

Alex Arenas

List of Publications by Year in descending order

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216
papers

26,156
citations

16437

64
h-index

6465

157
g-index

230
all docs

230
docs citations

230
times ranked

13806
citing authors

#	ARTICLE	IF	CITATIONS
1	Synchronization in complex networks. <i>Physics Reports</i> , 2008, 469, 93-153.	10.3	2,928
2	Multilayer networks. <i>Journal of Complex Networks</i> , 2014, 2, 203-271.	1.1	2,388
3	Comparing community structure identification. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2005, 2005, P09008-P09008.	0.9	1,889
4	Community detection in complex networks using extremal optimization. <i>Physical Review E</i> , 2005, 72, 027104.	0.8	1,233
5	Self-similar community structure in a network of human interactions. <i>Physical Review E</i> , 2003, 68, 065103.	0.8	1,092
6	Diffusion Dynamics on Multiplex Networks. <i>Physical Review Letters</i> , 2013, 110, 028701.	2.9	738
7	Dynamical Interplay between Awareness and Epidemic Spreading in Multiplex Networks. <i>Physical Review Letters</i> , 2013, 111, 128701.	2.9	715
8	Synchronization Reveals Topological Scales in Complex Networks. <i>Physical Review Letters</i> , 2006, 96, 114102.	2.9	692
9	Models of social networks based on social distance attachment. <i>Physical Review E</i> , 2004, 70, 056122.	0.8	549
10	Mathematical Formulation of Multilayer Networks. <i>Physical Review X</i> , 2013, 3, .	2.8	513
11	Optimal Network Topologies for Local Search with Congestion. <i>Physical Review Letters</i> , 2002, 89, 248701.	2.9	501
12	Explosive Synchronization Transitions in Scale-Free Networks. <i>Physical Review Letters</i> , 2011, 106, 128701.	2.9	459
13	The physics of spreading processes in multilayer networks. <i>Nature Physics</i> , 2016, 12, 901-906.	6.5	430
14	Discrete-time Markov chain approach to contact-based disease spreading in complex networks. <i>Europhysics Letters</i> , 2010, 89, 38009.	0.7	403
15	Analysis of the structure of complex networks at different resolution levels. <i>New Journal of Physics</i> , 2008, 10, 053039.	1.2	400
16	Structural reducibility of multilayer networks. <i>Nature Communications</i> , 2015, 6, 6864.	5.8	400
17	Communication in Networks with Hierarchical Branching. <i>Physical Review Letters</i> , 2001, 86, 3196-3199.	2.9	390
18	Evolution of Cooperation in Multiplex Networks. <i>Scientific Reports</i> , 2012, 2, 620.	1.6	355

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19	Navigability of interconnected networks under random failures. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8351-8356.	3.3	350
20	Paths to Synchronization on Complex Networks. Physical Review Letters, 2007, 98, 034101.	2.9	312
21	Competing spreading processes on multiplex networks: Awareness and epidemics. Physical Review E, 2014, 90, 012808.	0.8	280
22	Ranking in interconnected multilayer networks reveals versatile nodes. Nature Communications, 2015, 6, 6868.	5.8	276
23	Abrupt transition in the structural formation of interconnected networks. Nature Physics, 2013, 9, 717-720.	6.5	274
24	MuxViz: a tool for multilayer analysis and visualization of networks. Journal of Complex Networks, 2015, 3, 159-176.	1.1	271
25	Modeling human mobility responses to the large-scale spreading of infectious diseases. Scientific Reports, 2011, 1, 62.	1.6	269
26	Size reduction of complex networks preserving modularity. New Journal of Physics, 2007, 9, 176-176.	1.2	255
27	Analysis of community structure in networks of correlated data. Physical Review E, 2009, 80, 016114.	0.8	198
28	Spectral properties of the Laplacian of multiplex networks. Physical Review E, 2013, 88, 032807.	0.8	186
29	The effect of size heterogeneity on community identification in complex networks. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P11010-P11010.	0.9	178
30	Identifying Modular Flows on Multilayer Networks Reveals Highly Overlapping Organization in Interconnected Systems. Physical Review X, 2015, 5, .	2.8	178
31	Dynamical properties of model communication networks. Physical Review E, 2002, 66, 026704.	0.8	172
32	Community analysis in social networks. European Physical Journal B, 2004, 38, 373-380.	0.6	167
33	Traffic-driven epidemic spreading in finite-size scale-free networks. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16897-16902.	3.3	163
34	Abrupt Desynchronization and Extensive Multistability in Globally Coupled Oscillator Simplexes. Physical Review Letters, 2019, 122, 248301.	2.9	161
35	Semantic Networks: Structure and Dynamics. Entropy, 2010, 12, 1264-1302.	1.1	159
36	Explosive First-Order Transition to Synchrony in Networked Chaotic Oscillators. Physical Review Letters, 2012, 108, 168702.	2.9	154

