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Network Physiology - Physiologic Dynamic...

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| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">Physiobank, physiotoolkit, and physionet</a><br>AL Goldberger, LAN Amaral, L Glass, JM Hausdorff, PC Ivanov, RG Mark, ...<br>Circulation 101 (23), e215-e220   | 5799     | 2000 |
| <a href="#">Fractal dynamics in physiology: alterations with disease and aging</a><br>AL Goldberger, LAN Amaral, JM Hausdorff, PC Ivanov, CK Peng, ...<br>Proceedings of the national academy of sciences 99 (suppl 1), 2466-2472              | 1730     | 2002 |
| <a href="#">Multifractality in human heartbeat dynamics</a><br>PC Ivanov, LAN Amaral, AL Goldberger, S Havlin, MG Rosenblum, ...<br>Nature 399, 461-465  | 1557     | 1999 |
| <a href="#">Effect of trends on detrended fluctuation analysis</a><br>K Hu, PC Ivanov, Z Chen, P Carpena, HE Stanley<br>Physical Review E 64 (1), 011114   | 1160     | 2001 |
| <a href="#">Effect of nonstationarities on detrended fluctuation analysis</a><br>Z Chen, PC Ivanov, K Hu, HE Stanley<br>Physical review E 65 (4), 041107   | 829      | 2002 |
| <a href="#">Scaling behaviour of heartbeat intervals obtained by wavelet-based time-series analysis</a><br>PC Ivanov, MG Rosenblum, CK Peng, J Mietus, S Havlin, HE Stanley, ...<br>NATURE 383 (6598), 323-327                                 | 551      | 1996 |
| <a href="#">Scaling behaviour of heartbeat intervals obtained by wavelet-based time-series analysis</a><br>PC Ivanov, MG Rosenblum, CK Peng, J Mietus, S Havlin, HE Stanley, ...<br>Nature 383 (6598), 323                                     | 551      | 1996 |
| <a href="#">Magnitude and sign correlations in heartbeat fluctuations</a><br>Y Ashkenazy, PC Ivanov, S Havlin, CK Peng, AL Goldberger, HE Stanley<br>Physical Review Letters 86 (9), 1900  | 396      | 2001 |
| <a href="#">Statistical physics and physiology: monofractal and multifractal approaches</a><br>HE Stanley, LAN Amaral, AL Goldberger, S Havlin, PC Ivanov, CK Peng<br>Physica A: Statistical Mechanics and its Applications 270 (1-2), 309-324 | 345      | 1999 |
| <a href="#">From 1/f noise to multifractal cascades in heartbeat dynamics</a><br>PC Ivanov, LA Nunes Amaral, AL Goldberger, S Havlin, MG Rosenblum, ...<br>Chaos: An Interdisciplinary Journal of Nonlinear Science 11 (3), 641-652            | 338      | 2001 |
| <a href="#">Network physiology reveals relations between network topology and physiological function</a><br>A Bashan, RP Bartsch, JW Kantelhardt, S Havlin, PC Ivanov<br>Nature communications 3, 702  | 268      | 2012 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">Behavioral-independent features of complex heartbeat dynamics</a><br>LAN Amaral, PC Ivanov, N Aoyagi, I Hidaka, S Tomono, AL Goldberger, ...<br>Physical Review Letters 86 (26), 6026  | 251      | 2001 |
| <a href="#">Quantifying cross-correlations using local and global detrending approaches</a><br>B Podobnik, I Grosse, D Horvatić, S Ilic, PC Ivanov, HE Stanley<br>The European Physical Journal B 71 (2), 243  | 241      | 2009 |
| <a href="#">Metal–insulator transition in chains with correlated disorder</a><br>P Carpena, P Bernaola-Galván, PC Ivanov, HE Stanley<br>Nature 418 (6901), 955   | 236 *    | 2002 |
| <a href="#">Sleep-wake differences in scaling behavior of the human heartbeat: analysis of terrestrial and long-term space flight data</a><br>PC Ivanov, A Bunde, LAN Amaral, S Havlin, J Fritsch-Yelle, RM Baevsky, ...<br>EPL (Europhysics Letters) 48 (5), 594  | 235      | 1999 |
| <a href="#">Quantifying signals with power-law correlations: A comparative study of detrended fluctuation analysis and detrended moving average techniques</a><br>L Xu, PC Ivanov, K Hu, Z Chen, A Carbone, HE Stanley<br>Physical Review E 71 (5), 051101         | 234      | 2005 |
| <a href="#">Scale invariance in the nonstationarity of human heart rate</a><br>P Bernaola-Galván, PC Ivanov, LAN Amaral, HE Stanley<br>Physical review letters 87 (16), 168105   | 217      | 2001 |
| <a href="#">When human walking becomes random walking: fractal analysis and modeling of gait rhythm fluctuations</a><br>JM Hausdorff, Y Ashkenazy, CK Peng, PC Ivanov, HE Stanley, ...<br>Physica A: Statistical mechanics and its applications 302 (1-4), 138-147 | 207      | 2001 |
| <a href="#">Effect of nonlinear filters on detrended fluctuation analysis</a><br>Z Chen, K Hu, P Carpena, P Bernaola-Galvan, HE Stanley, PC Ivanov<br>Physical Review E 71 (1), 011104   | 201      | 2005 |
| <a href="#">Stochastic feedback and the regulation of biological rhythms</a><br>PC Ivanov, LAN Amaral, AL Goldberger, HE Stanley<br>EPL (Europhysics Letters) 43 (4), 363  | 191      | 1998 |
| <a href="#">Common scale-invariant patterns of sleep–wake transitions across mammalian species</a><br>CC Lo, T Chou, T Penzel, TE Scammell, RE Strecker, HE Stanley, ...<br>Proceedings of the National Academy of Sciences of the United States of ...            | 187      | 2004 |
| <a href="#">Scale-independent measures and pathologic cardiac dynamics</a><br>LAN Amaral, AL Goldberger, PC Ivanov, HE Stanley<br>Physical Review Letters 81 (11), 2388  | 173      | 1998 |
| <a href="#">Common scaling patterns in intertrade times of US stocks</a><br>PC Ivanov, A Yuen, B Podobnik, Y Lee<br>Physical Review E 69 (5), 056107   | 163      | 2004 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">Characterization of sleep stages by correlations in the magnitude and sign of heartbeat increments</a><br>JW Kantelhardt, Y Ashkenazy, PC Ivanov, A Bunde, S Havlin, T Penzel, ...<br><i>Physical Review E</i> 65 (5), 051908                                | 158      | 2002 |
| <a href="#">Magnitude and sign scaling in power-law correlated time series</a><br>Y Ashkenazy, S Havlin, PC Ivanov, CK Peng, V Schulte-Frohlinde, ...<br><i>Physica A: Statistical Mechanics and its Applications</i> 323, 19-41   | 144      | 2003 |
| <a href="#">Dynamics of sleep-wake transitions during sleep</a><br>CC Lo, LAN Amaral, S Havlin, PC Ivanov, T Penzel, JH Peter, HE Stanley<br><i>EPL (Europhysics Letters)</i> 57 (5), 625  | 138      | 2002 |
| <a href="#">Application of statistical physics to heartbeat diagnosis</a><br>S Havlin, LAN Amaral, Y Ashkenazy, AL Goldberger, PC Ivanov, CK Peng, ...<br><i>Physica A: Statistical Mechanics and its Applications</i> 274 (1-2), 99-110                                 | 127      | 1999 |
| <a href="#">Scale invariance and universality: organizing principles in complex systems</a><br>HE Stanley, LAN Amaral, P Gopikrishnan, PC Ivanov, TH Keitt, V Plerou<br><i>Physica A: Statistical Mechanics and its Applications</i> 281 (1-4), 60-68                    | 123      | 2000 |
| <a href="#">A stochastic model of human gait dynamics</a><br>Y Ashkenazy, JM Hausdorff, PC Ivanov, HE Stanley<br><i>Physica A: Statistical Mechanics and its Applications</i> 316 (1-4), 662-670   | 121      | 2002 |
| <a href="#">Detection of obstructive sleep apnea from cardiac interbeat interval time series</a><br>JE Mietus, CK Peng, PC Ivanov, AL Goldberger<br><i>Computers in Cardiology</i> 2000, 753-756   | 121      | 2000 |
| <a href="#">Endogenous circadian rhythm in an index of cardiac vulnerability independent of changes in behavior</a><br>K Hu, PC Ivanov, MF Hilton, Z Chen, RT Ayers, HE Stanley, SA Shea<br><i>Proceedings of the National Academy of Sciences</i> 101 (52), 18223-18227 | 107      | 2004 |
| <a href="#">Power-law autocorrelated stochastic processes with long-range cross-correlations</a><br>B Podobnik, DF Fu, HE Stanley, PC Ivanov<br><i>The European Physical Journal B</i> 56 (1), 47-52   | 103      | 2007 |
| <a href="#">Correlation differences in heartbeat fluctuations during rest and exercise</a><br>R Karasik, N Sapir, Y Ashkenazy, PC Ivanov, I Dvir, P Lavie, S Havlin<br><i>Physical Review E</i> 66 (6), 062902   | 99       | 2002 |
| <a href="#">Non-random fluctuations and multi-scale dynamics regulation of human activity</a><br>K Hu, PC Ivanov, Z Chen, MF Hilton, HE Stanley, SA Shea<br><i>Physica A: Statistical Mechanics and its Applications</i> 337 (1-2), 307-318                              | 95       | 2004 |
| <a href="#">Scaling and universality in heart rate variability distributions</a><br>PC Ivanov, MG Rosenblum, CK Peng, JE Mietus, S Havlin, HE Stanley, ...<br><i>Physica A: Statistical Mechanics and Its Applications</i> 249 (1-4), 587-593                            | 95       | 1998 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">Fractal scale-invariant and nonlinear properties of cardiac dynamics remain stable with advanced age: a new mechanistic picture of cardiac control in healthy elderly</a><br>DT Schmitt, PC Ivanov<br>American Journal of Physiology-Regulatory, Integrative and Comparative ... | 93       | 2007 |
| <a href="#">Influence of corruption on economic growth rate and foreign investment</a><br>B Podobnik, J Shao, D Njavro, PC Ivanov, HE Stanley<br>The European Physical Journal B 63 (4), 547-550   | 92       | 2008 |
| <a href="#">Phase transitions in physiologic coupling</a><br>RP Bartsch, AY Schumann, JW Kantelhardt, T Penzel, PC Ivanov<br>Proceedings of the National Academy of Sciences 109 (26), 10181-10186   | 91       | 2012 |
| <a href="#">Modeling long-range cross-correlations in two-component ARFIMA and FIARCH processes</a><br>B Podobnik, D Horvatic, AL Ng, HE Stanley, PC Ivanov<br>Physica A: Statistical Mechanics and its Applications 387 (15), 3954-3959   | 89       | 2008 |
| <a href="#">Steady-state visual evoked potentials and phase synchronization in migraine patients</a><br>L Angelini, M De Tommaso, M Guido, K Hu, PC Ivanov, D Marinazzo, ...<br>Physical review letters 93 (3), 038103   | 89       | 2004 |
| <a href="#">Scaling in nature: from DNA through heartbeats to weather</a><br>S Havlin, SV Buldyrev, A Bunde, AL Goldberger, PC Ivanov, CK Peng, ...<br>Physica A: Statistical Mechanics and its Applications 273 (1-2), 46-69  | 88       | 1999 |
| <a href="#">Levels of complexity in scale-invariant neural signals</a><br>PC Ivanov, QDY Ma, RP Bartsch, JM Hausdorff, LAN Amaral, ...<br>Physical Review E 79 (4), 041920   | 83       | 2009 |
| <a href="#">Endogenous circadian rhythm in human motor activity uncoupled from circadian influences on cardiac dynamics</a><br>PC Ivanov, K Hu, MF Hilton, SA Shea, HE Stanley<br>Proceedings of the National Academy of Sciences 104 (52), 20702-20707                                      | 80       | 2007 |
| <a href="#">Effect of extreme data loss on long-range correlated and anticorrelated signals quantified by detrended fluctuation analysis</a><br>QDY Ma, RP Bartsch, P Bernaola-Galván, M Yoneyama, PC Ivanov<br>Physical Review E 81 (3), 031101   | 79       | 2010 |
| <a href="#">The suprachiasmatic nucleus functions beyond circadian rhythm generation</a><br>K Hu, FAJL Scheer, PC Ivanov, RM Buijs, SA Shea<br>Neuroscience 149 (3), 508-517   | 74       | 2007 |
| <a href="#">Fractionally integrated process with power-law correlations in variables and magnitudes</a><br>B Podobnik, PC Ivanov, K Biljakovic, D Horvatic, HE Stanley, I Grosse<br>Physical Review E 72 (2), 026121   | 73       | 2005 |

