Marian Boguna

List of Publications by Citations

89 papers	7,184 citations	41 h-index	84 g-index
95 ext. papers	8,205 ext. citations	5.5 avg, IF	6.2 L-index

#	Paper	IF	Citations
89	Generation of uncorrelated random scale-free networks. *Physical Review E*, **2005**, 71, 027103	2.4	506
88	Models of social networks based on social distance attachment. *Physical Review E*, **2004**, 70, 056122	2.4	441
87	Extracting the multiscale backbone of complex weighted networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 6483-8	11.5	416
86	Hyperbolic geometry of complex networks. *Physical Review E*, **2010**, 82, 036106	2.4	402
85	Absence of epidemic threshold in scale-free networks with degree correlations. *Physical Review Letters*, **2003**, 90, 028701	7.4	379
84	Topology of the world trade web. *Physical Review E*, **2003**, 68, 015101	2.4	348
83	Epidemic spreading in correlated complex networks. *Physical Review E*, **2002**, 66, 047104	2.4	336
82	Popularity versus similarity in growing networks. *Nature*, **2012**, 489, 537-40	50.4	323
81	Navigability of complex networks. *Nature Physics*, **2009**, 5, 74-80	16.2	277
80	Class of correlated random networks with hidden variables. *Physical Review E*, **2003**, 68, 036112	2.4	272
79	Cut-offs and finite size effects in scale-free networks. *European Physical Journal B*, **2004**, 38, 205-209	1.2	244
78	Epidemic spreading on interconnected networks. *Physical Review E*, **2012**, 86, 026106	2.4	233
77	Sustaining the Internet with hyperbolic mapping. *Nature Communications*, **2010**, 1, 62	17.4	209
76	Nature of the epidemic threshold for the susceptible-infected-susceptible dynamics in networks. *Physical Review Letters*, **2013**, 111, 068701	7.4	182
75	Self-similarity of complex networks and hidden metric spaces. *Physical Review Letters*, **2008**, 100, 078701	7.4	157
74	Percolation and epidemic thresholds in clustered networks. *Physical Review Letters*, **2006**, 97, 088701	7.4	142
73	Patterns of dominant flows in the world trade web. *Journal of Economic Interaction and Coordination*, **2007**, 2, 111-124	1.1	126

72	Quantifying randomness in real networks. *Nature Communications*, **2015**, 6, 8627	17.4	98
71	Generalized percolation in random directed networks. *Physical Review E*, **2005**, 72, 016106	2.4	93
70	Network cosmology. *Scientific Reports*, **2012**, 2, 793	4.9	82
69	Tuning clustering in random networks with arbitrary degree distributions. *Physical Review E*, **2005**, 72, 036133	2.4	82
68	Clustering in complex networks. I. General formalism. *Physical Review E*, **2006**, 74, 056114	2.4	81
67	Langevin approach for the dynamics of the contact process on annealed scale-free networks. *Physical Review E*, **2009**, 79, 036110	2.4	80
66	Properties of resonant activation phenomena. *Physical Review E*, **1998**, 57, 3990-4002	2.4	78
65	Measuring the evolution of contemporary western popular music. *Scientific Reports*, **2012**, 2, 521	4.9	75
64	Hidden geometric correlations in real multiplex networks. *Nature Physics*, **2016**, 12, 1076-1081	16.2	73
63	Clustering in complex networks. II. Percolation properties. *Physical Review E*, **2006**, 74, 056115	2.4	68
62	Curvature and temperature of complex networks. *Physical Review E*, **2009**, 80, 035101	2.4	66
61	Diffusion-annihilation processes in complex networks. *Physical Review E*, **2005**, 71, 056104	2.4	65
60	Navigating ultrasmall worlds in ultrashort time. *Physical Review Letters*, **2009**, 102, 058701	7.4	64
59	Topology and correlations in structured scale-free networks. *Physical Review E*, **2003**, 67, 046111	2.4	61
58	Simulating non-Markovian stochastic processes. *Physical Review E*, **2014**, 90, 042108	2.4	59
57	Uncovering the hidden geometry behind metabolic networks. *Molecular BioSystems*, **2012**, 8, 843-50		56
56	Long-Tailed Trapping Times and L□y Flights in a Self-Organized Critical Granular System. *Physical Review Letters*, **1997**, 78, 4950-4953	7.4	52
55	Correlations in weighted networks. *Physical Review E*, **2006**, 74, 055101	2.4	51