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37	Improved prognostic classification of breast cancer defined by antagonistic activation patterns of immune response pathway modules. BMC Cancer, 2010, 10, 604.	1.1	144
38	Synchronization processes in complex networks. Physica D: Nonlinear Phenomena, 2006, 224, 27-34.	1.3	132
39	Higher order interactions in complex networks of phase oscillators promote abrupt synchronization switching. Communications Physics, 2020, 3, .	2.0	131
40	Explosive phenomena in complex networks. Advances in Physics, 2019, 68, 123-223.	35.9	125
41	Mapping Multiplex Hubs in Human Functional Brain Networks. Frontiers in Neuroscience, 2016, 10, 326.	1.4	121
42	Multiplex social ecological network analysis reveals how social changes affect community robustness more than resource depletion. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13708-13713.	3.3	114
43	Congestion Induced by the Structure of Multiplex Networks. Physical Review Letters, 2016, 116, 108701.	2.9	107
44	Collective Phenomena Emerging from the Interactions between Dynamical Processes in Multiplex Networks. Physical Review Letters, 2017, 118, 138302.	2.9	107
45	Critical regimes driven by recurrent mobility patterns of reaction-diffusion processes in networks. Nature Physics, 2018, 14, 391-395.	6.5	106
46	Self-Organized Criticality and Synchronization in a Lattice Model of Integrate-and-Fire Oscillators. Physical Review Letters, 1995, 74, 118-121.	2.9	105
47	Mesoscopic Structure Conditions the Emergence of Cooperation on Social Networks. PLoS ONE, 2008, 3, e1892.	1.1	102
48	A population-based controlled experiment assessing the epidemiological impact of digital contact tracing. Nature Communications, 2021, 12, 587.	5.8	98
49	Abrupt phase transition of epidemic spreading in simplicial complexes. Physical Review Research, 2020, 2, .	1.3	90
50	Scaling of Fluctuations in Traffic on Complex Networks. Physical Review Letters, 2006, 96, 218702.	2.9	89
51	Synchronizability determined by coupling strengths and topology on complex networks. Physical Review E, 2007, 75, 066106.	0.8	86
52	Modeling the Spatiotemporal Epidemic Spreading of COVID-19 and the Impact of Mobility and Social Distancing Interventions. Physical Review X, 2020, 10, .	2.8	85
53	Neural virtual sensor for the inferential prediction of product quality from process variables. Computers and Chemical Engineering, 2002, 26, 1735-1754.	2.0	84
54	Centrality rankings in multiplex networks. , 2014, , .		82