| TITLE   | CITED BY | YEAR |
|---|----------|------|
| <a href="#">Variance fluctuations in nonstationary time series: a comparative study of music genres</a><br>HD Jennings, PC Ivanov, AM Martins, PC da Silva, GM Viswanathan<br><i>Physica A: Statistical Mechanics and its Applications</i> 336 (3-4), 585-594       | 71       | 2004 |
| <a href="#">Multiscale aspects of cardiac control</a><br>PC Ivanov, Z Chen, K Hu, HE Stanley<br><i>Physica A: Statistical Mechanics and its Applications</i> 344 (3-4), 685-704   | 67       | 2004 |
| <a href="#">Stratification pattern of static and scale-invariant dynamic measures of heartbeat fluctuations across sleep stages in young and elderly</a><br>DT Schmitt, PK Stein, PC Ivanov<br><i>IEEE Transactions on Biomedical Engineering</i> 56 (5), 1564-1573 | 63       | 2009 |
| <a href="#">Aging effects on cardiac and respiratory dynamics in healthy subjects across sleep stages</a><br>AY Schumann, RP Bartsch, T Penzel, PC Ivanov, JW Kantelhardt<br><i>Sleep</i> 33 (7), 943-955   | 62       | 2010 |
| <a href="#">Systems with correlations in the variance: Generating power law tails in probability distributions</a><br>B Podobnik, PC Ivanov, Y Lee, A Chessa, HE Stanley<br><i>EPL (Europhysics Letters)</i> 50 (6), 711  | 59       | 2000 |
| <a href="#">Quantitative relations between corruption and economic factors</a><br>J Shao, PC Ivanov, B Podobnik, HE Stanley<br><i>The European physical journal B</i> 56 (2), 157-166   | 56       | 2007 |
| <a href="#">Noise effects on the complex patterns of abnormal heartbeats</a><br>V Schulte-Frohlinde, Y Ashkenazy, PC Ivanov, L Glass, AL Goldberger, ...<br><i>Physical Review Letters</i> 87 (6), 068104   | 56       | 2001 |
| <a href="#">Scale-invariant truncated Lévy process</a><br>B Podobnik, PC Ivanov, Y Lee, HE Stanley<br><i>EPL (Europhysics Letters)</i> 52 (5), 491  | 56       | 2000 |
| <a href="#">Network Physiology: How Organ Systems Dynamically Interact</a><br>RP Bartsch, KKL Liu, A Bashan, PC Ivanov<br><i>PLoS ONE</i> 10 (11), e0142143   | 53       | 2015 |
| <a href="#">Complex patterns of abnormal heartbeats</a><br>V Schulte-Frohlinde, Y Ashkenazy, AL Goldberger, PC Ivanov, M Costa, ...<br><i>Physical review E</i> 66 (3), 031901  | 49       | 2002 |
| <a href="#">Spurious detection of phase synchronization in coupled nonlinear oscillators</a><br>L Xu, Z Chen, K Hu, HE Stanley, PC Ivanov<br><i>Physical Review E</i> 73 (6), 065201  | 46       | 2006 |
| <a href="#">Heart rate sonification: A new approach to medical diagnosis</a><br>M Ballora, B Pennycook, PC Ivanov, L Glass, AL Goldberger<br><i>Leonardo</i> 37 (1), 41-46  | 46       | 2004 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <b>Cross-correlation of instantaneous phase increments in pressure-flow fluctuations: applications to cerebral autoregulation</b><br>Z Chen, K Hu, HE Stanley, V Novak, PC Ivanov<br>Physical Review E 73 (3), 031915                            | 45       | 2006 |
| <b>Power-law correlated processes with asymmetric distributions</b><br>B Podobnik, PC Ivanov, V Jazbinsek, Z Trontelj, HE Stanley, I Grosse<br>Physical Review E 71 (2), 025104  | 45       | 2005 |
| <b>Modeling transient correlations in heartbeat dynamics during sleep</b><br>JW Kantelhardt, S Havlin, PC Ivanov<br>EPL (Europhysics Letters) 62 (2), 147  | 41       | 2003 |
| <b>Scale-invariant aspects of cardiac dynamics across sleep stages and circadian phases</b><br>P Ivanov<br>IEEE Engineering in Medicine and Biology Magazine 26 (6)  | 40       | 2007 |
| <b>New class of level statistics in correlated disordered chains</b><br>P Carpena, P Bernaola-Galván, PC Ivanov<br>Physical review letters 93 (17), 176804   | 36       | 2004 |
| <b>Decomposition of heartbeat time series: scaling analysis of the sign sequence</b><br>Y Ashkenazy, PC Ivanov, S Havlin, CK Peng, Y Yamamoto, ...<br>Computers in Cardiology 2000, 139-142  | 36       | 2000 |
| <b>Long-range correlations in permeability fluctuations in porous rock</b><br>HA Makse, GW Davies, S Havlin, PC Ivanov, PR King, HE Stanley<br>Physical Review E 54 (4), 3129  | 36       | 1996 |
| <b>Network physiology: mapping interactions between networks of physiologic networks</b><br>PC Ivanov, RP Bartsch<br>Networks of Networks: the last Frontier of Complexity, 203-222  | 35       | 2014 |
| <b>Modeling heart rate variability by stochastic feedback</b><br>LAN Amaral, AL Goldberger, PC Ivanov, HE Stanley<br>Computer physics communications 121, 126-128  | 33       | 1999 |
| <b>Pattern formation in sedimentary rocks: Connectivity, permeability, and spatial correlations</b><br>HA Makse, S Havlin, PC Ivanov, PR King, S Prakash, HE Stanley<br>Physica A: Statistical Mechanics and its Applications 233 (3-4), 587-605 | 33       | 1996 |
| <b>Frustrated two-dimensional quantum Heisenberg antiferromagnet at low temperatures</b><br>NB Ivanov, PC Ivanov<br>Physical Review B 46 (13), 8206  | 33       | 1992 |
| <b>Power-law properties of Chinese stock market</b><br>C Yan, JW Zhang, Y Zhang, YN Tang<br>Physica A: Statistical Mechanics and its Applications 353, 425-432   | 32       | 2005 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">ARCH–GARCH approaches to modeling high-frequency financial data</a><br>B Podobnik, PC Ivanov, I Grosse, K Matia, HE Stanley<br>Physica A: Statistical Mechanics and its Applications 344 (1-2), 216-220  | 32       | 2004 |
| <a href="#">Current Perspective</a><br>AL Goldberger, LAN Amaral, L Glass, JM Hausdorff, PC Ivanov, RG Mark, ...<br>Circulation 101, e215-e220   | 32       | 2000 |
| <a href="#">Maternal–fetal heartbeat phase synchronization</a><br>PC Ivanov, QDY Ma, RP Bartsch<br>Proceedings of the National Academy of Sciences 106 (33), 13641-13642   | 31       | 2009 |
| <a href="#">Effects of coarse-graining on the scaling behavior of long-range correlated and anti-correlated signals</a><br>Y Xu, QDY Ma, DT Schmitt, P Bernaola-Galván, PC Ivanov<br>Physica A: Statistical Mechanics and its Applications 390 (23-24), 4057-4072                  | 30       | 2011 |
| <a href="#">Fluctuations, noise and scaling in the cardio-pulmonary system</a><br>B Suki, AM Alencar, U Frey, PCH IVANOV, SV Buldyrev, A MAJUMDAR, ...<br>Fluctuation and Noise Letters 3 (01), R1-R25   | 29       | 2003 |
| <a href="#">Time evolution of stochastic processes with correlations in the variance: stability in power-law tails of distributions</a><br>B Podobnik, K Matia, A Chessa, PC Ivanov, Y Lee, HE Stanley<br>Physica A: Statistical Mechanics and its Applications 300 (1-2), 300-309 | 27       | 2001 |
| <a href="#">Zipf rank approach and cross-country convergence of incomes</a><br>J Shao, PC Ivanov, B Urošević, HE Stanley, B Podobnik<br>EPL (Europhysics Letters) 94 (4), 48001  | 26       | 2011 |
| <a href="#">Focus on the emerging new fields of network physiology and network medicine</a><br>PC Ivanov, KKL Liu, RP Bartsch<br>New Journal of Physics 18 (10), 100201  | 25       | 2016 |
| <a href="#">Truncated Levy process with scale-invariant behavior</a><br>PC Ivanov, B Podobnik, Y Lee, HE Stanley<br>Physica A: Statistical Mechanics and its Applications 299 (1-2), 154-160   | 25       | 2001 |
| <a href="#">Coexisting Forms of Coupling and Phase-Transitions in Physiological Networks</a><br>RP Bartsch, PC Ivanov<br>Communications in Computer and Information Science 438, 270-287   | 23       | 2014 |
| <a href="#">Three independent forms of cardio-respiratory coupling: transitions across sleep stages</a><br>RP Bartsch, KKL Liu, QDY Ma, PC Ivanov<br>Computing in Cardiology 41, 781-784   | 21       | 2014 |
| <a href="#">Phase transitions in the first-passage time of scale-invariant correlated processes</a><br>C Carretero-Campos, P Bernaola-Galván, PC Ivanov, P Carpena<br>Physical Review E 85 (1), 011139   | 20       | 2012 |

