Beom Jun Kim

List of Publications by Year
in descending order

173 papers	5,750 citations	172457 29 h-index	79698 73 g-index
174 all docs	174 docs citations	174 times ranked	3864 citing authors

#	Article	IF	Citations
1	Attack vulnerability of complex networks. Physical Review E, 2002, 65, 056109.	2.1	1,365
2	Growing scale-free networks with tunable clustering. Physical Review E, 2002, 65, 026107.	2.1	728
3	Synchronization on small-world networks. Physical Review E, 2002, 65, 026139.	2.1	375
4	Vertex overload breakdown in evolving networks. Physical Review E, 2002, 65, 066109.	2.1	219
5	Factors that predict better synchronizability on complex networks. Physical Review E, 2004, 69, 067105.	2.1	209
6	Dynamic instabilities induced by asymmetric influence: Prisoners' dilemma game in small-world networks. Physical Review E, 2002, 66, 021907.	2.1	195
7	Path finding strategies in scale-free networks. Physical Review E, 2002, 65, 027103.	2.1	151
8	XYmodel in small-world networks. Physical Review E, 2001, 64, 056135.	2.1	108
9	Network bipartivity. Physical Review E, 2003, 68, 056107.	2.1	107
10	Performance of networks of artificial neurons: The role of clustering. Physical Review E, 2004, 69, 045101.	2.1	107
11	Korean university life in a network perspective: Dynamics of a large affiliation network. Physica A: Statistical Mechanics and Its Applications, 2007, 373, 821-830.	2.6	101
12	Prisoners' dilemma in real-world acquaintance networks: Spikes and quasiequilibria induced by the interplay between structure and dynamics. Physical Review E, 2003, 68, 030901.	2.1	92
13	Comment on "Ising model on a small world network". Physical Review E, 2002, 66, 018101.	2.1	69
14	Scaling laws between population and facility densities. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14236-14240.	7.1	69
15	The Sensitivity of Respondent-Driven Sampling. Journal of the Royal Statistical Society Series A: Statistics in Society, 2012, 175, 191-216.	1.1	66
16	Continuity of the explosive percolation transition. Physical Review E, 2011, 84, 020101.	2.1	64
17	Universality Class of the Fiber Bundle Model on Complex Networks. Physical Review Letters, 2005, 94, 025501.	7.8	61
18	Wiring cost in the organization of a biological neuronal network. Physica A: Statistical Mechanics and Its Applications, 2006, 367, 531-537.	2.6	55

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19	Geographical Coarse Graining of Complex Networks. Physical Review Letters, 2004, 93, 168701.	7.8	51
20	Vortex dynamics for two-dimensional XY models. Physical Review B, 1999, 59, 11506-11522.	3.2	50
21	Dynamic critical behavior of the XY model in small-world networks. Physical Review E, 2003, 67, 036118.	2.1	50
22	Dynamics and Directionality in Complex Networks. Physical Review Letters, 2009, 103, 228702.	7.8	43
23	Dynamic critical exponent of two-, three-, and four-dimensional XY models with relaxational and resistively shunted junction dynamics. Physical Review B, 2000, 61, 15412-15428.	3.2	39
24	Synchronization in interdependent networks. Chaos, 2011, 21, 025106.	2.5	39
25	Percolation on hyperbolic lattices. Physical Review E, 2009, 79, 011124.	2.1	36
26	Analysis of current-voltage characteristics of two-dimensional superconductors: Finite-size scaling behavior in the vicinity of the Kosterlitz-Thouless transition. Physical Review B, 2000, 62, 14531-14540.	3.2	35
27	Dynamic behaviors in directed networks. Physical Review E, 2006, 74, 026114.	2.1	34
28	Network marketing on a small-world network. Physica A: Statistical Mechanics and Its Applications, 2006, 360, 493-504.	2.6	33
29	Family name distributions: Master equation approach. Physical Review E, 2007, 76, 046113.	2.1	31
30	Direct evidence of the discontinuous character of the Kosterlitz-Thouless jump. Physical Review B, 2003, 67, .	3.2	29
31	Flow improvement caused by agents who ignore traffic rules. Physical Review E, 2009, 80, 016111.	2.1	28
32	Phase ordering on small-world networks with nearest-neighbor edges. Physical Review E, 2002, 65, 047104.	2.1	27
33	Intelligent tit-for-tat in the iterated prisoner's dilemma game. Physical Review E, 2008, 78, 011125.	2.1	25
34	True and quasi-long-range order in the generalized q-state clock model. Physical Review E, 2009, 80, 060101.	2.1	25
35	Stochastic resonance in the driven Ising model on small-world networks. Physical Review E, 2002, 66, 011107.	2.1	24
36	Quantum and classical diffusion on small-world networks. Physical Review B, 2003, 68, .	3.2	24

