Jianxi Gao

List of Publications by Year
in descending order

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Version: 2024-02-01

83	5,159	172457	88630
papers	citations	29 h-index	70 g-index

94	94	94	3493
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Networks formed from interdependent networks. Nature Physics, 2012, 8, 40-48.	16.7	961
2	Universal resilience patterns in complex networks. Nature, 2016, 530, 307-312.	27.8	754
3	Robustness of a Network of Networks. Physical Review Letters, 2011, 107, 195701.	7.8	509
4	Robustness of interdependent networks under targeted attack. Physical Review E, 2011, 83, 065101.	2.1	408
5	Target control of complex networks. Nature Communications, 2014, 5, 5415.	12.8	311
6	Robustness of network of networks under targeted attack. Physical Review E, 2013, 87, 052804.	2.1	167
7	Robustness of a network formed by<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>interdependent networks with a one-to-one correspondence of dependent nodes. Physical Review E, 2012, 85, 066134.	2.1	132
8	From a single network to a network of networks. National Science Review, 2014, 1, 346-356.	9.5	129
9	Breakdown of interdependent directed networks. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1138-1143.	7.1	120
10	Percolation of partially interdependent scale-free networks. Physical Review E, 2013, 87, 052812.	2.1	103
11	Percolation of a general network of networks. Physical Review E, 2013, 88, 062816.	2.1	103
12	Percolation of partially interdependent networks under targeted attack. Physical Review E, 2012, 85, 016112.	2.1	102
13	Recent Progress on the Resilience of Complex Networks. Energies, 2015, 8, 12187-12210.	3.1	82
14	Local floods induce large-scale abrupt failures of road networks. Nature Communications, 2019, 10, 2114.	12.8	69
15	Universal behavior of cascading failures in interdependent networks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22452-22457.	7.1	68
16	Percolation of interdependent network of networks. Chaos, Solitons and Fractals, 2015, 72, 4-19.	5.1	65
17	Robustness and lethality in multilayer biological molecular networks. Nature Communications, 2020, 11, 6043.	12.8	61
18	Controllability of multiplex, multi-time-scale networks. Physical Review E, 2016, 94, 032316.	2.1	53

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19	Network resilience. Physics Reports, 2022, 971, 1-108.	25.6	51
20	A novel network control model for identifying personalized driver genes in cancer. PLoS Computational Biology, 2019, 15, e1007520.	3.2	50
21	A mobility network approach to identify and anticipate large crowd gatherings. Transportation Research Part B: Methodological, 2018, 114, 147-170.	5.9	45
22	Evolution of cooperation among mobile agents. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 1615-1622.	2.6	44
23	Robust component: a robustness measure that incorporates access to critical facilities under disruptions. Journal of the Royal Society Interface, 2019, 16, 20190149.	3.4	43
24	Vulnerability of network of networks. European Physical Journal: Special Topics, 2014, 223, 2087-2106.	2.6	39
25	Polarization and tipping points. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	39
26	Measuring the Topological Robustness of Transportation Networks to Disaster-Induced Failures: A Percolation Approach. Journal of Infrastructure Systems, 2020, 26, .	1.8	38
27	Multiple metastable network states in urban traffic. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17528-17534.	7.1	36
28	Enhancing the convergence efficiency of a self-propelled agent system via a weighted model. Physical Review E, 2010, 81, 041918.	2.1	35
29	Network of Interdependent Networks: Overview of Theory and Applications. Understanding Complex Systems, 2014, , 3-36.	0.6	33
30	Angle restriction enhances synchronization of self-propelled objects. Physical Review E, 2011, 84, 046115.	2.1	31
31	Vulnerability and controllability of networks of networks. Chaos, Solitons and Fractals, 2015, 80, 125-138.	5.1	31
32	Data science approaches to confronting the COVID-19 pandemic: a narrative review. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210127.	3.4	28
33	High-resolution human mobility data reveal race and wealth disparities in disaster evacuation patterns. Humanities and Social Sciences Communications, 2021, 8, .	2.9	26
34	Reviving a failed network through microscopic interventions. Nature Physics, 2022, 18, 338-349.	16.7	25
35	Controllability of giant connected components in a directed network. Physical Review E, 2017, 95, 042318.	2.1	24
36	Country distancing increase reveals the effectiveness of travel restrictions in stopping COVID-19 transmission. Communications Physics, 2021, 4, .	5.3	20