| TITLE  | CITED BY | YEAR |
|--|----------|------|
| <a href="#">Fractal and multifractal approaches in physiology</a><br>PC Ivanov, AL Goldberger, HE Stanley<br>The Science of Disasters, 218-257   | 20       | 2002 |
| <a href="#">Detection of obstructive sleep apnea through auditory display of heart rate variability</a><br>M Ballora, B Pennycook, PC Ivanov, A Goldberger, L Glass<br>Computers in Cardiology 2000, 739-740   | 20       | 2000 |
| <a href="#">Quantum ferrimagnets</a><br>AV Chubukov, KI Ivanova, PC Ivanov, ER Korutcheva<br>Journal of Physics: Condensed Matter 3 (16), 2665   | 20       | 1991 |
| <a href="#">Plasticity of brain wave network interactions and evolution across physiologic states</a><br>KKL Liu, RP Bartsch, A Lin, RN Mantegna, PC Ivanov<br>Frontiers in neural circuits 9, 62  | 19       | 2015 |
| <a href="#">Asymmetry and basic pathways in sleep-stage transitions</a><br>CC Lo, RP Bartsch, PC Ivanov<br>EPL (Europhysics Letters) 102 (1), 10008  | 19       | 2013 |
| <a href="#">Analysis of sleep fragmentation and sleep structure in patients with sleep apnea and normal volunteers</a><br>T Penzel, CC Lo, PC Ivanov, K Kesper, HF Becker, C Vogelmeier<br>Engineering in Medicine and Biology Society, 2005. IEEE-EMBS 2005. 27th ... | 18       | 2006 |
| <a href="#">Correlated walks down the babylonian markets</a><br>NE Romero, QDY Ma, LS Liebovitch, CT Brown, PC Ivanov<br>EPL (Europhysics Letters) 90 (1), 18004   | 17       | 2010 |
| <a href="#">Information entropy and correlations in prime numbers</a><br>P Kumar, PC Ivanov, HE Stanley<br>arXiv preprint cond-mat/0303110   | 17       | 2003 |
| <a href="#">Impact of stock market structure on intertrade time and price dynamics</a><br>PC Ivanov, A Yuen, P Perakakis<br>PloS one 9 (4), e92885   | 16       | 2014 |
| <a href="#">Time correlations and 1/f behavior in backscattering radar reflectivity measurements from cirrus cloud ice fluctuations</a><br>K Ivanova, TP Ackerman, EE Clothiaux, PC Ivanov, HE Stanley, ...<br>Journal of Geophysical Research: Atmospheres 108 (D9)   | 16       | 2003 |
| <a href="#">Levels of complexity in scale-invariant neural signals</a><br>PC Ivanov, JM Hausdorff, S Havlin, LAN Amaral, K Arai, ...<br>arXiv preprint cond-mat/0409545  | 14       | 2004 |
| <a href="#">Delay-correlation landscape reveals characteristic time delays of brain rhythms and heart interactions</a><br>A Lin, KKL Liu, RP Bartsch, PC Ivanov<br>Phil. Trans. R. Soc. A 374 (2067), 20150182   | 13       | 2016 |

