temperature dependence of photonic crystals based on thermo-responsive magnetic fluids
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS 323 (22) Pages: 2866-2871, NOV 2011.

2. Cheng J. P.; Ma R.; Chen X.; et al.
Effect of ferric ions on the morphology and size of magnetite nanocrystals synthesized by ultrasonic irradiation

1. Can Musa Mutlu; Oezcan Sadan; Ceylan Abdullah; et al.
Effect of milling time on the synthesis of magnetite nanoparticles by wet milling
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 172 (1), pp.72-75, AUG 15 2010

Ivanova, T., Gesheva, K.A., Abrashev, M., Sharlandjiev, P., Lazarova, D.

70. “Growth and characterization of La2CoMnO6 crystals doped with Pb”

A-site-doping enhanced B-site ordering and correlated magnetic property in La2-xBixCoMnO6

71. “Polarized Raman spectroscopy of nearly tetragonal BiFeO3 thin films”
M. N. Iliev, M. V. Abrashev, D. Mazumdar, V. Shelke, and A. Gupta
Physical Review B 82, 014107 (2010). (5 pages)

13. Huang, Chuanwei; Chen, Lang
Effects of Interfaces on the Structure and Novel Physical Properties in Epitaxial Multiferroic BiFeO3 Ultrathin Films
MATERIALS 7 (7), pp. 5403-5426 JUL 2014
12. Zhang, Jinxing; Ke, Xiaoxing; Gou, Gaoyang; et al. A nanoscale shape memory oxide NATURE COMMUNICATIONS 4, Art. No. 2768 NOV 2013

11. Anokhin, A. S.; Bunina, O. A.; Golovko, Yu I.; et al. Raman and X-ray diffraction study of (Ba,Sr)TiO3/(Bi,Nd)FeO3 multilayer heterostructures THIN SOLID FILMS 545, 267-271, OCT 31 2013


7. Liu Huajun; Yang Ping; Yao Kui; et al. Origin of a Tetragonal BiFeO3 Phase with a Giant c/a Ratio on SrTiO3 Substrates ADVANCED FUNCTIONAL MATERIALS 22 (5), 937-942, MAR 7 2012.


4. Kreisel J.; Jadhav P.; Chaix-Pluchery O.; et al. A phase transition close to room temperature in BiFeO(3) thin films JOURNAL OF PHYSICS-CONDENSED MATTER 23 (34), Article Number: 342202, AUG 31 2011.


Investigation of magnetic ordering and cation distribution in the spinel ferrites $\text{Cr}_x\text{Fe}_{3-x}\text{O}_4 \ (0.0 \leq x \leq 1.0)$

**PHYSICA B-CONDENSED MATTER** 438, pp. 91-96 APR 1 2014

17. Shen, Liming; Althammer, Matthias; Pachauri, Neha; et al.
Epitaxial growth of spinel cobalt ferrite films on MgAl2O4 substrates by direct liquid injection chemical vapor deposition
**JOURNAL OF CRYSTAL GROWTH** 590, pp. 61-66 MAR 15 2014

16. Cheng, Ching
Enhanced magnetization and conductive phase in NiFe2O4
**JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS** 325, 144-146, 2013

15. Walsh, Sean R.; Rusakova, Irene; Whitmire, Kenton H.
Rock salt vs. wurtzite phases of $\text{Co}_1-x\text{Mn}_x\text{O}_3$: control of crystal lattice and morphology at the nanoscale
**CRYSTENGCOMM** 15 (4), 775-784, 2013

Mass spectrometric analysis of mono- and multi-phosphopeptides by selective binding with NiZnFe2O4 magnetic nanoparticles
**Nature Communications** 4, art. no. 1656, 2013

Stress-mediated magnetic anisotropy and magnetoelastic coupling in epitaxial multiferroic PbTiO3-CoFe2O4 nanostructures
**Journal of Applied Physics** 113 (8), art. no. 084101, 2013

Optical and magneto-optical study of nickel and cobalt ferrite epitaxial thin films and submicron structures
**Physical Review B - Condensed Matter and Materials Physics** 87 (2), art. no. 024419, 2013

11. Caffrey, N.M., Fritsch, D., Archer, T., Sanvito, S., Ederer, C.
Spin-filtering efficiency of ferrimagnetic spinels CoFe2O4 and NiFe2O4
**Physical Review B - Condensed Matter and Materials Physics** 82 (10), art. no. 014406, 2012