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55	Control of coupled oscillator networks with application to microgrid technologies. <i>Science Advances</i> , 2015, 1, e1500339.	4.7	82
56	Nonperturbative heterogeneous mean-field approach to epidemic spreading in complex networks. <i>Physical Review E</i> , 2011, 84, 036105.	0.8	81
57	Motif-based communities in complex networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 224001.	0.7	80
58	Effective approach to epidemic containment using link equations in complex networks. <i>Science Advances</i> , 2018, 4, eaau4212.	4.7	79
59	Structure of triadic relations in multiplex networks. <i>New Journal of Physics</i> , 2015, 17, 073029.	1.2	78
60	The multiplex network of human diseases. <i>Npj Systems Biology and Applications</i> , 2019, 5, 15.	1.4	77
61	From Modular to Centralized Organization of Synchronization in Functional Areas of the Cat Cerebral Cortex. <i>PLoS ONE</i> , 2010, 5, e12313.	1.1	75
62	Random walk centrality in interconnected multilayer networks. <i>Physica D: Nonlinear Phenomena</i> , 2016, 323-324, 73-79.	1.3	75
63	A validated single-cell-based strategy to identify diagnostic and therapeutic targets in complex diseases. <i>Genome Medicine</i> , 2019, 11, 47.	3.6	68
64	Amplified Signal Response in Scale-Free Networks by Collaborative Signaling. <i>Physical Review Letters</i> , 2007, 99, 128701.	2.9	67
65	The dynamics of information-driven coordination phenomena: A transfer entropy analysis. <i>Science Advances</i> , 2016, 2, e1501158.	4.7	67
66	A Fuzzy ARTMAP Based on Quantitative Structure-Property Relationships (QSPRs) for Predicting Aqueous Solubility of Organic Compounds. <i>Journal of Chemical Information and Computer Sciences</i> , 2001, 41, 1177-1207.	2.8	66
67	Modeling diffusion of innovations in a social network. <i>Physical Review E</i> , 2002, 66, 026121.	0.8	66
68	Stability of Boolean multilevel networks. <i>Physical Review E</i> , 2012, 86, 036115.	0.8	66
69	Experts' request to the Spanish Government: move Spain towards complete lockdown. <i>Lancet</i> , The, 2020, 395, 1193-1194.	6.3	63
70	Emergence of Assortative Mixing between Clusters of Cultured Neurons. <i>PLoS Computational Biology</i> , 2014, 10, e1003796.	1.5	61
71	Benchmark model to assess community structure in evolving networks. <i>Physical Review E</i> , 2015, 92, 012805.	0.8	60
72	A Mechanistic Model of Human Recall of Social Network Structure and Relationship Affect. <i>Scientific Reports</i> , 2017, 7, 17133.	1.6	55

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73	Synchronization and modularity in complex networks. <i>European Physical Journal: Special Topics</i> , 2007, 143, 19-25.	1.2	54
74	A Fuzzy ARTMAP-Based Quantitative Structure-Property Relationship (QSPR) for the Henry's Law Constant of Organic Compounds. <i>Journal of Chemical Information and Computer Sciences</i> , 2003, 43, 85-112.	2.8	53
75	ON SELF-ORGANIZED CRITICALITY AND SYNCHRONIZATION IN LATTICE MODELS OF COUPLED DYNAMICAL SYSTEMS. <i>International Journal of Modern Physics B</i> , 1996, 10, 1111-1151.	1.0	52
76	Erosion of synchronization in networks of coupled oscillators. <i>Physical Review E</i> , 2015, 91, 010802.	0.8	52
77	Disorder induces explosive synchronization. <i>Physical Review E</i> , 2014, 89, 062811.	0.8	51
78	Multilayer Networks. <i>SSRN Electronic Journal</i> , 0, , .	0.4	50
79	Impact of community structure on information transfer. <i>Physical Review E</i> , 2008, 77, 036103.	0.8	48
80	Characterizing interactions in online social networks during exceptional events. <i>Frontiers in Physics</i> , 2015, 3, .	1.0	48
81	Centralities of nodes and influences of layers in large multiplex networks. <i>Journal of Complex Networks</i> , 2018, 6, 733-752.	1.1	48
82	Neural Network Based Quantitative Structural Property Relations (QSPRs) for Predicting Boiling Points of Aliphatic Hydrocarbons. <i>Journal of Chemical Information and Computer Sciences</i> , 2000, 40, 859-879.	2.8	47
83	Functional Multiplex PageRank. <i>Europhysics Letters</i> , 2016, 116, 28004.	0.7	47
84	Bond Percolation on Multiplex Networks. <i>Physical Review X</i> , 2016, 6, .	2.8	46
85	The joker effect: Cooperation driven by destructive agents. <i>Journal of Theoretical Biology</i> , 2011, 279, 113-119.	0.8	44
86	The simulation and interpretation of free turbulence with a cognitive neural system. <i>Physics of Fluids</i> , 2000, 12, 1826-1835.	1.6	43
87	The real communication network behind the formal chart: Community structure in organizations. <i>Journal of Economic Behavior and Organization</i> , 2006, 61, 653-667.	1.0	43
88	Cascading failures in interdependent systems under a flow redistribution model. <i>Physical Review E</i> , 2018, 97, 022307.	0.8	42
89	Fuzzy ARTMAP and Back-Propagation Neural Networks Based Quantitative Structure-Property Relationships (QSPRs) for Octanol-Water Partition Coefficient of Organic Compounds. <i>Journal of Chemical Information and Computer Sciences</i> , 2002, 42, 162-183.	2.8	41
90	Personalized routing for multitudes in smart cities. <i>EPJ Data Science</i> , 2015, 4, .	1.5	41