| TITLE   | CITED BY | YEAR |
|---|----------|------|
| <a href="#">Impact of stock market structure on intertrade time and price dynamics</a><br>A Yuen, PC Ivanov<br>arXiv preprint physics/0508203   | 13       | 2005 |
| <a href="#">Segmentation of time series with long-range fractal correlations</a><br>P Bernaola-Galván, JL Oliver, M Hackenberg, AV Coronado, PC Ivanov, ...<br>The European Physical Journal B 85 (6), 211  | 12       | 2012 |
| <a href="#">Wavelets in medicine and physiology</a><br>PC Ivanov, AL Goldberger, S Havlin, CK Peng, MG Rosenblum, ...<br>Wavelets in Physics, 391   | 12       | 1999 |
| <a href="#">Long-range dependence in heartbeat dynamics</a><br>PC Ivanov<br>Processes with long-range correlations, 339-372   | 11       | 2003 |
| <a href="#">Scale invariance in the nonstationarity of physiological signals</a><br>P Bernaola-Galván, PC Ivanov, LAN Amaral, AL Goldberger, HE Stanley<br>arXiv preprint cond-mat/0005284  | 11       | 2000 |
| <a href="#">Entropy measures, entropy estimators, and their performance in quantifying complex dynamics: Effects of artifacts, nonstationarity, and long-range correlations</a><br>W Xiong, L Faes, PC Ivanov<br>Physical Review E 95 (6), 062114 | 10       | 2017 |
| <a href="#">Major component analysis of dynamic networks of physiologic organ interactions</a><br>KKL Liu, RP Bartsch, QDY Ma, PC Ivanov<br>Journal of Physics: Conference Series 640 (1), 012013   | 10       | 2015 |
| <a href="#">Patterns of spiral wave attenuation by low-frequency periodic planar fronts</a><br>MA de la Casa, FJ de la Rubia, PC Ivanov<br>Chaos: An Interdisciplinary Journal of Nonlinear Science 17 (1), 015109                                | 10       | 2007 |
| <a href="#">Magnitude and sign of long-range correlated time series: Decomposition and surrogate signal generation</a><br>M Gómez-Extremera, P Carpena, PC Ivanov, PA Bernaola-Galván<br>Physical Review E 93 (4), 042201                         | 9        | 2016 |
| <a href="#">Spiral wave annihilation by low-frequency planar fronts in a model of excitable media</a><br>A Miguel, FJ de la Rubia, PC Ivanov<br>EPL (Europhysics Letters) 86 (1), 18005   | 8        | 2009 |
| <a href="#">Scaling laws and model of words organization in spoken and written language</a><br>C Bian, R Lin, X Zhang, QDY Ma, PC Ivanov<br>EPL (Europhysics Letters) 113 (1), 18002  | 7        | 2016 |
| <a href="#">Relation between magnitude series correlations and multifractal spectrum width</a><br>Y Ashkenazy, S Havlin, PC Ivanov, CK Peng, V Schulte-Frohlinde, ...<br>arXiv preprint cond-mat/0111396  | 7        | 2001 |

| TITLE   | CITED BY | YEAR |
|---|----------|------|
| <a href="#">Dynamical patterns of human postural responses to emotional stimuli</a><br>PE Perakakis, S Idrissi, J Vila, PC Ivanov<br>Psychophysiology 49 (9), 1225-1229   | 6        | 2012 |
| <a href="#">Patterns of phase-dependent spiral wave attenuation in excitable media</a><br>MA de La Casa, FJ de La Rubia, PC Ivanov<br>Physical Review E 75 (5), 051923  | 5        | 2007 |
| <a href="#">Early Detection of Sepsis—A Role for Network Physiology?</a><br>JR Moorman, DE Lake, PC Ivanov<br>Critical care medicine 44 (5), e312-e313  | 4        | 2016 |
| <a href="#">Scale-invariant aspects of cardiac dynamics across sleep stages and circadian phases</a><br>PC Ivanov<br>Engineering in Medicine and Biology Society, 2006. EMBS'06. 28th Annual ...                                      | 4        | 2006 |
| <a href="#">Universal temporal characteristics and vanishing of multifractality in Barkhausen avalanches</a><br>GZ dos Santos Lima, G Corso, MA Correa, RL Sommer, PC Ivanov, ...<br>Physical Review E 96 (2), 022159                 | 3        | 2017 |
| <a href="#">Network Physiology: From Neural Plasticity to Organ Network Interactions</a><br>PC Ivanov, KKL Liu, A Lin, RP Bartsch<br>Emergent Complexity from Nonlinearity, in Physics, Engineering and the Life ...                  | 3        | 2017 |
| <a href="#">Model of the dynamic construction process of texts and scaling laws of words organization in language systems</a><br>S Li, R Lin, C Bian, QDY Ma, PC Ivanov<br>PloS one 11 (12), e0168971                                 | 3        | 2016 |
| <a href="#">Quantifying heartbeat dynamics by magnitude and sign correlations</a><br>PC Ivanov, Y Ashkenazy, JW Kantelhardt, HE Stanley<br>AIP Conference Proceedings 665 (1), 383-391  | 3        | 2003 |
| <a href="#">Modelling Biomedical Signals</a><br>H Kappen, K LEHNERTZ, RG ANDRZEJAK, T KREUZ, F MORMANN, ...<br>Singapore: World Scientific  | 3        | 2002 |
| <a href="#">Scaling properties of DNA sequences and heartbeat rate</a><br>S Havlin, SV Buldyrev, AL Goldberger, PC Ivanov, CK Peng, HE Stanley, ...<br>The Physics of Complex Systems [Proceedings of the International School of ... | 3        | 1997 |
| <a href="#">Neural responses to heartbeats of physically trained and sedentary young adults</a><br>P Perakakis, A Luque-Casado, LF Ciria, PC Ivanov, D Sanabria<br>bioRxiv, 156802  | 2        | 2017 |
| <a href="#">Phase synchronization of pressure-flow fluctuations: A measure of cerebral autoregulation dynamics</a><br>Z Chen, PC Ivanov, V Novák, K Hu, HE Stanley<br>Phys. Rev. E 73 (physics/0508102), 031915                       | 2        | 2005 |