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37	Consumer referral in a small world network. Social Networks, 2006, 28, 232-246.	2.1	24
38	Optimal synchronizability of networks. European Physical Journal B, 2007, 60, 89-95.	1.5	24
39	Dissolution of traffic jam via additional local interactions. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 4555-4561.	2.6	24
40	Phase transition in the Ising model on a small-world network with distance-dependent interactions. Physical Review E, 2003, 68, 027101.	2.1	23
41	Distribution of Korean family names. Physica A: Statistical Mechanics and Its Applications, 2005, 347, 683-694.	2.6	23
42	Curvature-induced frustration in the XY model on hyperbolic surfaces. Physical Review E, 2009, 79, 060106.	2.1	23
43	Phase transition in a coevolving network of conformist and contrarian voters. Physical Review E, 2013, 87, 012806.	2.1	22
44	Quantum fluctuations in superconducting arrays with a general capacitance matrix. Physical Review B, 1995, 52, 3624-3631.	3.2	21
45	Finite-temperature resistive transition in the two-dimensional XY gauge glass model. Physical Review B, 2000, 62, 644-647.	3.2	21
46	Testing a priority-based queue model with Linux command histories. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 3660-3668.	2.6	21
47	Confusion scheme in machine learning detects double phase transitions and quasi-long-range order. Physical Review E, 2019, 99, 043308.	2.1	20
48	Comment on "Six-state clock model on the square lattice: Fisher zero approach with Wang-Landau sampling". Physical Review E, 2010, 81, 063101.	2.1	19
49	Intrinsic Finite-Size Effects in the Two-Dimensional XY Model with Irrational Frustration. Physical Review Letters, 2000, 85, 3484-3487.	7.8	18
50	Anomalous relaxation in the XY gauge glass. Physical Review B, 1997, 56, 6007-6012.	3.2	17
51	Residual discrete symmetry of the five-state clock model. Physical Review E, 2013, 88, 012125.	2.1	17
52	Network analysis of an online community. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 5946-5951.	2.6	16
53	Vortex Fluctuations in High-Tc Films: Flux Noise Spectrum and Complex Impedance. Physical Review Letters, 1999, 83, 5567-5570.	7.8	15
54	Phase transitions in the two-dimensional random gauge XY model. Physical Review B, 2003, 67, .	3.2	15