54	Emergence of soft communities from geometric preferential attachment. *Scientific Reports*, **2015**, 5, 9421	4.9	50
53	Greedy Forwarding in Dynamic Scale-Free Networks Embedded in Hyperbolic Metric Spaces **2010**,		48
52	Double Percolation Phase Transition in Clustered Complex Networks. *Physical Review X*, **2014**, 4,	9.1	47
51	Deciphering the global organization of clustering in real complex networks. *Scientific Reports*, **2013**, 3, 2517	4.9	46
50	The geometric nature of weights in real complex networks. *Nature Communications*, **2017**, 8, 14103	17.4	44
49	Approximating PageRank from In-Degree. *Lecture Notes in Computer Science*, **2006**, 59-71	0.9	44
48	The hidden hyperbolic geometry of international trade: World Trade Atlas 1870-2013. *Scientific Reports*, **2016**, 6, 33441	4.9	36
47	Decoding the structure of the WWW. *ACM Transactions on the Web*, **2007**, 1, 10	3.2	36
46	Generalization of the persistent random walk to dimensions greater than 1. *Physical Review E*, **1998**, 58, 6992-6998	2.4	33
45	Equivalence between Non-Markovian and Markovian Dynamics in Epidemic Spreading Processes. *Physical Review Letters*, **2017**, 118, 128301	7.4	31
44	Multiscale unfolding of real networks by geometric renormalization. *Nature Physics*, **2018**, 14, 583-589	16.2	27
43	Percolation in self-similar networks. *Physical Review Letters*, **2011**, 106, 048701	7.4	27
42	Weighted Configuration Model. *AIP Conference Proceedings*, **2005**,	0	27
41	Competition and adaptation in an Internet evolution model. *Physical Review Letters*, **2005**, 94, 038701	7.4	27
40	Residence time densities for non-Markovian systems. (I). The two-state system. *Physica A: Statistical Mechanics and Its Applications*, **2000**, 282, 475-485	3.3	27
39	Geometric Correlations Mitigate the Extreme Vulnerability of Multiplex Networks against Targeted Attacks. *Physical Review Letters*, **2017**, 118, 218301	7.4	26
38	Persistent random walk model for transport through thin slabs. *Physical Review E*, **1999**, 59, 6517-26	2.4	23
37	Network geometry. *Nature Reviews Physics*, **2021**, 3, 114-135	23.6	22