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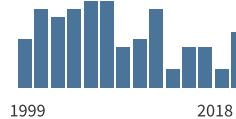
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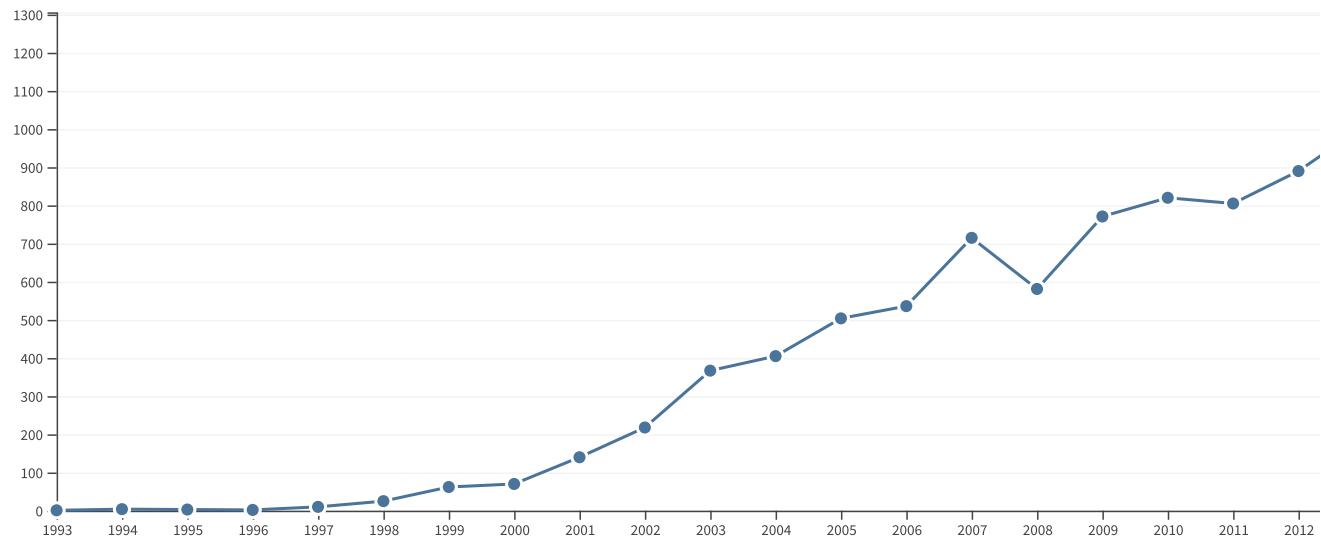
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| <input type="checkbox"/>   | <b>1. PhysioBank, PhysioToolkit, and PhysioNet - Components of a new research resource for complex physiologic signals</b><br><br>By: Goldberger, AL; Amaral, LAN; Glass, L; et al.<br><b>CIRCULATION</b> Volume: 101 Issue: 23 Pages: E215-E220 Published: JUN 13 2000   | 331  | 389  | 531  | 548  | 148 | 3391  | 178.47 |
| <input type="checkbox"/>   | <b>2. Fractal dynamics in physiology: Alterations with disease and aging</b><br><br>By: Goldberger, AL; Amaral, LAN; Hausdorff, JM; et al.<br>Conference: Colloquium of the National-Academy-of-Science on Self-Organized Complexity in the Physical, Biological, and Social Sciences Location: NAS BECKMAN CTR, IRVINE, CA Date: MAR 23-24, 2001<br>Sponsor(s): Natl Acad Sci<br><b>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA</b> Volume: 99 Supplement: 1 Pages: 2466-2472 Published: FEB 19 2002 | 81   | 73   | 94   | 91   | 33  | 1064  | 62.59  |
| <input type="checkbox"/>   | <b>3. Multifractality in human heartbeat dynamics</b><br><br>By: Ivanov, PC; Amaral, LAN; Goldberger, AL; et al.<br><b>NATURE</b> Volume: 399 Issue: 6735 Pages: 461-465 Published: JUN 3 1999  | 68   | 55   | 71   | 77   | 27  | 1030  | 51.50  |
| <input type="checkbox"/>   | <b>4. Effect of trends on detrended fluctuation analysis</b><br><br>By: Hu, K; Ivanov, PC; Chen, Z; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 64 Issue: 1 Article Number: 011114 Part: 1 Published: JUL 2001   | 59   | 56   | 52   | 67   | 22  | 804   | 44.67  |
| <input type="checkbox"/>   | <b>5. Effect of nonstationarities on detrended fluctuation analysis</b><br><br>By: Chen, Z; Ivanov, PC; Hu, K; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 65 Issue: 4 Article Number: 041107 Part: 1 Published: APR 2002  | 46   | 44   | 49   | 47   | 16  | 618   | 36.35  |
| <input type="checkbox"/>   | <b>6. Scaling behaviour of heartbeat intervals obtained by wavelet-based time-series analysis</b><br><br>By: Ivanov, PC; Rosenblum, MG; Peng, CK; et al.<br><b>NATURE</b> Volume: 383 Issue: 6598 Pages: 323-327 Published: SEP 26 1996   | 15   | 12   | 13   | 19   | 3   | 385   | 16.74  |
| <input type="checkbox"/>   | <b>7. Magnitude and sign correlations in heartbeat fluctuations</b><br><br>By: Ashkenazy, Y; Ivanov, PC; Havlin, S; et al.<br><b>PHYSICAL REVIEW LETTERS</b> Volume: 86 Issue: 9 Pages: 1900-1903 Published: FEB 26 2001  | 13   | 13   | 19   | 17   | 3   | 299   | 16.61  |
| <input type="checkbox"/>   | <b>8. From 1/f noise to multifractal cascades in heartbeat dynamics</b><br><br>By: Ivanov, PC; Amaral, LAN; Goldberger, AL; et al.<br><b>CHAOS</b> Volume: 11 Issue: 3 Pages: 641-652 Published: SEP 2001   | 20   | 7    | 11   | 20   | 4   | 251   | 13.94  |
| <input type="checkbox"/>   | <b>9. Statistical physics and physiology: Monofractal and multifractal approaches</b><br><br>By: Stanley, HE; Amaral, LAN; Goldberger, AL; et al.<br>Conference: International Conference on Statistical Physics (Statphys - Calcutta III) Location: SATYENDRA NATH BOSE NAT CTR BASIC SCI, SALT LAKE, INDIA Date: JAN 04-09, 1999<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 270 Issue: 1-2 Pages: 309-324 Published: AUG 1 1999   | 14   | 11   | 17   | 11   | 7   | 236   | 11.80  |
| <input type="checkbox"/>   | <b>10. Quantifying cross-correlations using local and global detrending approaches</b><br><br>By: Podobnik, B.; Grosse, I.; Horvatic, D.; et al.  | 30   | 29   | 29   | 31   | 16  | 206   | 20.60  |

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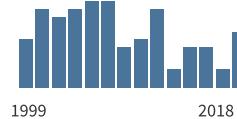
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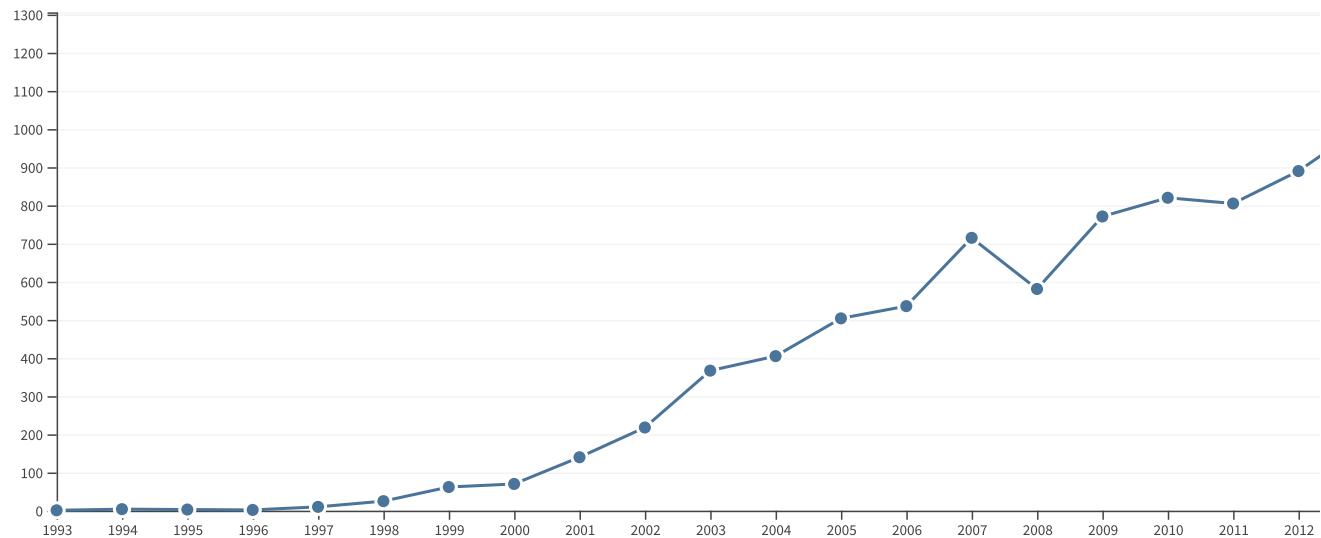
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| <input type="checkbox"/>   | <b>11. Quantifying signals with power-law correlations: A comparative study of detrended fluctuation analysis and detrended moving average techniques</b><br><br>By: Xu, LM; Ivanov, PC; Hu, K; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 71 Issue: 5 Article Number: 051101 Part: 1 Published: MAY 2005   | 14   | 18   | 18   | 14   | 5   | 193   | 13.79  |
| <input type="checkbox"/>   | <b>12. Network physiology reveals relations between network topology and physiological function</b><br><br>By: Bashan, Amir; Bartsch, Ronny P.; Kantelhardt, Jan. W.; et al.<br><b>NATURE COMMUNICATIONS</b> Volume: 3 Article Number: 702 Published: FEB 2012  | 45   | 30   | 32   | 39   | 12  | 192   | 27.43  |
| <input type="checkbox"/>   | <b>13. Behavioral-independence features of complex heartbeat dynamics</b><br><br>By: Amaral, LAN; Ivanov, PC; Aoyagi, N; et al.<br><b>PHYSICAL REVIEW LETTERS</b> Volume: 86 Issue: 26 Pages: 6026-6029 Published: JUN 25 2001  | 7    | 9    | 11   | 3    | 2   | 186   | 10.33  |
| <input type="checkbox"/>   | <b>14. Sleep-wake differences in scaling behavior of the human heartbeat: Analysis of terrestrial and long-term space flight data</b><br><br>By: Ivanov, PC; Bunde, A; Amaral, LAN; et al.<br><b>EUROPHYSICS LETTERS</b> Volume: 48 Issue: 5 Pages: 594-600 Published: DEC 1999   | 5    | 12   | 9    | 7    | 3   | 184   | 9.20   |
| <input type="checkbox"/>   | <b>15. Metal-insulator transition in chains with correlated disorder (Retracted Article. See vol 421, pg 764, 2003)</b><br><br>By: Carpena, P; Bernaola-Galvan, P; Ivanov, PC; et al.<br><b>NATURE</b> Volume: 418 Issue: 6901 Pages: 955-959 Published: AUG 29 2002  | 1    | 4    | 5    | 5    | 1   | 182   | 10.71  |
| <input type="checkbox"/>   | <b>16. Effect of nonlinear filters on detrended fluctuation analysis</b><br><br>By: Chen, Z; Hu, K; Carpena, P; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 71 Issue: 1 Article Number: 011104 Part: 1 Published: JAN 2005   | 11   | 8    | 19   | 8    | 2   | 166   | 11.86  |
| <input type="checkbox"/>   | <b>17. Stochastic feedback and the regulation of biological rhythms</b><br><br>By: Ivanov, PC; Amaral, LAN; Goldberger, AL; et al.<br><b>EUROPHYSICS LETTERS</b> Volume: 43 Issue: 4 Pages: 363-368 Published: AUG 15 1998  | 7    | 4    | 6    | 11   | 1   | 145   | 6.90   |
| <input type="checkbox"/>   | <b>18. Common scale-invariant patterns of sleep-wake transitions across mammalian species</b><br><br>By: Lo, CC; Chou, T; Penzel, T; et al.<br><b>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA</b> Volume: 101 Issue: 50 Pages: 17545-17548 Published: DEC 14 2004   | 16   | 9    | 12   | 13   | 8   | 144   | 9.60   |
| <input type="checkbox"/>   | <b>19. When human walking becomes random walking: fractal analysis and modeling of gait rhythm fluctuations</b><br><br>By: Hausdorff, JM; Ashkenazy, Y; Peng, CK; et al.<br>Conference: 2nd Minerva Workshop on Frontiers in the Physics of Complex Systems<br>Location: DEAD SEA, ISRAEL Date: MAR 25-28, 2001<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 302 Issue: 1-4 Pages: 138-147 Published: DEC 15 2001 | 10   | 6    | 10   | 5    | 4   | 133   | 7.39   |
| <input type="checkbox"/>   | <b>20. Scale invariance in the nonstationarity of human heart rate</b><br><br>By: Bernaola-Galvan, P; Ivanov, PC; Amaral, LAN; et al.   | 5    | 3    | 10   | 8    | 2   | 132   | 7.33   |

