

MooYoung Choi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1471260/publications.pdf>

Version: 2024-02-01

231
papers

4,792
citations

136740

32
h-index

118652

62
g-index

233
all docs

233
docs citations

233
times ranked

3594
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Synchronization on small-world networks. <i>Physical Review E</i> , 2002, 65, 026139. | 0.8 | 375 |
| 2 | Phase transitions in confined water nanofilms. <i>Nature Physics</i> , 2010, 6, 685-689. | 6.5 | 261 |
| 3 | Factors that predict better synchronizability on complex networks. <i>Physical Review E</i> , 2004, 69, 067105. | 0.8 | 209 |
| 4 | Dynamic instabilities induced by asymmetric influence: Prisoners' dilemma game in small-world networks. <i>Physical Review E</i> , 2002, 66, 021907. | 0.8 | 195 |
| 5 | Phase transitions in uniformly frustrated XY models. <i>Physical Review B</i> , 1985, 31, 4516-4526. | 1.1 | 181 |
| 6 | Solvation in molecular ionic liquids. <i>Journal of Chemical Physics</i> , 2003, 119, 6411-6414. | 1.2 | 156 |
| 7 | Statistical analysis of the Metropolitan Seoul Subway System: Network structure and passenger flows. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 6231-6234. | 1.2 | 124 |
| 8 | XY model in small-world networks. <i>Physical Review E</i> , 2001, 64, 056135. | 0.8 | 108 |
| 9 | Synaptotagmin-1 binds to PIP2-containing membrane but not to SNAREs at physiological ionic strength. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 815-823. | 3.6 | 107 |
| 10 | A molecular dynamics computer simulation study of room-temperature ionic liquids. II. Equilibrium and nonequilibrium solvation dynamics. <i>Journal of Chemical Physics</i> , 2005, 122, 044511. | 1.2 | 105 |
| 11 | Synchronization in a system of globally coupled oscillators with time delay. <i>Physical Review E</i> , 2000, 61, 371-381. | 0.8 | 103 |
| 12 | Kondo effects in carbon nanotubes: From SU(4) to SU(2) symmetry. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 85 |
| 13 | A molecular dynamics computer simulation study of room-temperature ionic liquids. I. Equilibrium solvation structure and free energetics. <i>Journal of Chemical Physics</i> , 2005, 122, 044510. | 1.2 | 84 |
| 14 | Collective synchronization in spatially extended systems of coupled oscillators with random frequencies. <i>Physical Review E</i> , 2005, 72, 036217. | 0.8 | 82 |
| 15 | Solvation, Solute Rotation and Vibration Relaxation, and Electron-Transfer Reactions in Room-Temperature Ionic Liquids. <i>Accounts of Chemical Research</i> , 2007, 40, 1130-1137. | 7.6 | 78 |
| 16 | Stability and Ensemble Inequivalence in a Globally Coupled System. <i>Physical Review Letters</i> , 2003, 91, 124101. | 2.9 | 73 |
| 17 | Comment on "Eising model on a small world network". <i>Physical Review E</i> , 2002, 66, 018101. | 0.8 | 69 |
| 18 | Size Distribution of Mouse Langerhans Islets. <i>Biophysical Journal</i> , 2007, 93, 2655-2666. | 0.2 | 69 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Critical behavior of pure and diluted XY models with uniform frustrations. <i>Physical Review B</i> , 1985, 32, 5773-5775. | 1.1 | 62 |
| 20 | Modification of the gravity model and application to the metropolitan Seoul subway system. <i>Physical Review E</i> , 2012, 86, 026102. | 0.8 | 59 |
| 21 | Effects of Solute Electronic Polarizability on Solvation in a Room-Temperature Ionic Liquid. <i>Journal of Physical Chemistry B</i> , 2007, 111, 4920-4925. | 1.2 | 53 |
| 22 | Dynamic behavior of nonlinear networks. <i>Physical Review A</i> , 1983, 28, 1204-1206. | 1.0 | 50 |
| 23 | Fragility, Stokes-Einstein violation, and correlated local excitations in a coarse-grained model of an ionic liquid. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2001. | 1.3 | 48 |
| 24 | Optimization by multicanonical annealing and the traveling salesman problem. <i>Physical Review E</i> , 1994, 50, R651-R654. | 0.8 | 42 |
| 25 | Positional disorder in a Josephson-junction array. <i>Physical Review B</i> , 1987, 35, 1669-1675. | 1.1 | 37 |
| 26 | How Noise and Coupling Induce Bursting Action Potentials in Pancreatic β -Cells. <i>Biophysical Journal</i> , 2005, 89, 1534-1542. | 0.2 | 37 |
| 27 | Digital dynamics and the simulation of magnetic systems. <i>Physical Review B</i> , 1983, 28, 2547-2554. | 1.1 | 36 |