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91	Spreading Processes in Multiplex Metapopulations Containing Different Mobility Networks. <i>Physical Review X</i> , 2018, 8, .	2.8	40
92	A Fuzzy ARTMAP-Based Quantitative Structureâ”Property Relationship (QSPR) for Predicting Physical Properties of Organic Compounds. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 2757-2766.	1.8	39
93	A model to identify urban traffic congestion hotspots in complex networks. <i>Royal Society Open Science</i> , 2016, 3, 160098.	1.1	39
94	Phase Locking in a Network of Neural Oscillators. <i>Europhysics Letters</i> , 1994, 26, 79-83.	0.7	38
95	Detection of timescales in evolving complex systems. <i>Scientific Reports</i> , 2016, 6, 39713.	1.6	37
96	Communication and optimal hierarchical networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 299, 247-252.	1.2	36
97	An Integrated SOM-Fuzzy ARTMAP Neural System for the Evaluation of Toxicity. <i>Journal of Chemical Information and Computer Sciences</i> , 2002, 42, 343-359.	2.8	36
98	Strategical incoherence regulates cooperation in social dilemmas on multiplex networks. <i>Scientific Reports</i> , 2015, 5, 9519.	1.6	36
99	Self-organized evolution in a socioeconomic environment. <i>Physical Review E</i> , 2000, 61, 3466-3469.	0.8	35
100	Message-passing approach to epidemic tracing and mitigation with apps. <i>Physical Review Research</i> , 2021, 3, .	1.3	35
101	Self-organized criticality in evolutionary systems with local interaction. <i>Journal of Economic Dynamics and Control</i> , 2002, 26, 2115-2142.	0.9	33
102	Modeling Abnormal Priming in Alzheimer's Patients with a Free Association Network. <i>PLoS ONE</i> , 2011, 6, e22651.	1.1	32
103	Higher-order interactions can better optimize network synchronization. <i>Physical Review Research</i> , 2021, 3, .	1.3	32
104	Detecting communities of triangles in complex networks using spectral optimization. <i>Computer Communications</i> , 2011, 34, 629-634.	3.1	31
105	Evolution of Cooperation in the Presence of Higher-Order Interactions: From Networks to Hypergraphs. <i>Entropy</i> , 2020, 22, 744.	1.1	31
106	Network clique cover approximation to analyze complex contagions through group interactions. <i>Communications Physics</i> , 2021, 4, .	2.0	31
107	Categorizing words through semantic memory navigation. <i>European Physical Journal B</i> , 2010, 74, 265-270.	0.6	30
108	Influence of trust in the spreading of information. <i>Physical Review E</i> , 2017, 95, 012301.	0.8	30