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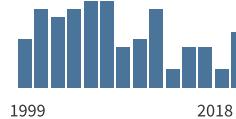
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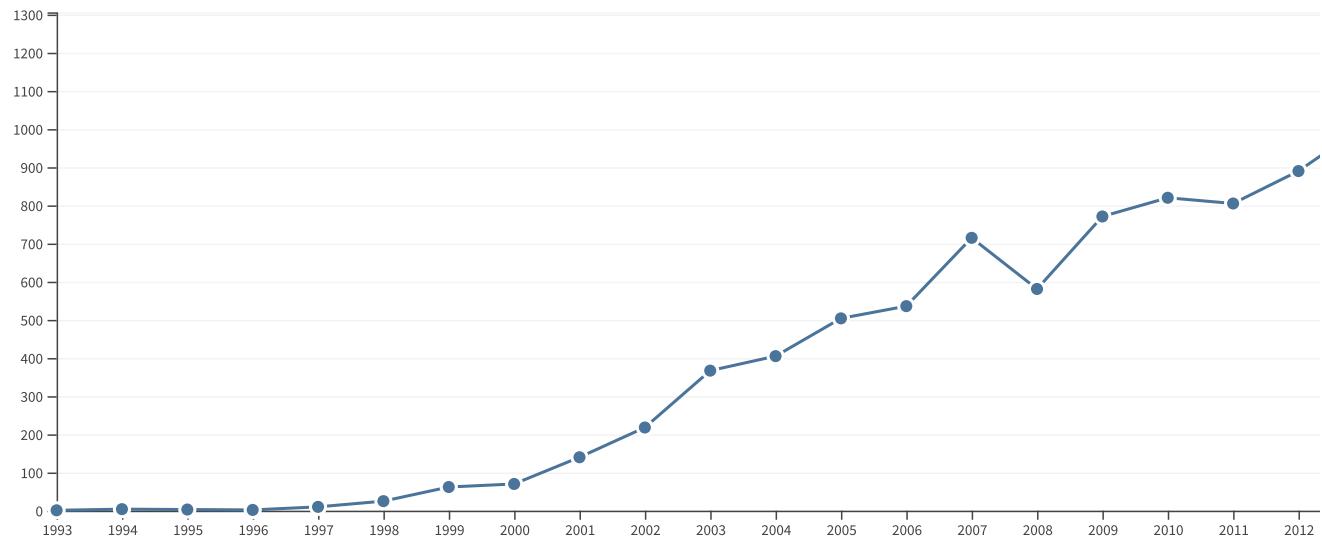
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| <input type="checkbox"/>  | <b>21. Common scaling patterns in intertrade times of US stocks</b>   | 6    | 5    | 9    | 7    | 3   | <a href="#">124</a> | 8.27   |
|   | By: Ivanov, PC; Yuen, A; Podobnik, B; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 69 Issue: 5 Article Number: 056107 Part: 2<br>Published: MAY 2004  |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>22. Scale-independent measures and pathologic cardiac dynamics</b>   | 1    | 1    | 1    | 5    | 0   | <a href="#">119</a> | 5.67   |
|   | By: Amaral, LAN; Goldberger, AL; Ivanov, PC; et al.<br><b>PHYSICAL REVIEW LETTERS</b> Volume: 81 Issue: 11 Pages: 2388-2391 Published: SEP 14 1998  |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>23. Characterization of sleep stages by correlations in the magnitude and sign of heartbeat increments</b>   | 8    | 13   | 11   | 6    | 2   | <a href="#">110</a> | 6.47   |
|   | By: Kantelhardt, JW; Ashkenazy, Y; Ivanov, PC; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 65 Issue: 5 Article Number: 051908 Part: 1<br>Published: MAY 2002   |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>24. Magnitude and sign scaling in power-law correlated time series</b>   | 7    | 9    | 14   | 9    | 3   | <a href="#">108</a> | 6.75   |
|   | By: Ashkenazy, Y; Havlin, S; Ivanov, PC; et al.<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 323 Pages: 19-41 Published: MAY 15 2003  |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>25. Dynamics of sleep-wake transitions during sleep</b>  | 8    | 10   | 7    | 11   | 6   | <a href="#">104</a> | 6.12   |
|   | By: Lo, CC; Amaral, LAN; Havlin, S; et al.<br><b>EUROPHYSICS LETTERS</b> Volume: 57 Issue: 5 Pages: 625-631 Published: MAR 2002   |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>26. Application of statistical physics to heartbeat diagnosis</b>  | 2    | 2    | 2    | 1    | 0   | <a href="#">89</a>  | 4.45   |
|   | By: Havlin, S; Amaral, LAN; Ashkenazy, Y; et al.<br>Conference: Conference of the NATO Advanced Research Workshop on Applications of Statistical Physics Location: TECH UNIV BUDAPEST, BUDAPEST, HUNGARY Date: MAY 19-22, 1999<br>Sponsor(s): NATO<br><b>PHYSICA A</b> Volume: 274 Issue: 1-2 Pages: 99-110 Published: DEC 1 1999 |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>27. A stochastic model of human gait dynamics</b>  | 5    | 3    | 7    | 3    | 2   | <a href="#">87</a>  | 5.12   |
|   | By: Ashkenazy, Y; Hausdorff, JA; Ivanov, PC; et al.<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 316 Issue: 1-4 Pages: 662-670 Article Number: PII S0378-4371(02)01453-X Published: DEC 15 2002   |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>28. Power-law autocorrelated stochastic processes with long-range cross-correlations</b>   | 14   | 6    | 12   | 7    | 3   | <a href="#">86</a>  | 7.17   |
|   | By: Podobnik, B; Fu, D. F.; Stanley, H. E.; et al.<br><b>EUROPEAN PHYSICAL JOURNAL B</b> Volume: 56 Issue: 1 Pages: 47-52 Published: MAR 2007   |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>29. Endogenous circadian rhythm in an index of cardiac vulnerability independent of changes in behavior</b>  | 6    | 10   | 1    | 7    | 1   | <a href="#">79</a>  | 5.27   |
|   | By: Hu, K; Ivanov, PC; Hilton, MF; et al.<br><b>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA</b> Volume: 101 Issue: 52 Pages: 18223-18227 Published: DEC 28 2004   |      |      |      |      |     |                     |        |
| <input type="checkbox"/>  | <b>30. Scale invariance and universality: organizing principles in complex systems</b>  | 1    | 2    | 5    | 8    | 1   | <a href="#">79</a>  | 4.16   |
|   | By: Stanley, HE; Amaral, LAN; Gopikrishnan, P; et al.   |      |      |      |      |     |                     |        |

