Francesc Comellas

List of Publications by Year
in descending order

52 papers	1,708 citations	331538 21 h-index	289141 40 g-index
53 all docs	53 docs citations	53 times ranked	1216 citing authors

#	Article	IF	Citations
1	Distributed Loop Computer-Networks: A Survey. Journal of Parallel and Distributed Computing, 1995, 24, 2-10.	2.7	318
2	Deterministic small-world communication networks. Information Processing Letters, 2000, 76, 83-90.	0.4	118
3	Oxidative Stress Is a Central Target for Physical Exercise Neuroprotection Against Pathological Brain Aging. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 40-49.	1.7	106
4	Recursive graphs with small-world scale-free properties. Physical Review E, 2004, 69, 037104.	0.8	88
5	Deterministic small-world networks. Physica A: Statistical Mechanics and Its Applications, 2002, 309, 231-235.	1.2	73
6	High-dimensional Apollonian networks. Journal of Physics A, 2006, 39, 1811-1818.	1.6	72
7	Quantum Google in a Complex Network. Scientific Reports, 2013, 3, 2773.	1.6	68
8	The hierarchical product of graphs. Discrete Applied Mathematics, 2009, 157, 36-48.	0.5	66
9	On the spectrum of the normalized Laplacian of iterated triangulations of graphs. Applied Mathematics and Computation, 2016, 273, 1123-1129.	1.4	64
10	High-dimensional random Apollonian networks. Physica A: Statistical Mechanics and Its Applications, 2006, 364, 610-618.	1.2	63
11	Synchronizability of complex networks. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 4483-4492.	0.7	47
12	The number of spanning trees in Apollonian networks. Discrete Applied Mathematics, 2014, 169, 206-213.	0.5	47
13	Farey graphs as models for complex networks. Theoretical Computer Science, 2011, 412, 865-875.	0.5	45
14	Evolving small-world networks with geographical attachment preference. Journal of Physics A, 2006, 39, 3253-3261.	1.6	42
15	The normalized Laplacian spectrum of subdivisions of a graph. Applied Mathematics and Computation, 2016, 286, 250-256.	1.4	41
16	Mean first-passage time for random walks on generalized deterministic recursive trees. Physical Review E, 2010, 81, 061103.	0.8	40
17	Fractality and the small-world effect in Sierpinski graphs. Journal of Physics A, 2006, 39, 11739-11753.	1.6	29
18	Spectral bounds for the betweenness of a graph. Linear Algebra and Its Applications, 2007, 423, 74-80.	0.4	25

#	Article	IF	Citations
19	Spectral reconstruction of complex networks. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 6436-6442.	1.2	25
20	The number of spanning trees of an infinite family of outerplanar, small-world and self-similar graphs. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 2803-2806.	1.2	25
21	Modeling complex networks with self-similar outerplanar unclustered graphs. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2227-2233.	1.2	24
22	Proteomic study of neuron and astrocyte cultures from senescence€accelerated mouse SAMP8 reveals degenerative changes. Journal of Neurochemistry, 2009, 111, 945-955.	2.1	24
23	Vertex-symmetric digraphs with small diameter. Discrete Applied Mathematics, 1995, 58, 1-11.	0.5	22
24	Biological Convergence of Cancer Signatures. PLoS ONE, 2009, 4, e4544.	1.1	20
25	A multiagent system for frequency assignment in cellular radio networks. IEEE Transactions on Vehicular Technology, 2000, 49, 1558-1565.	3.9	18
26	The number and degree distribution of spanning trees in the Tower of Hanoi graph. Theoretical Computer Science, 2016, 609, 443-455.	0.5	18
27	Planar unclustered scale-free graphs as models for technological and biological networks. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 1955-1964.	1.2	16
28	Proinsulin protects against age-related cognitive loss through anti-inflammatory convergent pathways. Neuropharmacology, 2017, 123, 221-232.	2.0	14
29	The spectra of wrapped butterfly digraphs. Networks, 2003, 42, 15-19.	1.6	11
30	Synchronous and asynchronous recursive random scale-free nets. Physical Review E, 2005, 72, 046142.	0.8	11
31	On the hierarchical product of graphs and the generalized binomial tree. Linear and Multilinear Algebra, 2009, 57, 695-712.	0.5	11
32	Weakly distance-regular digraphs. Journal of Combinatorial Theory Series B, 2004, 90, 233-255.	0.6	10
33	On the spectra of hypertrees. Linear Algebra and Its Applications, 2008, 428, 1499-1510.	0.4	10
34	Vertex labeling and routing in self-similar outerplanar unclustered graphs modeling complex networks. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 425001.	0.7	10
35	Cancer develops, progresses and responds to therapies through restricted perturbation of the protein€"protein interaction network. Integrative Biology (United Kingdom), 2012, 4, 1038.	0.6	10
36	A Multiagent Algorithm for Graph Partitioning. Lecture Notes in Computer Science, 2006, , 279-285.	1.0	9

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37	Label-based routing for a family of scale-free, modular, planar and unclustered graphs. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 205102.	0.7	8
38	A star-based model for the eigenvalue power law of Internet graphs. Physica A: Statistical Mechanics and Its Applications, 2005, 351, 680-686.	1.2	7
39	The spectra of Manhattan street networks. Linear Algebra and Its Applications, 2008, 429, 1823-1839.	0.4	7
40	Multidimensional Manhattan Street Networks. SIAM Journal on Discrete Mathematics, 2008, 22, 1428-1447.	0.4	7
41	Reconstruction of Networks from Their Betweenness Centrality. Lecture Notes in Computer Science, 2008, , 31-37.	1.0	7
42	Vertex labeling and routing in expanded Apollonian networks. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 035004.	0.7	6
43	Self-similar non-clustered planar graphs as models for complex networks. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 045103.	0.7	6
44	A fast and efficient algorithm to identify clusters in networks. Applied Mathematics and Computation, 2010, 217, 2007-2014.	1.4	6
45	Broadcasting in cycle prefix digraphs. Discrete Applied Mathematics, 1998, 83, 31-39.	0.5	3
46	Broadcasting in generalized chordal rings. Networks, 2003, 42, 123-134.	1.6	3
47	The Spectra of Cycle Prefix Digraphs. SIAM Journal on Discrete Mathematics, 2003, 16, 418-421.	0.4	3
48	Angels & Mortals: A New Combinatorial Optimization Algorithm. , 2005, , 397-405.		3
49	On the weak distance-regularity of Moore-type digraphs. Linear and Multilinear Algebra, 2006, 54, 265-284.	0.5	1
50	The Manhattan product of digraphs. Electronic Journal of Graph Theory and Applications, 2013, 1, 11-27.	0.2	1
51	Exact Solutions for Minimax Optimization Problems. American Mathematical Monthly, 2005, 112, 454.	0.2	0
52	Using Genetic Programming to Design Broadcasting Algorithms for Manhattan Street Networks. Lecture Notes in Computer Science, 2004, , 170-177.	1.0	0