| 28 | Glassy phase in an array of Josephson junctions. <i>Physical Review B</i> , 1987, 35, 7109-7112. | 1.1 | 36 |
| 29 | Double stochastic resonance peaks in systems with dynamic phase transitions. <i>Europhysics Letters</i> , 2001, 56, 333-339. | 0.7 | 36 |
| 30 | Rotational dynamics of a diatomic solute in the room-temperature ionic liquid 1-ethyl-3-methylimidazolium hexafluorophosphate. <i>Journal of Chemical Physics</i> , 2006, 125, 061102. | 1.2 | 36 |
| 31 | Spontaneous current and voltage via Aharonov-Casher effect. <i>Physical Review Letters</i> , 1993, 71, 2987-2990. | 2.9 | 35 |
| 32 | Inertia effects on periodic synchronization in a system of coupled oscillators. <i>Physical Review E</i> , 1999, 59, 353-363. | 0.8 | 33 |
| 33 | Network marketing on a small-world network. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006, 360, 493-504. | 1.2 | 33 |
| 34 | Quantum phase transitions in Josephson-junction chains. <i>Physical Review B</i> , 1998, 57, R716-R719. | 1.1 | 32 |
| 35 | Dynamic Model of Neural Networks. <i>Physical Review Letters</i> , 1988, 61, 2809-2812. | 2.9 | 30 |
| 36 | Periodic synchronization in a driven system of coupled oscillators. <i>Physical Review E</i> , 1994, 49, 3825-3832. | 0.8 | 29 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Traffic flow and 1/f fluctuations. <i>Physical Review E</i> , 1995, 52, 5979-5984. | 0.8 | 29 |
| 38 | Arrays of resistively shunted Josephson junctions in magnetic fields. <i>Physical Review B</i> , 1993, 48, 322-332. | 1.1 | 28 |
| 39 | Granular relaxation under tapping and the traffic problem. <i>Physical Review E</i> , 1994, 50, 4123-4135. | 0.8 | 28 |
| 40 | Modeling stock return distributions with a quantum harmonic oscillator. <i>Europhysics Letters</i> , 2017, 120, 38003. | 0.7 | 28 |
| 41 | Phase ordering on small-world networks with nearest-neighbor edges. <i>Physical Review E</i> , 2002, 65, 047104. | 0.8 | 27 |
| 42 | Quantum Hall effect in ideal superconducting arrays at zero temperature. <i>Physical Review B</i> , 1994, 50, 10088-10091. | 1.1 | 26 |
| 43 | Phase synchronization and noise-induced resonance in systems of coupled oscillators. <i>Physical Review E</i> , 2000, 62, 6462-6468. | 0.8 | 26 |
| 44 | Nature of time in Monte Carlo processes. <i>Physical Review B</i> , 1984, 29, 2796-2798. | 1.1 | 25 |
| 45 | Topological invariance of superconducting arrays. <i>Physical Review B</i> , 1992, 46, 564-566. | 1.1 | 25 |
| 46 | Collective phase synchronization in locally coupled limit-cycle oscillators. <i>Physical Review E</i> , 2004, 70, 045204. | 0.8 | 25 |
| 47 | How skew distributions emerge in evolving systems. <i>Europhysics Letters</i> , 2009, 85, 30006. | 0.7 | 25 |
| 48 | Josephson arrays in an incommensurate magnetic field. <i>Physical Review B</i> , 1985, 32, 7532-7534. | 1.1 | 24 |
| 49 | Quantum fluctuations in superconducting arrays. <i>Physical Review B</i> , 1990, 41, 111-116. | 1.1 | 24 |
| 50 | Cotunneling Transport and Quantum Phase Transitions in Coupled Josephson-Junction Chains with Charge Frustration. <i>Physical Review Letters</i> , 1998, 81, 4240-4243. | 2.9 | 24 |
| 51 | Stochastic resonance in the driven Ising model on small-world networks. <i>Physical Review E</i> , 2002, 66, 011107. | 0.8 | 24 |
| 52 | Quantum and classical diffusion on small-world networks. <i>Physical Review B</i> , 2003, 68, . | 1.1 | 24 |
| 53 | Consumer referral in a small world network. <i>Social Networks</i> , 2006, 28, 232-246. | 1.3 | 24 |
| 54 | Model for Twitter dynamics: Public attention and time series of tweeting. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 404, 142-149. | 1.2 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Synchronization in a network of neuronal oscillators with finite storage capacity. <i>Physical Review E</i> , 1995, 52, 2907-2911. | 0.8 | 23 |
| 56 | Noise effects on synchronization in systems of coupled oscillators. <i>Journal of Physics A</i> , 1999, 32, L9-L15. | 1.6 | 23 |
| 57 | Phase transition in the Ising model on a small-world network with distance-dependent interactions. <i>Physical Review E</i> , 2003, 68, 027101. | 0.8 | 23 |