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109	Centralized and distributed cognitive task processing in the human connectome. <i>Network Neuroscience</i> , 2019, 3, 455-474.	1.4	30
110	Interplay between population density and mobility in determining the spread of epidemics in cities. <i>Communications Physics</i> , 2021, 4, .	2.0	30
111	Synchronization in a Lattice Model of Pulse-Coupled Oscillators. <i>Physical Review Letters</i> , 1995, 75, 3697-3700.	2.9	29
112	Modeling structure and resilience of the dark network. <i>Physical Review E</i> , 2017, 95, 022313.	0.8	28
113	Exact long-time behavior of a network of phase oscillators under random fields. <i>Physical Review E</i> , 1994, 50, 949-956.	0.8	27
114	HIERARCHICAL MULTIREOLUTION METHOD TO OVERCOME THE RESOLUTION LIMIT IN COMPLEX NETWORKS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250171.	0.7	27
115	Assessing reliable human mobility patterns from higher order memory in mobile communications. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160203.	1.5	27
116	Estimation of infinite dilution activity coefficients of organic compounds in water with neural classifiers. <i>AIChE Journal</i> , 2004, 50, 1315-1343.	1.8	26
117	Quantifying sudden changes in dynamical systems using symbolic networks. <i>New Journal of Physics</i> , 2015, 17, 023068.	1.2	26
118	Decongestion of Urban Areas with Hotspot Pricing. <i>Networks and Spatial Economics</i> , 2018, 18, 33-50.	0.7	26
119	Analysis of large social datasets by community detection. <i>European Physical Journal: Special Topics</i> , 2007, 143, 257-259.	1.2	24
120	Optimal map of the modular structure of complex networks. <i>New Journal of Physics</i> , 2010, 12, 053009.	1.2	24
121	Disentangling categorical relationships through a graph of co-occurrences. <i>Physical Review E</i> , 2011, 84, 046108.	0.8	23
122	Clustering determines the dynamics of complex contagions in multiplex networks. <i>Physical Review E</i> , 2017, 95, 012312.	0.8	23
123	Virus spread versus contact tracing: Two competing contagion processes. <i>Physical Review Research</i> , 2021, 3, .	1.3	23
124	A framework for the construction of generative models for mesoscale structure in multilayer networks. <i>Physical Review Research</i> , 2020, 2, .	1.3	23
125	Local-Based Semantic Navigation on a Networked Representation of Information. <i>PLoS ONE</i> , 2012, 7, e43694.	1.1	23
126	Universal scaling in food-web structure?. <i>Nature</i> , 2005, 435, E3-E4.	13.7	22

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127	Effect of shortest path multiplicity on congestion of multiplex networks. <i>New Journal of Physics</i> , 2019, 21, 035003.	1.2	22
128	Impact of temporal scales and recurrent mobility patterns on the unfolding of epidemics. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2020, 2020, 024006.	0.9	22
129	Topological Traps Control Flow on Real Networks: The Case of Coordination Failures. <i>PLoS ONE</i> , 2010, 5, e15210.	1.1	22
130	Mesoscopic analysis of networks: Applications to exploratory analysis and data clustering. <i>Chaos</i> , 2011, 21, 016102.	1.0	21
131	Evaluating the impact of interdisciplinary research: A multilayer network approach. <i>Network Science</i> , 2017, 5, 235-246.	0.8	21
132	Atapuerca: evolution of scientific collaboration in an emergent large-scale research infrastructure. <i>Scientometrics</i> , 2014, 98, 1505-1520.	1.6	20
133	Enhancing the stability of the synchronization of multivariable coupled oscillators. <i>Physical Review E</i> , 2015, 92, 032804.	0.8	20
134	Layer-by-layer competition in multiplex complex networks. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20150117.	1.6	19
135	Mechanisms of synchronization and pattern formation in a lattice of pulse-coupled oscillators. <i>Physical Review E</i> , 1998, 57, 3820-3828.	0.8	18
136	Search and Congestion in Complex Networks. <i>Lecture Notes in Physics</i> , 2003, , 175-194.	0.3	18
137	Structural and functional networks in complex systems with delay. <i>Physical Review E</i> , 2011, 83, 056113.	0.8	18
138	Explainable, automated urban interventions to improve pedestrian and vehicle safety. <i>Transportation Research Part C: Emerging Technologies</i> , 2021, 125, 103018.	3.9	18
139	A Complex Network Approach to the Determination of Functional Groups in the Neural System of <i>C.Ælegans</i> . <i>Lecture Notes in Computer Science</i> , 2008, , 9-18.	1.0	18
140	Quantifying the diaspora of knowledge in the last century. <i>Applied Network Science</i> , 2016, 1, 15.	0.8	17
141	Interplay between cost and benefits triggers nontrivial vaccination uptake. <i>Physical Review E</i> , 2018, 97, 032308.	0.8	17
142	Pulsating campaigns of human prophylaxis driven by risk perception palliate oscillations of direct contact transmitted diseases. <i>Physical Review Research</i> , 2020, 2, .	1.3	17
143	On the short-time dynamics of networks of Hebbian coupled oscillators. <i>Journal of Physics A</i> , 1996, 29, L9-L16.	1.6	16
144	Modeling self-sustained activity cascades in socio-technical networks. <i>Europhysics Letters</i> , 2013, 104, 48004.	0.7	16