10. Lorenz, M., Ziese, M., Wagner, G., Lenzner, J., Kranert, C., Brachwitz, K., Hochmuth, H., Grundmann, M.
Exchange bias and magnetodielectric coupling effects in $\text{ZnFe}_2\text{O}_4$-BaTiO3 thin films
**ACS Catalysis** 2 (8), pp. 1793-1801, 2012

9. Ravindra, A.V., Padhan, P., Prellier, W.
Electronic structure and optical band gap of CoFe2O4 thin films
**Applied Physics Letters** 101 (16), art. no. 161902, 2012

Dielectric response of epitaxially strained CoFe2O4 spinel thin films
**Applied Physics B - Condensed Matter and Materials Physics** 86 (12), art. no. 125309, 2012

Spectroscopic characterization of mixed Fe-Ni oxide electrocatalysts for the oxygen evolution reaction in alkaline electrolytes
**ACS Catalysis** 2 (8), pp. 1793-1801, 2012

6. Fritsch, D., Ederer, C.
First-principles calculation of magnetoelastic coefficients and magnetostriction in the spinel ferrites CoFe2O4 and NiFe2O4
**Physical Review B - Condensed Matter and Materials Physics** 81 (1), art. no. 014406, 2012

5. Benrabaa R.; Bouklhouf H.; Barama S.; et al.
Structural, Textural and Acid-Base Properties of Nano-Sized NiFe2O4 Spinel Catalysts
**CATALYSIS LETTERS** 142 (1), 42-49, JAN 2012.

4. Zhu X. F.; Chen L. F.
First-principles study of magnetic properties of a Nickel-Zinc ferrite: Zn(x)Ni(1-x)Fe2O4
**JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS** 323 (23), pp.3138-3142, DEC 2011

3. Fritsch, D., Ederer, C.
Effect of epitaxial strain on the cation distribution in spinel ferrites CoFe2O4 and NiFe2O4: A density functional theory study
**Applied Physics Letters** 99 (8), art. no. 081916, AUG 22 2011.

2. Haetge, J., Suchomski, C., Brezesinski, T.
Ordered mesoporous MFe2O4 (M = Co, Cu, Mg, Ni, Zn) thin films with nanocrystalline walls, uniform 16 nm diameter pores and high thermal stability: Template-directed synthesis and characterization of redox active trevorite

1. Fritsch Daniel, Ederer Claude
Epitaxial strain effects in the spinel ferrites CoFe2O4(0)4 and NiFe2O4(0)4 from first principles
**Physical Review B - Condensed Matter and Materials Physics** 82 (10), art. no. 104117, SEP 23 2010.

73. “Synthesis and characterization of R$\text{BaCo}_2\text{O}_{5+x} \ (R = \text{La, Nd, Gd, Y and Ho})$”
N. D. Todorov, M. V. Abrashev, V. G. Ivanov, G. V. Avdeev and S. C. Russev
On the magnetic behavior of polycrystalline RBaCo2O5+delta synthesized by solid state and wet chemical routes  

74. “Lattice dynamics of the α and β phases of LiFe5O8”  
Physical Review B 83, 174111 (2011) (7 pages)

3. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014

2. Teixeira, S. Soretto; Graça, M. P. F.; Costa, L. C.; et al.  
Study of the influence of thermal treatment on the magnetic properties of lithium ferrite prepared by wet ball-milling using nitrates as raw material  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS 186, pp. 83-88 AUG 2014

1. Teixeira, S.S., Graça, M.P.F., Costa, L.C.  
Dielectric, morphological and structural properties of lithium ferrite powders prepared by solid state method  

75. “Comparative Raman study of isostructural YCrO3 and YMnO3: Effects of structural distortions and twinning”  
Physical Review B 83, 224303 (2011) (6 pages)

6. Sharma, Yogesh; Sahoo, Satyaprakash; Perez, William; et al.  
Phonons and magnetic excitation correlations in weak ferromagnetic YCrO3  
JOURNAL OF APPLIED PHYSICS 115 (18), Art. No. 183907 MAY 14 2014

5. Staruch, M.; Jain, M.  
Evidence of antiferromagnetic and ferromagnetic superexchange interactions in bulk TbMn1-xCrO3  
JOURNAL OF PHYSICS-CONDENSED MATTER 26 (4), Art. No. 046005 JAN 29 2014

Temperature Dependent Raman Scattering in YCrO3  
AIP Conference Proceedings 1591, pp. 1753-1754 2014