36	Greedy forwarding in scale-free networks embedded in hyperbolic metric spaces. *Performance Evaluation Review*, **2009**, 37, 15-17	0.4	20
35	Clustering of random scale-free networks. *Physical Review E*, **2012**, 86, 026120	2.4	19
34	On Local Estimations of PageRank: A Mean Field Approach. *Internet Mathematics*, **2007**, 4, 245-266	0	19
33	Mercator: uncovering faithful hyperbolic embeddings of complex networks. *New Journal of Physics*, **2019**, 21, 123033	2.9	19
32	Evolution of the Digital Society Reveals Balance between Viral and Mass Media Influence. *Physical Review X*, **2014**, 4,	9.1	14
31	Competition between global and local online social networks. *Scientific Reports*, **2016**, 6, 25116	4.9	13
30	Modeling the Internet. *European Physical Journal B*, **2006**, 50, 249-254	1.2	13
29	Correlations in Complex Networks. *Complex Systems and Interdisciplinary Science*, **2007**, 35-65		11
28	Digital Ecology: Coexistence and Domination among Interacting Networks. *Scientific Reports*, **2015**, 5, 10268	4.9	10
27	Soft Communities in Similarity Space. *Journal of Statistical Physics*, **2018**, 173, 775-782	1.5	9
26	The interconnected wealth of nations: Shock propagation on global trade-investment multiplex networks. *Scientific Reports*, **2019**, 9, 13079	4.9	8
25	Lifespan method as a tool to study criticality in absorbing-state phase transitions. *Physical Review E*, **2015**, 91, 052117	2.4	8
24	Residence time densities for non-Markovian systems. (II). The N-state system. *Physica A: Statistical Mechanics and Its Applications*, **2000**, 282, 486-494	3.3	8
23	Small worlds and clustering in spatial networks. *Physical Review Research*, **2020**, 2,	3.9	8
22	Follow the leader: Herding behavior in heterogeneous populations. *Physical Review E*, **2015**, 91, 052804	2.4	7
21	Regulation of burstiness by network-driven activation. *Scientific Reports*, **2015**, 5, 9714	4.9	7
20	Escaping the avalanche collapse in self-similar multiplexes. *New Journal of Physics*, **2015**, 17, 053033	2.9	7
19	Complex architecture of primes and natural numbers. *Physical Review E*, **2014**, 90, 022806	2.4	7

18	Evaluation of rate constants for conformational transitions using single-molecule fluorescence spectroscopy. *Chemical Physics Letters*, **2001**, 336, 321-324	2.5	7
17	Memory-induced complex contagion in epidemic spreading. *New Journal of Physics*, **2019**, 21, 033034	2.9	5
16	Dynamical properties of the herding voter model with and without noise. *Physical Review E*, **2017**, 96, 012310	2.4	5
15	Conditional dynamics driving financial markets. *European Physical Journal B*, **2004**, 40, 347-352	1.2	5
14	Occupancy of a single site by many random walkers. *Physical Review E*, **2000**, 62, 3250-6	2.4	5
13	Rate Constants for Slow Conformational Transitions and Their Sampling Errors Using Single-Molecule Fluorescence Spectroscopy. *Journal of Physical Chemistry A*, **2001**, 105, 4898-4901	2.8	5
12	Cosmological networks. *New Journal of Physics*, **2014**, 16, 093031	2.9	4
11	Scaling up real networks by geometric branching growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
10	The asymptotic form of the probability density of sojourn times in randomly changing multistate systems. *Physica A: Statistical Mechanics and Its Applications*, **2000**, 284, 13-22	3.3	3
9	Continued fraction solution for the radiative transfer equation in three dimensions. *Physical Review E*, **2000**, 61, 6248-54	2.4	3
8	Rate Constants from Uncorrelated Single-Molecule Data. *Journal of Physical Chemistry B*, **2001**, 105, 6246-6250	3.4	3
7	Quantifying Human Engagement into Playful Activities. *Scientific Reports*, **2020**, 10, 4145	4.9	2
6	Reply to Slater: Extracting the backbone of multiscale networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, E67-E67	11.5	2
5	A model for noise effects on fibre tract trajectories in diffusion tensor imaging: theory and simulations. *New Journal of Physics*, **2005**, 7, 24-24	2.9	2
4	A discrete formulation of the theory of sojourn times in a two-state system. *Physica A: Statistical Mechanics and Its Applications*, **2001**, 289, 307-320	3.3	2
3	Isotropization time for non-Markovian CTRWs. *Physica A: Statistical Mechanics and Its Applications*, **1996**, 230, 149-155	3.3	2
2	Reaction-diffusion Processes in Scale-free Networks. *Bolyai Society Mathematical Studies*, **2008**, 203-237	0.4	2
1	M. Franceschetti, R. Meester: Random Networks for Communication. From Statistical Physics to Information Systems. *Journal of Statistical Physics*, **2009**, 135, 585-586	1.5	0