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145	Infectious disease dynamics in metapopulations with heterogeneous transmission and recurrent mobility. <i>New Journal of Physics</i> , 2021, 23, 073019.	1.2	16
146	Stability and robustness analysis of cooperation cycles driven by destructive agents in finite populations. <i>Physical Review E</i> , 2012, 86, 026105.	0.8	15
147	Assessing the risk of default propagation in interconnected sectoral financial networks. <i>EPJ Data Science</i> , 2019, 8, .	1.5	15
148	On the existence and scaling of structure functions in turbulence according to the data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 4352-4355.	3.3	14
149	Memory selection and information switching in oscillator networks with higher-order interactions. <i>Journal of Physics Complexity</i> , 2021, 2, 015003.	0.9	14
150	Spontaneous Functional Recovery after Focal Damage in Neuronal Cultures. <i>ENeuro</i> , 2020, 7, ENEURO.0254-19.2019.	0.9	13
151	Homophily impacts the success of vaccine roll-outs. <i>Communications Physics</i> , 2022, 5, .	2.0	13
152	IDENTIFICATION OF COHERENT STRUCTURES IN TURBULENT SHEAR FLOWS WITH A FUZZY ARTMAP NEURAL NETWORK. <i>International Journal of Neural Systems</i> , 1996, 07, 559-568.	3.2	12
153	Community connectivity and heterogeneity: clues and insights on cooperation on social networks. <i>Journal of Economic Interaction and Coordination</i> , 2008, 3, 183-199.	0.4	12
154	Phase clustering in complex networks of delay-coupled oscillators. <i>Chaos</i> , 2011, 21, 025111.	1.0	12
155	Extraction of structures from turbulent signals. <i>Advanced Engineering Informatics</i> , 1997, 11, 413-419.	0.5	11
156	Collective frequency variation in network synchronization and reverse PageRank. <i>Physical Review E</i> , 2016, 93, 042314.	0.8	11
157	Impact of origin-destination information in epidemic spreading. <i>Scientific Reports</i> , 2019, 9, 2315.	1.6	11
158	Homophily in the adoption of digital proximity tracing apps shapes the evolution of epidemics. <i>Physical Review Research</i> , 2021, 3, .	1.3	11
159	Phase Patterns of Coupled Oscillators with Application to Wireless Communication. <i>Lecture Notes in Computer Science</i> , 2008, , 184-191.	1.0	11
160	Optimal information transmission in organizations: search and congestion. <i>Review of Economic Design</i> , 2010, 14, 75-93.	0.2	10
161	Evolution of microscopic and mesoscopic synchronized patterns in complex networks. <i>Chaos</i> , 2011, 21, 016105.	1.0	10
162	Degree of intervality of food webs: From body-size data to models. <i>Journal of Theoretical Biology</i> , 2013, 334, 35-44.	0.8	10