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55	Phase transition ofq-state clock models on heptagonal lattices. Physical Review E, 2009, 80, 011133.	2.1	15
56	Defect motions and smearing of Shapiro steps in Josephson-junction ladders under magnetic frustration. Physical Review B, 1995, 51, 8462-8466.	3.2	14
57	Flux-noise spectra around the Kosterlitz-Thouless transition for two-dimensional superconductors. Physical Review B, 1999, 60, 6834-6843.	3.2	14
58	Instability of defensive alliances in the predator-prey model on complex networks. Physical Review E, 2005, 72, 041906.	2.1	14
59	Kosterlitz-Thouless transition of magnetic dipoles on the two-dimensional plane. Physical Review B, 2011, 83, .	3.2	14
60	Korean Family Name Distribution in the Past. Journal of the Korean Physical Society, 2007, 51, 1812-1816.	0.7	14
61	Neutral theory of chemical reaction networks. New Journal of Physics, 2012, 14, 033032.	2.9	13
62	Deviation-based spam-filtering method via stochastic approach. Europhysics Letters, 2018, 121, 68004.	2.0	13
63	Comment on â€œGlassiness in a Model without Energy Barriersâ€. Physical Review Letters, 1996, 76, 4648-4648.	7.8	12
64	Quantum phase transitions in superconducting arrays with general capacitance matrices. Physical Review B, 1997, 56, 395-409.	3.2	12
65	Optimal size of a complex network. Physical Review E, 2003, 67, 046101.	2.1	12
66	Phase diagram of generalized fully frustratedXYmodel in two dimensions. Physical Review B, 2007, 76, .	3.2	12
67	Diffusion on a heptagonal lattice. Physical Review E, 2008, 77, 022104.	2.1	12
68	Voter model on a directed network: Role of bidirectional opinion exchanges. Physical Review E, 2010, 81, 057103.	2.1	12
69	Fractal Profit Landscape of the Stock Market. PLoS ONE, 2012, 7, e33960.	2.5	12
70	Percolation properties of growing networks under an Achlioptas process. Europhysics Letters, 2013, 103, 26004.	2.0	12
71	Generalized gravity model for human migration. New Journal of Physics, 2018, 20, 093018.	2.9	12
72	Spatiotemporal stochastic resonance in fully frustrated Josephson ladders. Physical Review B, 2001, 63, .	3.2	11

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73	Netons: vibrations of complex networks. Journal of Physics A, 2003, 36, 6329-6336.	1.6	11
74	Dynamic transition and Shapiro-step melting in a frustrated Josephson-junction array. Physical Review B, 2004, 69, .	3.2	11
75	Current-voltage characteristics of the two-dimensional XY model with Monte Carlo dynamics. Physical Review B, 2000, 63, .	3.2	10
76	ANTIPHASE SYNCHRONIZATION OF TWO NONIDENTICAL PENDULUMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 2179-2184.	1.7	10
77	The ten thousand Kims. New Journal of Physics, 2011, 13, 073036.	2.9	10
78	Cluster-size heterogeneity in the two-dimensional Ising model. Physical Review E, 2012, 86, 032103.	2.1	10
79	Evidence of Two Distinct Dynamic Critical Exponents in Connection with Vortex Physics. Physical Review Letters, 2001, 87, 037002.	7.8	9
80	Dynamic critical behaviors in two-dimensional Josephson junction arrays with positional disorder. Physical Review B, 2006, 74, .	3.2	9
81	Comment on â€˜Monte Carlo simulation study of the two-stage percolation transition in enhanced binary treesâ€™. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 478001.	2.1	9
82	Matchmaker, Matchmaker, Make Me a Match: Migration of Populations via Marriages in the Past. Physical Review X, 2014, 4, .	8.9	9
83	Climate change alters diffusion of forest pest: A model study. Journal of the Korean Physical Society, 2017, 70, 108-115.	0.7	9
84	Consistency landscape of network communities. Physical Review E, 2021, 103, 052306.	2.1	9
85	Dynamic Phase Transition of the Globally-Coupled Kinetic Ising Model in the Low-Frequency Region. Journal of the Korean Physical Society, 2008, 52, 203-208.	0.7	9
86	Subharmonic structure of Shapiro steps in frustrated superconducting arrays. Physical Review B, 1995, 52, 13536-13546.	3.2	8
87	Ubiquitous finite-size scaling features in Iâ€"V characteristics of various dynamic XY models in two dimensions. Physica C: Superconductivity and Its Applications, 2001, 355, 6-14.	1.2	8
88	Critical condition of the water-retention model. Physical Review E, 2012, 85, 032103.	2.1	8
89	International transmission of shocks and fragility of a bank network. Physica A: Statistical Mechanics and Its Applications, 2014, 403, 120-129.	2.6	8
90	Power-grid stability predictions using transferable machine learning. Chaos, 2021, 31, 123127.	2.5	8