Anomalous magnetic behavior below 10 K in YCrO3 nanoparticles obtained under droplet confinement  
APPLIED PHYSICS LETTERS 103 (18) OCT 28 2013

2. Tiwari, B., Surendra, M.K., Ramachandra Rao, M.S.  
HoCrO3 and YCrO3: A comparative study  
Journal of Physics Condensed Matter 25 (21), art. no. 216004, 2013

Phonon Raman scattering of RCo3O6 perovskites (R=Y, La, Pr, Sm, Gd, Dy, Ho, Yb, Lu)  

76. “Infrared response of α- and β-phases of LiFe5O8”  
V. G. Ivanov, A. P. Litvinchuk, N. D. Todorov, M. V. Abrashev, and V. Marinova  
Physical Review B 84, 094111 (2011) (5 pages)

1. Cheruku, Rajesh; Govindaraj, G.; Vijayan, Lakshmi  
Super-linear frequency dependence of ac conductivity in nanocrystalline lithium ferrite  
MATERIALS CHEMISTRY AND PHYSICS 146 (3), pp. 389-398 AUG 14 2014

77. “Electrochromic and Optical Study of Atmospheric Pressure Chemical Vapour Deposition MoO3–Cr2O3 Films”  
T. Ivanova, K. A. Geshева, M. Kozlov, and M. Abrashev  
Journal of Nanoscience and Nanotechnology 11, 1–7 (2011) (7 pages)

78. “Frequency dependence of the quasi-soft Raman-active modes in rotationally distorted R3+Cr3+O3 perovskites (R3+—rare earth, B3+: D, Al, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Ga)”
79. “Relationship between structural properties and activity in complete benzene oxidation over Au/CoO2–CoOx catalysts”

80. “Raman spectroscopy and lattice-dynamical calculations of Sc3CrO6 single crystals”
Physical Review B 85, 314301 (2012) (7 pages)

81. “Study of electrochromic APCVD WO3-V2O5 films”
G. Bodurov, T. Ivanova, M. Abrashev, and K. Gesheva

82. “Raman spectroscopy and lattice dynamical calculations of Sc2O3 single crystals”
N. D. Todorov, M. V. Abrashev, V. Marinova, M. Kadiyski, L. Dimowa, and E. Faulques
Physical Review B 87, 104301 (2013) (5 pages)

83. “Biogenic iron oxides produced by neutrophilic iron-oxidizing bacteria under laboratory conditions”
Ralitza Angelova, Lyubomir Slavov, Mihail Iliev, Blagoi Blagoev, Daniela Kovacheva, Miroslav Abrashev, Ivan Nedkov, and Veneta Groudeva

84. “Thin film optical coatings of Vanadium Oxide and mixed Tungsten/Vanadium Oxide deposited by APCVD employing precursors of Vanadyl Acetylacetonate and a mixture with tungsten hexacarbonyl”
Georgi Bodurov, Tatiana Ivanova, Miroslav Abrashev, Zoya Nenova, and Kostadinka Gesheva

85. “Phonon and magnon Raman scattering in CuB2O4”
V. G. Ivanov, M. V. Abrashev, N. D. Todorov, V. Tomov, R. P. Nikolova, A. P. Litvinchuk, and M. N. Iliev
86. “Microwave plasma based single step method for free standing graphene synthesis at atmospheric conditions”

87. “Lattice dynamics and spin-phonon coupling in CaMn2O4: A Raman study”
V. G. Ivanov, V. G. Hadjiev, A. P. Litvinchuk, D. Z. Dimitrov, B. L. Shivachev, M. V. Abrashev, B. Lorenz, and M. N. Iliev
Physical Review B 89, 184307 (2014)

88. “Raman study of phonons in CaMn7O12: Effects of structural modulation and structural transition”
M. N. Iliev, V. G. Hadjiev, M. M. Gospodinov, R. P. Nikolova, and M. V. Abrashev
Physical Review B 89, 214302 (2014)

89. “Microwave plasmas applied for the synthesis of free standing graphene sheets”
E Tatarova, A Dias, J Henriques, A M Botelho do Rego, A M Ferraria, M V Abrashev, C C Luhrs, J Phillips, F M Dias and C M Ferreira

90. “Raman spectra of R2O3 (R—rare earth) sesquioxides with C-type bixbyite crystal structure: A comparative study”
M. V. Abrashev, N. D. Todorov, and J. Geshev