| 58 | Phase transition in the two-dimensional gauge glass. <i>Physical Review B</i> , 1999, 60, 4070-4073. | 1.1 | 22 |
| 59 | Quantum fluctuations in superconducting arrays with a general capacitance matrix. <i>Physical Review B</i> , 1995, 52, 3624-3631. | 1.1 | 21 |
| 60 | Synchronization in networks of superconducting wires. <i>Physical Review B</i> , 1997, 56, 387-394. | 1.1 | 21 |
| 61 | Beneficial effects of intercellular interactions between pancreatic islet cells in blood glucose regulation. <i>Journal of Theoretical Biology</i> , 2009, 257, 312-319. | 0.8 | 21 |
| 62 | Emergence of skew distributions in controlled growth processes. <i>Physical Review E</i> , 2010, 82, 061115. | 0.8 | 21 |
| 63 | Collective excitations and retarded interactions. <i>Physical Review B</i> , 1985, 31, 2862-2866. | 1.1 | 20 |
| 64 | Spontaneous phase oscillation induced by inertia and time delay. <i>Physical Review E</i> , 2002, 65, 026208. | 0.8 | 20 |
| 65 | How complexity emerges in urban systems: Theory of urban morphology. <i>Physical Review E</i> , 2016, 93, 052309. | 0.8 | 19 |
| 66 | Intrinsic Finite-Size Effects in the Two-Dimensional XY Model with Irrational Frustration. <i>Physical Review Letters</i> , 2000, 85, 3484-3487. | 2.9 | 18 |
| 67 | $1/f$ spectrum and memory function analysis of solvation dynamics in a room-temperature ionic liquid. <i>Journal of Chemical Physics</i> , 2008, 128, 174504. | 1.2 | 18 |
| 68 | Emergence of Criticality in the Transportation Passenger Flow: Scaling and Renormalization in the Seoul Bus System. <i>PLoS ONE</i> , 2014, 9, e89980. | 1.1 | 18 |
| 69 | Anomalous relaxation in the XY gauge glass. <i>Physical Review B</i> , 1997, 56, 6007-6012. | 1.1 | 17 |
| 70 | Fluctuation effects on critical behavior of Josephson-junction arrays. <i>Physical Review B</i> , 1985, 32, 7173-7178. | 1.1 | 16 |
| 71 | Weibull-type limiting distribution for replicative systems. <i>Physical Review E</i> , 2011, 83, 031123. | 0.8 | 16 |
| 72 | Accessibility Measurement in Transportation Networks and Application to the Seoul Bus System. <i>Geographical Analysis</i> , 2019, 51, 339-353. | 1.9 | 16 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Mathematical model for glucose regulation in the whole-body system. <i>Islets</i> , 2012, 4, 84-93. | 0.9 | 15 |
| 74 | A model for the receptive field of retinal ganglion cells. <i>Neural Networks</i> , 2014, 49, 51-58. | 3.3 | 15 |
| 75 | Phase transitions in a dynamic model of neural networks. <i>Physical Review A</i> , 1991, 43, 1079-1089. | 1.0 | 14 |
| 76 | Conformational Dynamics and Ligand Binding in the Multi-Domain Protein PDC109. <i>PLoS ONE</i> , 2010, 5, e9180. | 1.1 | 14 |
| 77 | Master equation approach to the intra-urban passenger flow and application to the Metropolitan Seoul Subway system. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011, 44, 115007. | 0.7 | 14 |
| 78 | Autophagy mediates phase transitions from cell death to life. <i>Heliyon</i> , 2015, 1, e00027. | 1.4 | 14 |
| 79 | Double transitions in the fully frustrated XY model. <i>Physical Review B</i> , 1997, 55, 14088-14091. | 1.1 | 13 |
| 80 | Potts-glass model of layered feedforward neural networks. <i>Physical Review A</i> , 1992, 45, 1238-1248. | 1.0 | 12 |
| 81 | Dual Aharonov-Casher effect and persistent dipole current. <i>Physical Review B</i> , 1995, 52, 7838-7840. | 1.1 | 12 |
| 82 | Comment on "Glassiness in a Model without Energy Barriers". <i>Physical Review Letters</i> , 1996, 76, 4648-4648. | 2.9 | 12 |
| 83 | Quantum phase transitions in superconducting arrays with general capacitance matrices. <i>Physical Review B</i> , 1997, 56, 395-409. | 1.1 | 12 |
| 84 | Optimal size of a complex network. <i>Physical Review E</i> , 2003, 67, 046101. | 0.8 | 12 |
| 85 | Computational modeling of the effects of autophagy on amyloid- β^2 peptide levels. <i>Theoretical Biology and Medical Modelling</i> , 2020, 17, 2. | 2.1 | 12 |
| 86 | Sleepless in Seoul: "The Ant and the Metrohopper". <i>Journal of the Korean Physical Society</i> , 2010, 57, 823-825. | 0.3 | 12 |
| 87 | Phase transition in superconducting arrays with external currents. <i>Physical Review B</i> , 1991, 44, 10411-10413. | 1.1 | 11 |
| 88 | Synchronization and resonance in a driven system of coupled oscillators. <i>Physical Review E</i> , 1999, 60, 4014-4020. | 0.8 | 11 |