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91	Quantrum diffusion in the generalized Harper equation. Journal of Physics A, 1998, 31, 1353-1364.	1.6	7
92	Giant Shapiro steps for two-dimensional Josephson-junction arrays with time-dependent Ginzburg-Landau dynamics. Physical Review B, 1999, 60, 588-591.	3.2	7
93	Comparison of immunization strategies in geographical networks. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 3877-3882.	2.1	7
94	Ising model on a hyperbolic plane with a boundary. Physical Review E, 2011, 84, 032103.	2.1	7
95	Double stochastic resonance in the mean-field q-state clock model. Physical Review E, 2012, 86, 011132.	2.1	7
96	Finite-Time and Finite-Size Scaling of the Kuramoto Oscillators. Physical Review Letters, 2014, 112, 074102.	7.8	7
97	Lattice effects on the current-voltage characteristics of superconducting arrays. Physical Review B, 2000, 61, 3263-3266.	3.2	6
98	Relaxational dynamics study of the classical Heisenberg spin XY model in spherical coordinate representation. Physical Review B, 2001, 64, .	3.2	6
99	Quantum Monte Carlo study of the transverse-field quantum Ising model on infinite-dimensional structures. Physical Review B, 2011, 84, .	3.2	6
100	Spatial uniformity in the power-grid system. Physical Review E, 2017, 95, 042316.	2.1	6
101	Benford's law and first letter of words. Physica A: Statistical Mechanics and Its Applications, 2018, 512, 305-315.	2.6	6
102	Stochastic resonance of abundance fluctuations and mean time to extinction in an ecological community. Physical Review E, 2021, 104, 024133.	2.1	6
103	Quantum phase transitions in superconducting arrays under external magnetic fields. Physical Review B, 1998, 58, 14524-14530.	3.2	5
104	Scale-free dynamics emerging from information transfer. Europhysics Letters, 2005, 69, 503-509.	2.0	5
105	Scale-freeness for networks as a degenerate ground state: A Hamiltonian formulation. Europhysics Letters, 2007, 78, 28004.	2.0	5
106	Facilitated gapless conduction through DNA molecules. Physical Review B, 2007, 75, .	3.2	5
107	Network marketing with bounded rationality and partial information. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 4896-4902.	2.6	5
108	Reentrant phase transition in a predator-prey model. Physical Review E, 2009, 79, 066114.	2.1	5

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109	Role of generosity and forgiveness: Return to a cooperative society. Physical Review E, 2017, 95, 042314.	2.1	5
110	Critical dynamics of the four-dimensional XY model. Physica B: Condensed Matter, 2000, 284-288, 455-456.	2.7	4
111	Critical current from dynamical boundary instability for fully frustrated Josephson junction arrays. Physical Review B, 2000, 61, 7017-7020.	3.2	4
112	Symmetry-allowed phase transitions realized by the two-dimensional fully frustratedXYclass. Physical Review B, 2008, 78, .	3.2	4
113	Surface and bulk criticality in midpoint percolation. Physical Review E, 2010, 81, 041108.	2.1	4
114	Critical temperatures of the three- and four-state Potts models on the kagome lattice. Physical Review E, 2011, 83, 061104.	2.1	4
115	Stochastic resonance in the two-dimensional$q$-state clock models. Physical Review E, 2014, 89, 032137.	2.1	4
116	Evolution of popularity in given names. Physica A: Statistical Mechanics and Its Applications, 2016, 443, 415-422.	2.6	4
117	Discontinuous phase transition in the Kuramoto model with asymmetric dynamic interaction. Physical Review E, 2020, 102, 052207.	2.1	4
118	Quantum coherence and duality in Josephson junctions. Physical Review B, 1993, 47, 9112-9115.	3.2	3
119	Dynamic critical exponent of three-dimensional XY model. Physica B: Condensed Matter, 2000, 284-288, 413-414.	2.7	3
120	Localization softening in flexible conducting polymers. Physical Review B, 2007, 76, .	3.2	3
121	Blood-type distribution. Physica A: Statistical Mechanics and Its Applications, 2007, 373, 533-540.	2.6	3
122	Comment on â€œPhase transition in a one-dimensional Ising ferromagnet at zero temperature using Glauber dynamics with a synchronous updating modeâ€. Physical Review E, 2011, 83, 033101.	2.1	3
123	Force correlations in molecular and stochastic dynamics. Computer Physics Communications, 2012, 183, 1574-1577.	7.5	3
124	Free energy of a chemotactic model with nonlinear diffusion. Scientific Reports, 2017, 7, 8909.	3.3	3
125	Product flow and price change in an agricultural distribution network. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 70-76.	2.6	3
126	Co-sponsorship analysis of party politics in the 20th National Assembly of Republic of Korea. Physica A: Statistical Mechanics and Its Applications, 2020, 560, 125178.	2.6	3