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163	Erosion of synchronization: Coupling heterogeneity and network structure. <i>Physica D: Nonlinear Phenomena</i> , 2016, 323-324, 40-48.	1.3	10
164	Endemicity and prevalence of multipartite viruses under heterogeneous between-host transmission. <i>PLoS Computational Biology</i> , 2019, 15, e1006876.	1.5	10
165	Behavioural response to heterogeneous severity of COVID-19 explains temporal variation of cases among different age groups. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, 20210119.	1.6	10
166	Phase diagram of a planar XY model with random field. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 201, 614-625.	1.2	9
167	On controlling networks of limit-cycle oscillators. <i>Chaos</i> , 2016, 26, 094812.	1.0	9
168	Mapping individual behavior in financial markets: synchronization and anticipation. <i>EPJ Data Science</i> , 2019, 8, .	1.5	9
169	Modeling Epidemic Spreading in Complex Networks: Concurrency and Traffic. <i>Springer Optimization and Its Applications</i> , 2012, , 435-462.	0.6	9
170	Modeling Communicable Diseases, Human Mobility, and Epidemics: A Review. <i>Annalen Der Physik</i> , 2022, 534, .	0.9	9
171	TOPOLOGICAL VERSUS DYNAMICAL ROBUSTNESS IN A LEXICAL NETWORK. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250157.	0.7	8
172	Untangling the role of diverse social dimensions in the diffusion of microfinance. <i>Applied Network Science</i> , 2016, 1, 14.	0.8	8
173	Synchronization invariance under network structural transformations. <i>Physical Review E</i> , 2018, 97, 060301.	0.8	8
174	Stability of spatio-temporal structures in a lattice model of pulse-coupled oscillators. <i>Physica D: Nonlinear Phenomena</i> , 1997, 103, 419-429.	1.3	7
175	Information transfer in community structured multiplex networks. <i>Frontiers in Physics</i> , 2015, 3, .	1.0	7
176	Local Search with Congestion in Complex Communication Networks. <i>Lecture Notes in Computer Science</i> , 2004, , 1078-1085.	1.0	7
177	Symmetry-breaking mechanism for the formation of cluster chimera patterns. <i>Chaos</i> , 2022, 32, 013107.	1.0	7
178	Effect of random failures on traffic in complex networks. , 2007, , .		6
179	UNSUPERVISED CLUSTERING ANALYSIS: A MULTISCALE COMPLEX NETWORKS APPROACH. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1230023.	0.7	6
180	Structural Patterns in Complex Systems Using Multidendrograms. <i>Entropy</i> , 2013, 15, 5464-5474.	1.1	6

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181	EU cash goes to the sticky and attractive. <i>Nature</i> , 2016, 531, 580-580.	13.7	6
182	Geometric unfolding of synchronization dynamics on networks. <i>Chaos</i> , 2021, 31, 061105.	1.0	6
183	A model to study the scaling of traffic fluctuations on complex networks. <i>European Physical Journal: Special Topics</i> , 2007, 143, 253-255.	1.2	5
184	Fragility and anomalous susceptibility of weakly interacting networks. <i>Physical Review E</i> , 2019, 99, 042302.	0.8	5
185	Functional strengthening through synaptic scaling upon connectivity disruption in neuronal cultures. <i>Network Neuroscience</i> , 2020, 4, 1160-1180.	1.4	5
186	Modeling international crisis synchronization in the world trade web. <i>Networks and Heterogeneous Media</i> , 2012, 7, 385-397.	0.5	5
187	Optimal Information Transmission in Organizations: Search and Congestion. <i>SSRN Electronic Journal</i> , 2003, , .	0.4	4
188	Multiple structural transitions in interacting networks. <i>Physical Review E</i> , 2018, 98, 012302.	0.8	4
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