Jingfang Fan

List of Publications by Year
in descending order

56	13,992	147801	149698
papers	citations	31 h-index	56 g-index

59	59	59	8136
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catastrophic cascade of failures in interdependent networks. Nature, 2010, 464, 1025-1028.	27.8	3,326
2	Identification of influential spreaders in complex networks. Nature Physics, 2010, 6, 888-893.	16.7	2,386
3	Resilience of the Internet to Random Breakdowns. Physical Review Letters, 2000, 85, 4626-4628.	7.8	1,911
4	Networks formed from interdependent networks. Nature Physics, 2012, 8, 40-48.	16.7	961
5	Efficient Immunization Strategies for Computer Networks and Populations. Physical Review Letters, 2003, 91, 247901.	7.8	881
6	Robustness of a Network of Networks. Physical Review Letters, 2011, 107, 195701.	7.8	509
7	Modelling urban growth patterns. Nature, 1995, 377, 608-612.	27.8	392
8	Percolation transition in dynamical traffic network with evolving critical bottlenecks. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 669-672.	7.1	349
9	Spontaneous recovery in dynamical networks. Nature Physics, 2014, 10, 34-38.	16.7	251
10	Social physics. Physics Reports, 2022, 948, 1-148.	25.6	231
11	Punishment diminishes the benefits of network reciprocity in social dilemma experiments. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 30-35.	7.1	213
12	Robustness of network of networks under targeted attack. Physical Review E, 2013, 87, 052804.	2.1	167
13	Very early warning of next El NiÃ±o. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2064-2066.	7.1	158
14	Improved El NiÃ±o forecasting by cooperativity detection. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11742-11745.	7.1	136
15	Memory in the Occurrence of Earthquakes. Physical Review Letters, 2005, 95, 208501.	7.8	130
16	Percolation of partially interdependent scale-free networks. Physical Review E, 2013, 87, 052812.	2.1	103
17	Percolation of a general network of networks. Physical Review E, 2013, 88, 062816.	2.1	103
18	Recent advances on failure and recovery in networks of networks. Chaos, Solitons and Fractals, 2016, 90, 28-36.	5.1	84

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19	Recent Progress on the Resilience of Complex Networks. Energies, 2015, 8, 12187-12210.	3.1	82
20	Resilience of networks with community structure behaves as if under an external field. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6911-6915.	7.1	82
21	Teleconnection Paths via Climate Network Direct Link Detection. Physical Review Letters, 2015, 115, 268501.	7.8	80
22	Multiple tipping points and optimal repairing in interacting networks. Nature Communications, 2016, 7, 10850.	12.8	79
23	Statistical physics approaches to the complex Earth system. Physics Reports, 2021, 896, 1-84.	25.6	79
24	Network analysis reveals strongly localized impacts of El NiÃ±o. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7543-7548.	7.1	76
25	Dominant Imprint of Rossby Waves in the Climate Network. Physical Review Letters, 2013, 111, 138501.	7.8	70
26	Resilience of networks formed of interdependent modular networks. New Journal of Physics, 2015, 17, 123007.	2.9	51
27	Percolation framework to describe El NiÃ±o conditions. Chaos, 2017, 27, 035807.	2.5	48
28	Critical tipping point distinguishing two types of transitions in modular network structures. Physical Review E, 2015, 92, 062805.	2.1	43
29	Optimal resilience of modular interacting networks. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	41
30	Complexity-based approach for El NiÃ±o magnitude forecasting before the spring predictability barrier. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 177-183.	7.1	37
31	Continuous percolation phase transitions of random networks under a generalized Achlioptas process. Physical Review E, 2012, 85, 061110.	2.1	36
32	Significant Impact of Rossby Waves on Air Pollution Detected by Network Analysis. Geophysical Research Letters, 2019, 46, 12476-12485.	4.0	28
33	Epidemic spreading on modular networks: The fear to declare a pandemic. Physical Review E, 2020, 101, 032309.	2.1	27
34	Climate network percolation reveals the expansion and weakening of the tropical component under global warming. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12128-E12134.	7.1	26
35	Universal gap scaling in percolation. Nature Physics, 2020, 16, 455-461.	16.7	25
36	Network-based forecasting of climate phenomena. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24

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37	Structural resilience of spatial networks with inter-links behaving as an external field. New Journal of Physics, 2018, 20, 093003.	2.9	15
38	General clique percolation in random networks. Europhysics Letters, 2014, 107, 28005.	2.0	14
39	Correlation and scaling behaviors of fine particulate matter (PM_{2.5}) concentration in China. Europhysics Letters, 2018, 122, 58003.	2.0	14
40	Epidemic spreading and control strategies in spatial modular network. Applied Network Science, 2020, 5, 95.	1.5	13
41	Eigen microstates and their evolutions in complex systems. Communications in Theoretical Physics, 2021, 73, 065603.	2.5	13
42	Localized attack on networks with clustering. New Journal of Physics, 2019, 21, 013014.	2.9	10
43	Scaling laws in earthquake memory for interevent times and distances. Physical Review Research, 2020, 2, .	3.6	10
44	Network approaches to climate science. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	5.1	9
45	Possible origin of memory in earthquakes: Real catalogs and an epidemic-type aftershock sequence model. Physical Review E, 2019, 99, 042210.	2.1	9
46	Improved earthquake aftershocks forecasting model based on long-term memory. New Journal of Physics, 2021, 23, 042001.	2.9	9
47	Networkâ€Synchronization Analysis Reveals the Weakening Tropical Circulations. Geophysical Research Letters, 2021, 48, e2021GL093582.	4.0	8
48	Percolation framework of the Earth's topography. Physical Review E, 2019, 99, 022304.	2.1	7
49	Evolution mechanism of principal modes in climate dynamics. New Journal of Physics, 2020, 22, 093077.	2.9	6
50	Network approach reveals the spatiotemporal influence of traffic on air pollution under COVID-19. Chaos, 2022, 32, 041106.	2.5	6
51	Climate network approach reveals the modes of CO2 concentration to surface air temperature. Chaos, 2021, 31, 031104.	2.5	5
52	Topology of products similarity network for market forecasting. Applied Network Science, 2019, 4, .	1.5	4
53	Eigen microstates and their evolution of global ozone at different geopotential heights. Chaos, 2021, 31, 071102.	2.5	4
54	Asymmetry in Earthquake Interevent Time Intervals. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022454.	3.4	3

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55	Percolation II. , 1996, , 115-176.		3
56	Percolation analysis of the atmospheric structure. Physical Review E, 2021, 104, 064139.	2.1	1