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127	Asymmetric dynamic interaction shifts synchronized frequency of coupled oscillators. Scientific Reports, 2020, 10, 2516.	3.3	3
128	The effect of media on opinion formation. Physica A: Statistical Mechanics and Its Applications, 2022, 595, 127075.	2.6	3
129	Different environmental conditions in genetic algorithm. Physica A: Statistical Mechanics and Its Applications, 2022, 602, 127604.	2.6	3
130	Comment on â€œLoss of Superconducting Phase Coherence inYBa2Cu3O7films: Vortex-Loop Unbinding and Kosterlitz-Thouless Phenomenaâ€• Physical Review Letters, 2002, 89, 149703; author reply 149704.	7.8	2
131	Scaling determination of the nonlinearIâˆ'Vcharacteristics for two-dimensional superconducting networks. Physical Review B, 2004, 69, .	3.2	2
132	Critical currents for vortex defect motion in superconducting arrays. Physical Review B, 2005, 71, .	3.2	2
133	Double resonance in the infinite-range quantum Ising model. Physical Review E, 2012, 86, 021119.	2.1	2
134	Traveling baseball playersâ€™ problem in Korea. Journal of the Korean Physical Society, 2012, 61, 484-492.	0.7	2
135	Fractality of profit landscapes and validation of time series models for stock prices. European Physical Journal B, 2013, 86, 1.	1.5	2
136	Allometric exponent and randomness. New Journal of Physics, 2013, 15, 043001.	2.9	2
137	Structural properties of networks grown via an Achlioptas process. Journal of the Korean Physical Society, 2014, 65, 1985-1990.	0.7	2
138	Winding-number excitation in one-dimensional oscillators with variable interaction range. Journal of the Korean Physical Society, 2014, 64, 954-957.	0.7	2
139	Human dynamics of spending: Longitudinal study of a coalition loyalty program. Physica A: Statistical Mechanics and Its Applications, 2014, 410, 391-398.	2.6	2
140	Winding number excitation detects phase transition in one-dimensionalXYmodel with variable interaction range. Physical Review E, 2015, 91, 052120.	2.1	2
141	Theory of fads: Traveling-wave solution of evolutionary dynamics in a one-dimensional trait space. Physical Review E, 2015, 91, 012815.	2.1	2
142	Network of likes and dislikes: Conflict and membership. Physica A: Statistical Mechanics and Its Applications, 2016, 461, 647-654.	2.6	2
143	Human bipedalism and body-mass index. Scientific Reports, 2017, 7, 3688.	3.3	2
144	Spatial distribution of access diversity on urban road networks. Journal of the Korean Physical Society, 2021, 79, 504-511.	0.7	2