Conference: 50th Taiwan International Symposium on Statistical Physics Location:  
INST PHYS , ACAD SIN, TAIPEI, TAIWAN Date: AUG 09-12, 1999  
Sponsor(s): Inst Phys, Acad Sin  
**PHYSICA A** Volume: 281 Issue: 1-4 Pages: 60-68 Published: JUN 15 2000



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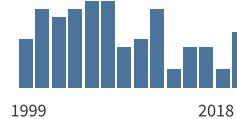
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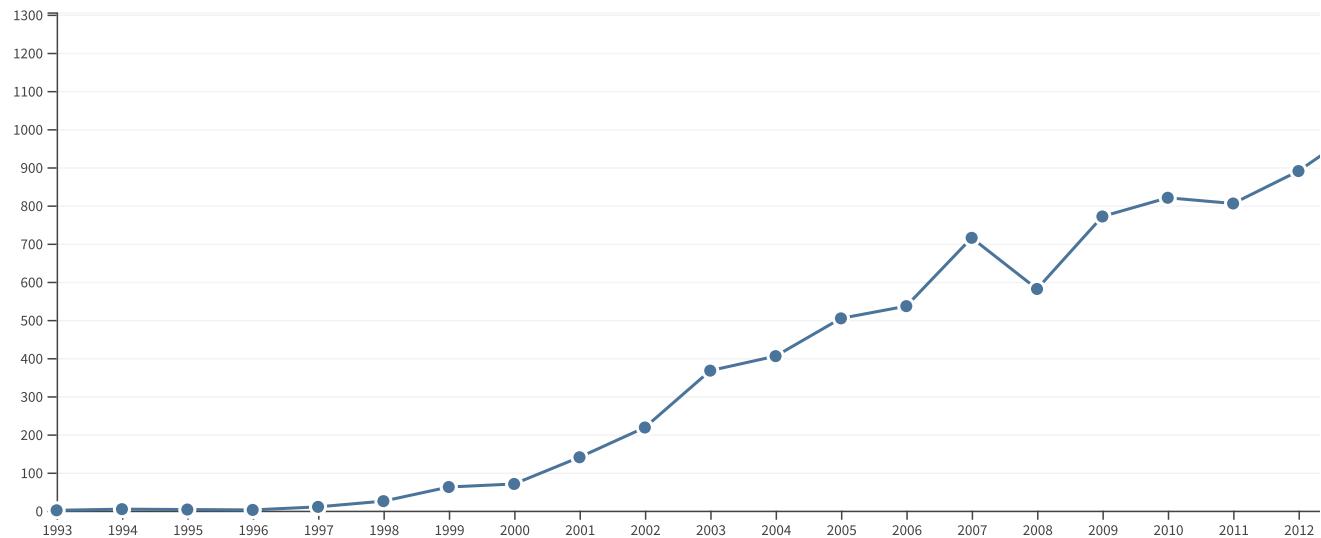
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| <input type="checkbox"/>  | <b>31. Phase transitions in physiologic coupling</b>  | 21   | 12   | 7    | 15   | 7   | 78    | 11.14  |
|   | By: Bartsch, Ronny P; Schumann, Aicko Y; Kantelhardt, Jan W; et al.<br><b>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA</b> Volume: 109 Issue: 26 Pages: 10181-10186 Published: JUN 26 2012   |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>32. Modeling long-range cross-correlations in two-component ARFIMA and FIARCH processes</b>  | 6    | 4    | 8    | 13   | 10  | 77    | 7.00   |
|   | By: Podobnik, Boris; Horvatic, Davor; Ng, Alfonso Lam; et al.<br>Conference: 6th International Conference on Applications of Physics in Financial Analysis Location: Lisbon, PORTUGAL Date: JUL 04-07, 2007<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 387 Issue: 15 Pages: 3954-3959 Published: JUN 15 2008                    |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>33. Correlation differences in heartbeat fluctuations during rest and exercise</b>   | 3    | 6    | 3    | 6    | 1   | 75    | 4.41   |
|   | By: Karasik, R; Sapir, N; Ashkenazy, Y; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 66 Issue: 6 Article Number: 062902 Part: 1 Published: DEC 2002   |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>34. Non-random fluctuations and multi-scale dynamics regulation of human activity</b>  | 8    | 2    | 7    | 4    | 3   | 69    | 4.60   |
|   | By: Hu, K; Ivanov, PC; Chen, Z; et al.<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 337 Issue: 1-2 Pages: 307-318 Published: JUN 1 2004   |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>35. Scaling and universality in heart rate variability distributions</b>   | 2    | 0    | 1    | 1    | 0   | 65    | 3.10   |
|   | By: Ivanov, PC; Rosenblum, MG; Peng, CK; et al.<br>Conference: 5th International Bar-Ilan Conference on Frontiers in Condensed Matter Physics Location: BAR-ILAN UNIV, RAMAT GAN, ISRAEL Date: MAR 31-APR 03, 1997<br>Sponsor(s): Bar Ilan Univ; Bar Ilan Univ, Fac Nat Sci<br><b>PHYSICA A</b> Volume: 249 Issue: 1-4 Pages: 587-593 Published: FEB 1 1998 |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>36. Fractionally integrated process with power-law correlations in variables and magnitudes</b>  | 2    | 5    | 7    | 6    | 3   | 64    | 4.57   |
|   | By: Podobnik, B; Ivanov, PC; Biljakovic, K; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 72 Issue: 2 Article Number: 026121 Part: 2 Published: AUG 2005   |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>37. Steady-state visual evoked potentials and phase synchronization in migraine patients</b>   | 4    | 4    | 2    | 6    | 3   | 64    | 4.27   |
|   | By: Angelini, L; Tommaso, MD; Guido, M; et al.<br><b>PHYSICAL REVIEW LETTERS</b> Volume: 93 Issue: 3 Article Number: 038103 Published: JUL 16 2004  |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>38. Effect of extreme data loss on long-range correlated and anticorrelated signals quantified by detrended fluctuation analysis</b>   | 9    | 5    | 10   | 5    | 7   | 63    | 7.00   |
|   | By: Ma, Qianli D. Y.; Bartsch, Ronny P; Bernaola-Galvan, Pedro; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 81 Issue: 3 Article Number: 031101 Part: 1 Published: MAR 2010   |      |      |      |      |     |       |        |
| <input type="checkbox"/>  | <b>39. Fractal scale-invariant and nonlinear properties of cardiac dynamics remain stable with advanced age: a new mechanistic picture of cardiac control in healthy elderly</b>  | 4    | 10   | 3    | 4    | 3   | 63    | 5.25   |
|   | By: Schmitt, Daniel T; Ivanov, Plamen Ch.   |      |      |      |      |     |       |        |