| 89 | Spatiotemporal stochastic resonance in fully frustrated Josephson ladders. <i>Physical Review B</i> , 2001, 63, . | 1.1 | 11 |
| 90 | Netons: vibrations of complex networks. <i>Journal of Physics A</i> , 2003, 36, 6329-6336. | 1.6 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Dynamic transition and Shapiro-step melting in a frustrated Josephson-junction array. <i>Physical Review B</i> , 2004, 69, . | 1.1 | 11 |
| 92 | Dynamics of macroautophagy: Modeling and oscillatory behavior. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012, 391, 686-692. | 1.2 | 11 |
| 93 | Dynamics of analyst forecasts and emergence of complexity: Role of information disparity. <i>PLoS ONE</i> , 2017, 12, e0177071. | 1.1 | 11 |
| 94 | Phase transition in the XYgauge glass. <i>Physical Review B</i> , 1995, 51, 16211-16219. | 1.1 | 10 |
| 95 | Dynamic transition and resonance in current-driven arrays of Josephson junctions. <i>Physical Review B</i> , 2002, 66, . | 1.1 | 10 |
| 96 | Relaxation and coarsening dynamics in superconducting arrays. <i>Physical Review B</i> , 2003, 67, . | 1.1 | 10 |
| 97 | Spontaneous organization of the cortical structure through endogenous neural firing and gap junction transmission. <i>Neural Networks</i> , 2012, 31, 46-52. | 3.3 | 10 |
| 98 | Origin of the spike-timingâ€“dependent plasticity rule. <i>Europhysics Letters</i> , 2016, 115, 38001. | 0.7 | 10 |
| 99 | Topological interpretation of subharmonic mode locking in coupled oscillators with inertia. <i>Physical Review B</i> , 2001, 64, . | 1.1 | 9 |
| 100 | Frequency resonance in Josephson-junction arrays driven by high alternating currents. <i>Physical Review B</i> , 2003, 68, . | 1.1 | 9 |
| 101 | Glucose metabolism and oscillatory behavior of pancreatic islets. <i>Physical Review E</i> , 2005, 72, 051905. | 0.8 | 9 |
| 102 | Dynamic critical behaviors in two-dimensional Josephson junction arrays with positional disorder. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 9 |
| 103 | Equalization of Synaptic Efficacy by Synchronous Neural Activity. <i>Physical Review Letters</i> , 2007, 99, 208102. | 2.9 | 9 |
| 104 | Emergent topologies in activity-dependent self-organizing networks. <i>Europhysics Letters</i> , 2011, 95, 58005. | 0.7 | 9 |
| 105 | Mathematical models for insulin secretion in pancreatic β -cells. <i>Islets</i> , 2012, 4, 94-107. | 0.9 | 9 |
| 106 | Finite-temperature phase transitions in the ionic Hubbard model. <i>Physical Review B</i> , 2014, 89, . | 1.1 | 9 |
| 107 | Discriminating between Weibull distributions and log-normal distributions emerging in branching processes. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 225101. | 0.7 | 9 |
| 108 | Quantitative indices of autophagy activity from minimal models. <i>Theoretical Biology and Medical Modelling</i> , 2014, 11, 31. | 2.1 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Cryptocurrency: Not far from equilibrium. <i>Technological Forecasting and Social Change</i> , 2022, 177, 121424. | 6.2 | 9 |
| 110 | Glass behavior of superconducting arrays: Novel finite-size effects. <i>Physical Review B</i> , 1989, 40, 5147-5150. | 1.1 | 8 |
| 111 | Novel transition between critical and localized states in a one-dimensional quasiperiodic system. <i>Physical Review B</i> , 1989, 40, 2581-2584. | 1.1 | 8 |
| 112 | Dynamic model of neural networks with asymmetric diluted couplings. <i>Physical Review A</i> , 1990, 41, 7062-7065. | 1.0 | 8 |
| 113 | Subharmonic structure of Shapiro steps in frustrated superconducting arrays. <i>Physical Review B</i> , 1995, 52, 13536-13546. | 1.1 | 8 |
| 114 | Quantum phase transitions and persistent currents in Josephson-junction ladders. <i>Physical Review B</i> , 2003, 68, . | 1.1 | 8 |
| 115 | Slow relaxation in the Ising model on a small-world network with strong long-range interactions. <i>Physical Review E</i> , 2005, 71, 036103. | 0.8 | 8 |
| 116 | Mathematical model of the glucose-insulin regulatory system: From the bursting electrical activity in pancreatic β -cells to the glucose dynamics in the whole body. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 3150-3157. | 0.9 | 8 |