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145	Synchronization of Nonidentical Phase Oscillators in Directed Networks. Journal of the Korean Physical Society, 2008, 53, 491-496.	0.7	2
146	Dworkinâ€™s Paradox. PLoS ONE, 2012, 7, e38529.	2.5	2
147	Cliophysics: A scientific analysis of recurrent historical events. Europhysics Letters, 2022, 138, 22004.	2.0	2
148	Magnetic-field dependence of dynamical vortex response in two-dimensional Josephson junction arrays and superconducting films. Physical Review B, 1999, 60, R15043-R15046.	3.2	1
149	Anomalous dynamic response in the two-dimensional lattice Coulomb gas model: Effects of pinning. Physical Review B, 2001, 63, .	3.2	1
150	Splitting of the superconducting transition in the two weakly coupled 2D XY models. Physica C: Superconductivity and Its Applications, 2002, 369, 282-285.	1.2	1
151	Entropic sampling dynamics of the globally coupled kinetic Ising model. Journal of Physics A, 2005, 38, 2115-2122.	1.6	1
152	Analysis of the one-dimensional Yut-Nori game: Winning strategy and avalanche-size distribution. Journal of the Korean Physical Society, 2013, 63, 1497-1502.	0.7	1
153	Thermodynamic arrow of time of quantum projective measurements. Europhysics Letters, 2013, 103, 20006.	2.0	1
154	Universal statistics of the knockout tournament. Scientific Reports, 2013, 3, 3198.	3.3	1
155	Anomalous response in the vicinity of spontaneous symmetry breaking. European Physical Journal B, 2015, 88, 1.	1.5	1
156	Frequency-Entrainment Measures in Coupled-Oscillator Systems. Journal of the Korean Physical Society, 2008, 52, 198-202.	0.7	1
157	THE GROUNDSTATES AND PHASES OF THE TWO-DIMENSIONAL FULLY FRUSTRATED XY MODEL. , 2009, , .		1
158	Defense strategies against cascading failures in networks: â€œToo-big-to-failâ€•and â€œtoo-small-to-failâ€• Physica A: Statistical Mechanics and Its Applications, 2022, 586, 126488.	2.6	1
159	THE GROUNDSTATES AND PHASES OF THE TWO-DIMENSIONAL FULLY FRUSTRATED XY MODEL. International Journal of Modern Physics B, 2009, 23, 3939-3950.	2.0	0
160	LOCATION DYNAMICS OF FOREIGN BANKING IN SHANGHAI FROM 1990 TO 2009. International Journal of Modern Physics C, 2011, 22, 1081-1092.	1.7	0
161	Time reversibility of quantum diffusion in small-world networks. Journal of the Korean Physical Society, 2012, 60, 665-668.	0.7	0
162	Surname statistics â€" Crossing the boundary between disciplines. Physics of Life Reviews, 2013, 10, 420-421.	2.8	0

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163	Nonequilibrium work by charge control in a Josephson junction. Physical Review E, 2013, 88, 022143.	2.1	0
164	Zero-one-only process: A correlated random walk with a stochastic ratchet. International Journal of Modern Physics B, 2014, 28, 1450201.	2.0	0
165	Group Intimacy and Network Formation. , 2015, , .		0
166	Structural phase transition in a growing network model with tunable member intimacy. Europhysics Letters, 2017, 118, 48004.	2.0	0
167	Dynamic critical behavior of the one-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mi>Y</mml:mi></mml:mrow></mml:m model with a long-range interaction. Physical Review E, 2018, 98, .	2.1	0
168	Impact of personal income on mortality: Decomposition into biological vs. socio-economic effects. Europhysics Letters, 2021, 135, 14002.	2.0	0
169	Modified Kuramoto model with inverse-square law coupling and spatial time delay. Physica A: Statistical Mechanics and Its Applications, 2021, 582, 126263.	2.6	0
170	Z2 Symmetry in the Melting Transition of the DNA Helix. Journal of the Korean Physical Society, 2008, 52, 502-506.	0.7	0
171	Phase Transitions in the Generalized XY Model at f = 1/2. Journal of the Korean Physical Society, 2008, 53, 1269-1272.	0.7	0
172	Temperature-dependent performance of the erasure machine. Journal of the Korean Physical Society, 0, , 1.	0.7	0
173	Generalized p-median problem for the optimal distribution of facilities. Journal of the Korean Physical Society, 2022, 80, 352-358.	0.7	0