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Published: NOV 2007

40. **Scaling in nature: from DNA through heartbeats to weather**

By: Havlin, S; Buldyrev, SV; Bunde, A; et al.  
Conference: XIIIth Max Born Symposium on Statistical Physics in Biology:  
Perspectives in DNA Analysis, Population Dynamics and Ageing Location: WROCLAW  
UNIV, WROCLAW, POLAND Date: MAY 26-30, 1999  
Sponsor(s): Univ Wroclaw, Inst Theoret Phys; Univ Wroclaw, Inst Microbiol  
**PHYSICA A** Volume: 273 Issue: 1-2 Pages: 46-69 Published: NOV 1 1999

|   |   |   |   |   |    |      |
|---|---|---|---|---|----|------|
| 1 | 3 | 2 | 1 | 1 | 62 | 3.10 |
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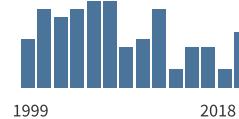
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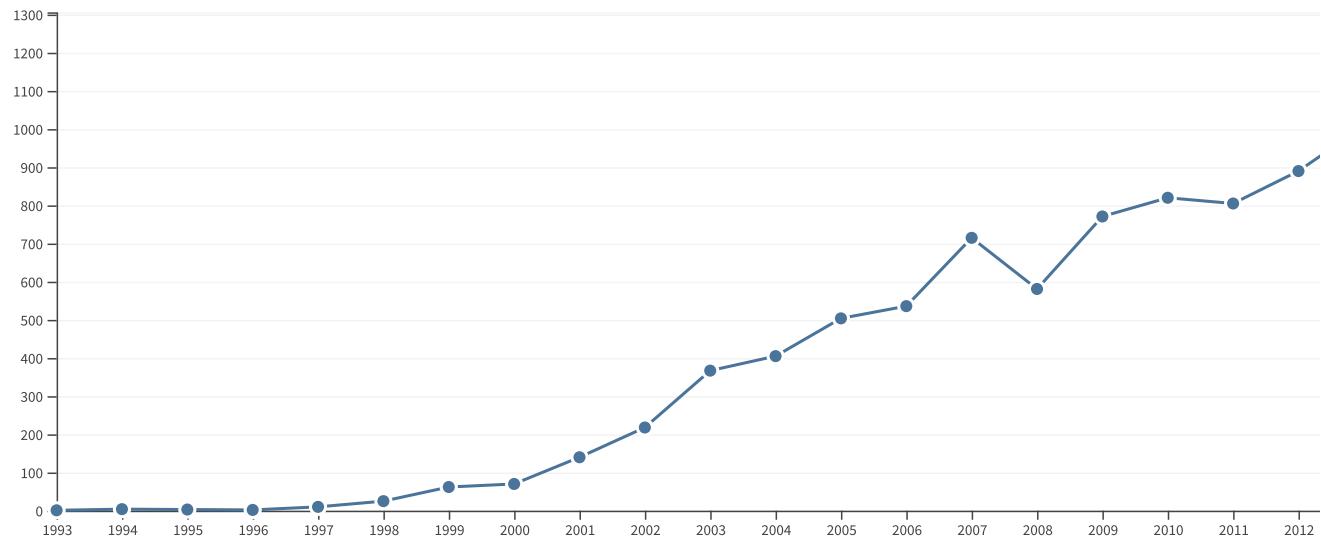
Citing articles

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| 2014 | 2015 | 2016 | 2017 | 2018 | Total | Average Citations per Year |
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| <input type="checkbox"/> Use the checkboxes to remove individual items from this Citation Report<br>or restrict to items published between <input type="text" value="1950"/> and <input type="text" value="2018"/> <input type="button" value="Go"/>   |   | 1038 | 1027 | 1282 | 1305 | 462 | 13051 | 501.96 |
|--|---|------|------|------|------|-----|-------|--------|
| <input type="checkbox"/>   | <b>41. Levels of complexity in scale-invariant neural signals</b>   | 6    | 4    | 6    | 7    | 4   | 59    | 5.90   |
| By: Ivanov, Plamen Ch.; Ma, Qianli D. Y.; Bartsch, Ronny P.; et al.<br><b>PHYSICAL REVIEW E</b> Volume: 79 Issue: 4 Article Number: 041920 Part: 1<br>Published: APR 2009  |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>42. Endogenous circadian rhythm in human motor activity uncoupled from circadian influences on cardiac dynamics</b>                              | 10   | 8    | 5    | 4    | 1   | 58    | 4.83   |
| By: Ivanov, Plamen Ch.; Hu, Kun; Hilton, Michael F.; et al.<br><b>PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA</b> Volume: 104 Issue: 52 Pages: 20702-20707 Published: DEC 26 2007  |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>43. The suprachiasmatic nucleus functions beyond circadian rhythm generation</b>   | 6    | 8    | 6    | 2    | 2   | 53    | 4.42   |
| By: Hu, K.; Scheer, F. A. J. L.; Ivanov, P. Ch.; et al.<br><b>NEUROSCIENCE</b> Volume: 149 Issue: 3 Pages: 508-517 Published: NOV 9 2007   |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>44. Detection of obstructive sleep apnea from cardiac interbeat interval time series</b>   | 2    | 4    | 1    | 2    | 1   | 53    | 2.79   |
| By: Mietus, JE; Peng, CK; Ivanov, PC; et al.<br>Conference: 27th Annual Meeting of Computers in Cardiology Location: CAMBRIDGE, MA Date: SEP 24-27, 2000<br>Sponsor(s): European Soc Cardiol; Hlth Sci & Technol, Harvard MIT Div<br><b>COMPUTERS IN CARDIOLOGY 2000, VOL 27</b> Book Series: COMPUTERS IN CARDIOLOGY Volume: 27 Pages: 753-756 Published: 2000                          |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>45. Aging Effects on Cardiac and Respiratory Dynamics in Healthy Subjects across Sleep Stages</b>  | 8    | 11   | 10   | 3    | 4   | 51    | 5.67   |
| By: Schumann, Aicko Y.; Bartsch, Ronny P.; Penzel, Thomas; et al.<br><b>SLEEP</b> Volume: 33 Issue: 7 Pages: 943-955 Published: JUL 1 2010   |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>46. Stratification Pattern of Static and Scale-Invariant Dynamic Measures of Heartbeat Fluctuations Across Sleep Stages in Young and Elderly</b> | 8    | 8    | 4    | 9    | 5   | 50    | 5.00   |
| By: Schmitt, Daniel T.; Stein, Phyllis K.; Ivanov, Plamen Ch.<br><b>IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING</b> Volume: 56 Issue: 5 Pages: 1564-1573 Published: MAY 2009   |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>47. Multiscale aspects of cardiac control</b>  | 3    | 3    | 2    | 2    | 1   | 50    | 3.33   |
| By: Ivanov, PC; Chen, Z; Hu, K; et al.<br>Conference: International Workshop on Trends and Perspectives in Extensive and Non-Extensive Statistical Mechanics Location: Angra dos Reis, BRAZIL Date: NOV 19-21, 2003<br>Sponsor(s): CBPF; CNPq; Finep; Faperj<br><b>PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS</b> Volume: 344 Issue: 3-4 Pages: 685-704 Published: DEC 15 2004 |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>48. Systems with correlations in the variance: Generating power law tails in probability distributions</b>                                       | 0    | 0    | 2    | 1    | 1   | 44    | 2.32   |
| By: Podobnik, B; Ivanov, PC; Lee, Y; et al.<br><b>EUROPHYSICS LETTERS</b> Volume: 50 Issue: 6 Pages: 711-717 Published: JUN 2000   |   |      |      |      |      |     |       |        |
| <input type="checkbox"/>   | <b>49. Scale-invariant truncated Levy process</b>   | 0    | 2    | 1    | 1    | 1   | 43    | 2.26   |
| By: Podobnik, B; Ivanov, PC; Lee, Y; et al.<br><b>EUROPHYSICS LETTERS</b> Volume: 52 Issue: 5 Pages: 491-497 Published: DEC 2000   |   |      |      |      |      |     |       |        |

50. **Metal-insulator transition in chains with correlated disorder  
(Retraction of vol 418, pg 955, 2002)**

By: Carpena, P; Bernaola-Galvan, P; Ivanov, PC; et al.  
**NATURE** Volume: 421 Issue: 6924 Pages: 764-764 Published: FEB 13 2003

|   |   |   |   |   |    |      |
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| 2 | 0 | 0 | 0 | 0 | 41 | 2.56 |
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