| 117 | A dynamical model for the stick-slip behaviour of faults. <i>Journal of Physics C: Solid State Physics</i> , 1984, 17, L673-L677. | 1.5 | 7 |
| 118 | Quantum diffusion in the generalized Harper equation. <i>Journal of Physics A</i> , 1998, 31, 1353-1364. | 1.6 | 7 |
| 119 | Brain networks: Graph theoretical analysis and development models. <i>International Journal of Imaging Systems and Technology</i> , 2010, 20, 108-116. | 2.7 | 7 |
| 120 | General solution of the Black-Scholes boundary-value problem. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 509, 546-550. | 1.2 | 7 |
| 121 | Characterization of dynamics and information processing of integrate-and-fire neuron models. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 445601. | 0.7 | 7 |
| 122 | Dissipation effects on superconducting arrays. <i>Physical Review B</i> , 1990, 42, 80-86. | 1.1 | 6 |
| 123 | Capacitively coupled Josephson-junction chains: straight versus slanted coupling. <i>Journal of Physics Condensed Matter</i> , 2000, 12, 943-957. | 0.7 | 6 |
| 124 | Noise-enhanced temporal association in neural networks. <i>Physical Review E</i> , 2002, 65, 036114. | 0.8 | 6 |
| 125 | Dynamic transitions and resonances in Josephson-junction arrays under oscillating magnetic fields. <i>Physical Review B</i> , 2002, 65, . | 1.1 | 6 |
| 126 | Exact quantum description of the Aharonov-Bohm effect. <i>Current Applied Physics</i> , 2004, 4, 267-271. | 1.1 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Dynamic characteristics of tweeting and tweet topics. Journal of the Korean Physical Society, 2012, 60, 590-594. | 0.3 | 6 |
| 128 | Emergence of heavy-tailed skew distributions from the heat equation. Physica A: Statistical Mechanics and Its Applications, 2017, 470, 88-93. | 1.2 | 6 |
| 129 | Time evolution of entropy in a growth model: Dependence on the description. Journal of the Korean Physical Society, 2017, 70, 12-21. | 0.3 | 6 |
| 130 | Functional Organization for Direction Preference in Relation to Orientation and Ocular Dominance Maps. Journal of the Korean Physical Society, 2009, 55, 2532-2536. | 0.3 | 6 |
| 131 | Phase transitions of a quasiperiodic Josephson-junction array in magnetic fields. Physical Review B, 1988, 38, 11476-11480. | 1.1 | 5 |
| 132 | Bloch oscillation and topological quantization. Physical Review B, 1994, 50, 13875-13878. | 1.1 | 5 |
| 133 | Entropic sampling and natural selection in biological evolution. Journal of Physics A, 1997, 30, L749-L755. | 1.6 | 5 |
| 134 | Quantum phase transitions in superconducting arrays under external magnetic fields. Physical Review B, 1998, 58, 14524-14530. | 1.1 | 5 |
| 135 | Temporal association in a network of neuronal oscillators. Journal of Physics A, 2001, 34, 5021-5031. | 1.6 | 5 |
| 136 | Dynamic model of fiber bundles. Europhysics Letters, 2004, 66, 62-68. | 0.7 | 5 |
| 137 | Dynamic model for failures in biological systems. Europhysics Letters, 2005, 71, 501-507. | 0.7 | 5 |
| 138 | Scale-free dynamics emerging from information transfer. Europhysics Letters, 2005, 69, 503-509. | 0.7 | 5 |
| 139 | Dynamics of interval fragmentation and asymptotic distributions. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 225002. | 0.7 | 5 |
| 140 | Information-sharing tendency on Twitter and time evolution of tweeting. Europhysics Letters, 2013, 101, 58004. | 0.7 | 5 |
| 141 | COMPUTER SIMULATIONS UNVEIL THE DYNAMICS OF AUTOPHAGY AND ITS IMPLICATIONS FOR THE CELLULAR QUALITY CONTROL. Journal of Biological Systems, 2014, 22, 659-675. | 0.5 | 5 |
| 142 | On the dynamics of traveling phase-oscillators with positive and negative couplings. Journal of the Korean Physical Society, 2014, 65, 1738-1742. | 0.3 | 5 |
| 143 | Estimate of the phase transition line in the infinite-dimensional Hubbard model. Journal of the Korean Physical Society, 2014, 64, 268-276. | 0.3 | 5 |
| 144 | Spatiotemporal distributions of population in Seoul: joint influence of ridership and accessibility of the subway system. EPJ Data Science, 2021, 10, . | 1.5 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | The dissipative effects on stochasticity of the nonlinear oscillator. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1982, 89, 1-3. | 0.9 | 4 |
| 146 | Devil's Staircase in a Fully Frustrated Superconducting Array. <i>Europhysics Letters</i> , 1993, 23, 217-222. | 0.7 | 4 |