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37	Multiple phase transitions in networks of directed networks. Physical Review E, 2019, 99, 012312.	2.1	19
38	Resilience centrality in complex networks. Physical Review E, 2020, 101, 022304.	2.1	18
39	The impact of non-pharmaceutical interventions on the prevention and control of COVID-19 in New York City. Chaos, 2021, 31, 021101.	2.5	17
40	Generalized model for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>k</mml:mi></mml:math> -core percolation and interdependent networks. Physical Review E, 2017, 96, 032317.	2.1	16
41	Modest flooding can trigger catastrophic road network collapse due to compound failure. Communications Earth & Environment, 2022, 3, .	6.8	16
42	An Integrated Approach for Assessing the Impact of Largeâ€Scale Future Floods on a Highway Transport System. Risk Analysis, 2020, 40, 1780-1794.	2.7	14
43	Nonlinear model of cascade failure in weighted complex networks considering overloaded edges. Scientific Reports, 2020, 10, 13428.	3.3	13
44	A Network Observability Framework for Sensor Placement in Flood Control Networks to Improve Flood Situational Awareness and Risk Management. Reliability Engineering and System Safety, 2022, 221, 108366.	8.9	13
45	Evolutionary prisonerâ€™s dilemma game in flocks. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 50-56.	2.6	12
46	Towards perturbation prediction of biological networks using deep learning. Scientific Reports, 2019, 9, 11941.	3.3	12
47	The evolution of polarization in the legislative branch of government. Journal of the Royal Society Interface, 2019, 16, 20190010.	3.4	11
48	Network percolation reveals adaptive bridges of the mobility network response to COVID-19. PLoS ONE, 2021, 16, e0258868.	2.5	11
49	The Co-Evolution Model for Social Network Evolving and Opinion Migration. , 2017, , .		10
50	Concurrence Percolation in Quantum Networks. Physical Review Letters, 2021, 126, 170501.	7.8	10
51	Percolation of edge-coupled interdependent networks. Physica A: Statistical Mechanics and Its Applications, 2021, 580, 126136.	2.6	10
52	Collective Motion in a Network of Self-Propelled Agent Systems. PLoS ONE, 2015, 10, e0144153.	2.5	8
53	Cyber War Game in Temporal Networks. PLoS ONE, 2016, 11, e0148674.	2.5	7
54	Robustness of interdependent scale-free networks based on link addition strategies. Physica A: Statistical Mechanics and Its Applications, 2022, 604, 127851.	2.6	7

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55	Co-adaptation enhances the resilience of mutualistic networks. Journal of the Royal Society Interface, 2020, 17, 20200236.	3.4	6
56	True Nonlinear Dynamics from Incomplete Networks. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 131-138.	4.9	6
57	Discrimination reveals reconstructability of multiplex networks from partial observations. Communications Physics, 2022, 5, .	5.3	6
58	Robustness of interdependent networks based on bond percolation. Europhysics Letters, 2020, 130, 38003.	2.0	5
59	Vaccination intentions generate racial disparities in the societal persistence of COVID-19. Scientific Reports, 2021, 11, 19906.	3.3	5
60	Percolation of temporal hierarchical mobility networks during COVID-19. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210116.	3.4	5
61	Universality of noise-induced resilience restoration in spatially-extended ecological systems. Communications Physics, 2021, 4, .	5.3	5
62	Ultrafast synchronization via local observation. New Journal of Physics, 2019, 21, 013040.	2.9	4
63	From data to complex network control of airline flight delays. Scientific Reports, 2021, 11, 18715.	3.3	4
64	Modeling competitive evolution of multiple languages. PLoS ONE, 2020, 15, e0232888.	2.5	3
65	Inferring Degrees from Incomplete Networks and Nonlinear Dynamics. , 2020, , .		3
66	Designing pinning network controllability for interdependent dynamical networks. , 2018, , .		2
67	Synchronization of interconnected heterogeneous networks: The role of network sizes. Scientific Reports, 2019, 9, 6154.	3.3	2
68	Dissecting lightning strike hazard impact patterns to National Airspace System facilities in the contiguous United States. Computers, Environment and Urban Systems, 2022, 91, 101735.	7.1	2
69	Identifying the shifting sources to predict the dynamics of COVID-19 in the U.S.. Chaos, 2022, 32, 033104.	2.5	2
70	A quantification method of non-failure cascading spreading in a network of networks. Chaos, 2021, 31, 123122.	2.5	2
71	Vaccination and three non-pharmaceutical interventions determine the dynamics of COVID-19 in the US. Humanities and Social Sciences Communications, 2022, 9, .	2.9	2
72	Study on robust H â^ž filtering in networked environments. International Journal of Automation and Computing, 2011, 8, 465-471.	4.5	1

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73	Aviation Transportation, Cyber Threats, and Network-of-Networks: Modeling Perspectives for Translating Theory to Practice. , 2018, , .		1
74	Cluster-based topological features of nodes in a multiplex networkâ€"from a network of networks perspective. New Journal of Physics, 2019, 21, 103014.	2.9	1
75	Heuristic assessment of choices for risk network control. Scientific Reports, 2021, 11, 7645.	3.3	1
76	Nuclear reaction network unveils novel reaction patterns based on stellar energies. New Journal of Physics, 2021, 23, 083035.	2.9	1
77	An Approach to Enhance Convergence Efficiency of Self-propelled Agent System. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 1261-1269.	0.3	1
78	The Critical Penetration Level in Oscillator-Based Smart Grid. , 2018, , .		0
79	A novel network control model for identifying personalized driver genes in cancer. , 2019, 15, e1007520.		0
80	A novel network control model for identifying personalized driver genes in cancer. , 2019, 15, e1007520.		0
81	A novel network control model for identifying personalized driver genes in cancer. , 2019, 15, e1007520.		0
82	A novel network control model for identifying personalized driver genes in cancer. , 2019, 15, e1007520.		0
83	A novel network control model for identifying personalized driver genes in cancer. , 2019, 15, e1007520.		0