| 147 | Optimal storage capacity of neural networks at finite temperatures. <i>Journal of Physics A</i> , 1993, 26, 3741-3755. | 1.6 | 4 |
| 148 | Langevin dynamics, scale invariance, and granular flows. <i>Physical Review E</i> , 1993, 47, 137-142. | 0.8 | 4 |
| 149 | Stability of thermodynamic and dynamical order in a system of globally coupled rotors. <i>Journal of Physics A</i> , 2005, 38, 5659-5675. | 1.6 | 4 |
| 150 | Modulation of the boundary between hierarchically differentiated domains in a self-organizing neural system. <i>Europhysics Letters</i> , 2013, 101, 48004. | 0.7 | 4 |
| 151 | Emergent incommensurate correlations in frustrated ferromagnetic spin-1 chains. <i>Physical Review B</i> , 2017, 95, . | 1.1 | 4 |
| 152 | Predicting Energy Expenditure During Gradient Walking With a Foot Monitoring Device: Model-Based Approach. <i>JMIR MHealth and UHealth</i> , 2019, 7, e12335. | 1.8 | 4 |
| 153 | Systems of pancreatic beta-cells and glucose regulation. <i>Frontiers in Bioscience - Landmark</i> , 2008, Volume, 6421. | 3.0 | 4 |
| 154 | Behavioral Dynamics of Pedestrians Crossing between Two Moving Vehicles. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 859. | 1.3 | 4 |
| 155 | Synaptic noise in neural networks at finite temperatures. <i>Journal of Physics A</i> , 1993, 26, 3697-3705. | 1.6 | 3 |
| 156 | Fractional periods of persistent currents in frustrated systems. <i>Physical Review B</i> , 1995, 52, 13769-13772. | 1.1 | 3 |
| 157 | Frustration effects on supercurrents in annular arrays of superconductors. <i>Physical Review B</i> , 1997, 56, 2368-2371. | 1.1 | 3 |
| 158 | Renormalization-group study of gate charge effects in Josephson-junction chains. <i>Physical Review B</i> , 2001, 63, . | 1.1 | 3 |
| 159 | Health status and resonance in a model for living organisms under periodic stress and healing. <i>Physical Review E</i> , 2006, 73, 031905. | 0.8 | 3 |
| 160 | Criticality in the dynamic failure model. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 145101. | 0.7 | 3 |
| 161 | DYNAMIC TRANSITION AND RESONANCE IN COUPLED OSCILLATORS UNDER SYMMETRY-BREAKING FIELDS. <i>International Journal of Modern Physics B</i> , 2013, 27, 1350062. | 1.0 | 3 |
| 162 | Generalized hydromechanical model for stomatal responses to hydraulic perturbations. <i>Journal of Theoretical Biology</i> , 2014, 340, 119-130. | 0.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | General method to solve the heat equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016, 444, 530-537. | 1.2 | 3 |
| 164 | Phase transitions and relaxation dynamics of Ising models exchanging particles. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2017, 466, 166-179. | 1.2 | 3 |
| 165 | Numerical study of entrainment of the human circadian system and recovery by light treatment. <i>Theoretical Biology and Medical Modelling</i> , 2018, 15, 5. | 2.1 | 3 |
| 166 | Statistical properties of human activity and criticality in active behavior. <i>Europhysics Letters</i> , 2019, 126, 68001. | 0.7 | 3 |
| 167 | Response Theory of Spiking Neural Networks. <i>Journal of the Korean Physical Society</i> , 2020, 77, 168-176. | 0.3 | 3 |
| 168 | Hub-Periphery Hierarchy in Bus Transportation Networks: Gini Coefficients and the Seoul Bus System. <i>Sustainability</i> , 2020, 12, 7297. | 1.6 | 3 |
| 169 | Failure of Arm Movement Control in Stroke Patients, Characterized by Loss of Complexity. <i>PLoS ONE</i> , 2015, 10, e0141996. | 1.1 | 3 |
| 170 | The structural aspects of neural dynamics and information flow. <i>Frontiers in Bioscience</i> , 2022, 27, 1. | 0.8 | 3 |
| 171 | Phase transitions of frustrated XY models on deformed square lattices. <i>Physical Review B</i> , 1988, 37, 7569-7574. | 1.1 | 2 |
| 172 | Domain-wall pinning in the incommensurate phase of sodium nitrite. <i>Physical Review B</i> , 1988, 37, 5874-5876. | 1.1 | 2 |
| 173 | Statistical-mechanical formulation of the Willshaw model with local inhibition. <i>Physical Review A</i> , 1991, 43, 7012-7018. | 1.0 | 2 |
| 174 | Triangular superconducting array with a quarter of the flux quantum per plaquette. <i>Physical Review B</i> , 1992, 46, 1240-1243. | 1.1 | 2 |
| 175 | Current responses and voltage fluctuations in Josephson-junction systems. <i>Europhysics Letters</i> , 1998, 43, 439-444. | 0.7 | 2 |
| 176 | Temporal association in neural networks at finite temperatures. <i>Physical Review E</i> , 1998, 58, 7761-7768. | 0.8 | 2 |
| 177 | Topological quantization and degeneracy in Josephson-junction arrays. <i>Physical Review B</i> , 2001, 63, . | 1.1 | 2 |
| 178 | Quantum and frustration effects on fluctuations of the inverse compressibility in two-dimensional Coulomb glasses. <i>Physical Review B</i> , 2002, 66, . | 1.1 | 2 |
| 179 | Phase transitions in models for coupled charge-density waves. <i>Physical Review B</i> , 2004, 69, . | 1.1 | 2 |
| 180 | Correspondences and quantum description of Aharonovâ€™Bohm and Aharonovâ€™Casher effects. <i>Journal of Physics A</i> , 2004, 37, 973-988. | 1.6 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Critical currents for vortex defect motion in superconducting arrays. <i>Physical Review B</i> , 2005, 71, . | 1.1 | 2 |
| 182 | Collective oscillations, bicluster motion, and dynamical order in a system of globally coupled rotors with repulsive interactions. <i>Physical Review E</i> , 2006, 74, 056106. | 0.8 | 2 |
| 183 | Construction of equilibrium networks with an energy function. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 9723-9732. | 0.7 | 2 |
| 184 | Effects of neuronal loss in the dynamic model of neural networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 385102. | 0.7 | 2 |
| 185 | Connectivity effects in the dynamic model of neural networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 205003. | 0.7 | 2 |
| 186 | How cells grow and divide: mathematical analysis confirms demand for the cell cycle. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 135101. | 0.7 | 2 |
| 187 | Driving distributions and periodic synchronization-desynchronization in driven phase oscillators. <i>Journal of the Korean Physical Society</i> , 2014, 64, 11-15. | 0.3 | 2 |
| 188 | Traveling Speed of Clusters in the Kuramoto-Sakaguchi Model. <i>Journal of the Korean Physical Society</i> , 2018, 72, 342-347. | 0.3 | 2 |
| 189 | Effects of Janus Oscillators in the Kuramoto Model with Positive and Negative Couplings. <i>Journal of the Korean Physical Society</i> , 2019, 75, 443-447. | 0.3 | 2 |
| 190 | General solutions of the heat equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 539, 122914. | 1.2 | 2 |
| 191 | Generalized maximal entropy argument for the gravity law in human mobility. <i>Europhysics Letters</i> , 2020, 132, 48001. | 0.7 | 2 |
| 192 | Characterization of multiscale logic operations in the neural circuits. <i>Frontiers in Bioscience</i> , 2021, 26, 723. | 0.8 | 2 |
| 193 | Phase transition in a random array of Josephson junctions. <i>Physical Review Letters</i> , 1989, 63, 1023-1023. | 2.9 | 1 |
| 194 | Algebraic decay of correlations in neural networks. <i>Physical Review A</i> , 1992, 46, 5292-5295. | 1.0 | 1 |
| 195 | Vortex state and quantization in superconducting arrays. <i>Physica B: Condensed Matter</i> , 1996, 222, 358-363. | 1.3 | 1 |
| 196 | Fractional giant Shapiro resonances in frustrated systems driven by a time-dependent flux. <i>Europhysics Letters</i> , 1996, 35, 457-462. | 0.7 | 1 |
| 197 | Slow relaxation in superconducting arrays. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 315, 255-266. | 1.2 | 1 |
| 198 | Entropic sampling dynamics of the globally coupled kinetic Ising model. <i>Journal of Physics A</i> , 2005, 38, 2115-2122. | 1.6 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Defect motion and lattice pinning barriers in Josephson-junction ladders. <i>Physical Review B</i> , 2006, 73, . | 1.1 | 1 |
| 200 | Noise effects on the health status in a dynamic failure model for living organisms. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 3319-3328. | 0.7 | 1 |
| 201 | Range of shortcuts in the dynamic model of neural networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 205001. | 0.7 | 1 |
| 202 | Comment on "Dynamical phase transition of a one-dimensional transport process including death". <i>Physical Review E</i> , 2010, 82, 013101. | 0.8 | 1 |
| 203 | Information exchange dynamics of the two-dimensional XY model. <i>Physical Review E</i> , 2013, 88, 052134. | 0.8 | 1 |
| 204 | Traveling cluster pairs in a system of phase oscillators with positive and negative couplings under a periodic driving field. <i>Journal of the Korean Physical Society</i> , 2015, 67, 1524-1528. | 0.3 | 1 |
| 205 | Slope-reversed Mott transition in multiorbital systems. <i>Physical Review B</i> , 2015, 92, . | 1.1 | 1 |
| 206 | COEXISTENCE OF THREE OSCILLATORY MODES OF INSULIN SECRETION: MATHEMATICAL MODELING AND RELEVANCE TO GLUCOSE REGULATION. <i>Journal of Biological Systems</i> , 2017, 25, 341-368. | 0.5 | 1 |
| 207 | Interaction Effects on the Size Distribution in a Growth Model. <i>Journal of the Korean Physical Society</i> , 2018, 72, 327-334. | 0.3 | 1 |
| 208 | Generalized formulation of free energy and application to photosynthesis. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 493, 125-134. | 1.2 | 1 |
| 209 | Density distribution in two Ising systems with particle exchange. <i>European Physical Journal B</i> , 2018, 91, 1. | 0.6 | 1 |
| 210 | Using a Virtual Reality Walking Simulator to Investigate Pedestrian Behavior. <i>Journal of Visualized Experiments</i> , 2020, , . | 0.2 | 1 |
| 211 | A neural network model based on the cortical modularity. <i>Journal of the Korean Physical Society</i> , 2021, 79, 772. | 0.3 | 1 |
| 212 | Cluster Motion and Resonance-like Behavior in Coupled Oscillators under Periodic Symmetry-breaking Fields. <i>Journal of the Korean Physical Society</i> , 2011, 59, 2664-2669. | 0.3 | 1 |
| 213 | Spatiotemporal behaviors of the ridership of a public transportation system during an epidemic outbreak: case of MERS in Seoul. <i>Journal of the Korean Physical Society</i> , 2021, , 1-9. | 0.3 | 1 |
| 214 | Topological Quantization in Superconducting Arrays. , 1995, , 541-548. | | 1 |
| 215 | Product molecule numbers and reaction rate fluctuations in elementary reactions. <i>AIP Advances</i> , 2022, 12, 065308. | 0.6 | 1 |
| 216 | Master equation approach to neural networks. <i>AIP Conference Proceedings</i> , 1992, , . | 0.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Static and dynamic behaviors of the two-dimensional XY gauge glass. European Physical Journal D, 1996, 46, 2279-2280. | 0.4 | 0 |
| 218 | Persistent currents in annuli: effects of disorder and Coulomb interaction. Journal of Physics Condensed Matter, 1996, 8, 4429-4440. | 0.7 | 0 |
| 219 | $\hat{\rho}^2$ CELLS IN PANCREATIC ISLETS AND GLUCOSE REGULATION. International Journal of Modern Physics B, 2007, 21, 4104-4110. | 1.0 | 0 |
| 220 | Relaxation dynamics and interrupted coarsening in irrationally frustrated superconducting arrays. Physical Review B, 2008, 78, . | 1.1 | 0 |
| 221 | Reply to the Comment by A. Gadomski. Europhysics Letters, 2010, 89, 40003. | 0.7 | 0 |
| 222 | Modeling of a Neural System Based on Statistical Mechanics. Entropy, 2018, 20, 848. | 1.1 | 0 |
| 223 | Fractionalized Edge Spins and Boundary Conditions in Frustrated Ferromagnetic Quantum Spin Chains. Journal of the Korean Physical Society, 2019, 75, 929-934. | 0.3 | 0 |
| 224 | Grand canonical description of equilibrium and non-equilibrium systems using spin formalism. Physica A: Statistical Mechanics and Its Applications, 2020, 558, 124983. | 1.2 | 0 |
| 225 | Limited coagulation-diffusion dynamics in inflating spaces. European Physical Journal B, 2020, 93, 1. | 0.6 | 0 |
| 226 | A least action principle for interceptive walking. Scientific Reports, 2021, 11, 2198. | 1.6 | 0 |
| 227 | Dynamic Phase Transition in Coupled Oscillators under a Periodic Symmetry-breaking Field. Journal of the Korean Physical Society, 2010, 57, 1350-1355. | 0.3 | 0 |
| 228 | Emergence of complexity in poetry: "Soleils couchants" by Verlaine. Palgrave Communications, 2019, 5, . | 4.7 | 0 |
| 229 | Distribution of the coalescence times in a system of diffusion-aggregation of particle clusters in one dimension. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 505004. | 0.7 | 0 |
| 230 | Ontological Revision and Quantum Mechanics. Results in Physics, 2022, 33, 105159. | 2.0 | 0 |
| 231 | Spatial distributions of restaurants emerging from pedestrian behavior and online information sharing. Physica A: Statistical Mechanics and Its Applications, 2022, 597, 127265. | 1.2 | 0 |