Regino Criado

List of Publications by Year
in descending order

64 papers	3,594 citations	471061 17 h-index	138251 58 g-index
70 all docs	70 docs citations	70 times ranked	3136 citing authors

#	Article	IF	Citations
1	The structure and dynamics of multilayer networks. Physics Reports, 2014, 544, 1-122.	10.3	2,469
2	Eigenvector centrality of nodes in multiplex networks. Chaos, 2013, 23, 033131.	1.0	207
3	Evolutionary games defined at the network mesoscale: The Public Goods game. Chaos, 2011, 21, 016113.	1.0	105
4	Multiscale vulnerability of complex networks. Chaos, 2007, 17, 043110.	1.0	62
5	Controlling centrality in complex networks. Scientific Reports, 2012, 2, 218.	1.6	60
6	A mathematical model for networks with structures in the mesoscale. International Journal of Computer Mathematics, 2012, 89, 291-309.	1.0	47
7	A biplex approach to PageRank centrality: From classic to multiplex networks. Chaos, 2016, 26, 065301.	1.0	44
8	Effective measurement of network vulnerability under random and intentional attacks. Mathematical Modelling and Algorithms, 2005, 4, 307-316.	0.5	43
9	Credit Card Fraud Detection through Parenclitic Network Analysis. Complexity, 2018, 2018, 1-9.	0.9	38
10	EFFICIENCY, VULNERABILITY AND COST: AN OVERVIEW WITH APPLICATIONS TO SUBWAY NETWORKS WORLDWIDE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 2289-2301.	0.7	36
11	HYPERSTRUCTURES, A NEW APPROACH TO COMPLEX SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 877-883.	0.7	34
12	New results on computable efficiency and its stability for complex networks. Journal of Computational and Applied Mathematics, 2006, 192, 59-74.	1.1	30
13	A new method for comparing rankings through complex networks: Model and analysis of competitiveness of major European soccer leagues. Chaos, 2013, 23, 043114.	1.0	29
14	Introduction to Focus Issue: Mesoscales in Complex Networks. Chaos, 2011, 21, 016101.	1.0	24
15	On the stability of exponential fitting BDF algorithms. Journal of Computational and Applied Mathematics, 2005, 175, 183-194.	1.1	23
16	Centralities of a network and its line graph: an analytical comparison by means of their irregularity. International Journal of Computer Mathematics, 2014, 91, 304-314.	1.0	22
17	Analytical relationships between metric and centrality measures of a network and its dual. Journal of Computational and Applied Mathematics, 2011, 235, 1775-1780.	1.1	20
18	Choosing a leader on a complex network. Journal of Computational and Applied Mathematics, 2007, 204, 10-17.	1.1	17

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19	Synchronization in dynamical networks with unconstrained structure switching. Physical Review E, 2015, 92, 062819.	0.8	16
20	A Perronâ€“Frobenius theory for block matrices associated to a multiplex network. Chaos, Solitons and Fractals, 2015, 72, 77-89.	2.5	16
21	Efficient algorithms for estimating loss of information in a complex network: Applications to intentional risk analysis. Networks and Heterogeneous Media, 2015, 10, 195-208.	0.5	16
22	A generator of pseudo-random numbers sequences with a very long period. Mathematical and Computer Modelling, 2005, 42, 809-816.	2.0	15
23	Structural Vulnerability and Robustness in Complex Networks: Different Approaches and Relationships Between them. Springer Optimization and Its Applications, 2012, , 3-36.	0.6	15
24	Non-backtracking PageRank: From the classic model to hashimoto matrices. Chaos, Solitons and Fractals, 2019, 126, 283-291.	2.5	15
25	A new approach to combine multiplex networks and time series attributes: Building intrusion detection systems (IDS) in cybersecurity. Chaos, Solitons and Fractals, 2021, 150, 111143.	2.5	15
26	Intentional Risk Management through Complex Networks Analysis. SpringerBriefs in Optimization, 2015, , .	0.3	12
27	Sharp estimates for the personalized Multiplex PageRank. Journal of Computational and Applied Mathematics, 2018, 330, 1030-1040.	1.1	12
28	Line graphs for a multiplex network. Chaos, 2016, 26, 065309.	1.0	10
29	Interest point detection in images using complex network analysis. Journal of Computational and Applied Mathematics, 2012, 236, 2975-2980.	1.1	9
30	VULNERABILITY AND FALL OF EFFICIENCY IN COMPLEX NETWORKS: A NEW APPROACH WITH COMPUTATIONAL ADVANTAGES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 727-735.	0.7	8
31	A NODE-BASED MULTISCALE VULNERABILITY OF COMPLEX NETWORKS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 703-710.	0.7	8
32	A POST-PROCESSING METHOD FOR INTEREST POINT LOCATION IN IMAGES BY USING WEIGHTED LINE-GRAPH COMPLEX NETWORKS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250163.	0.7	8
33	The topology of card transaction money flows. Physica A: Statistical Mechanics and Its Applications, 2016, 462, 134-140.	1.2	8
34	On the edgesâ€™ PageRank and line graphs. Chaos, 2018, 28, 075503.	1.0	8
35	Identity and Access Management Resilience against Intentional Risk for Blockchain-Based IOT Platforms. Electronics (Switzerland), 2021, 10, 378.	1.8	7
36	Visibility Graph Analysis of IOTA and IoTeX Price Series: An Intentional Risk-Based Strategy to Use 5G for IoT. Electronics (Switzerland), 2021, 10, 2282.	1.8	7

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37	Structural properties of the line-graphs associated to directed networks. Networks and Heterogeneous Media, 2012, 7, 373-384.	0.5	7
38	Jordan Normal Form via Elementary Transformations. SIAM Review, 1998, 40, 947-956.	4.2	5
39	Mathematical modeling and computational methods. Journal of Computational and Applied Mathematics, 2016, 291, 1-4.	1.1	5
40	On graphs associated to sets of rankings. Journal of Computational and Applied Mathematics, 2016, 291, 497-508.	1.1	5
41	Asymptotic estimates for efficiency, vulnerability and cost for random networks. Journal of Computational and Applied Mathematics, 2007, 204, 166-171.	1.1	4
42	Improvements in performance and security for complex networks. International Journal of Computer Mathematics, 2009, 86, 209-218.	1.0	4
43	Editorial on â€œMultiplex networks: Structure, dynamics and applicationsâ€• Chaos, Solitons and Fractals, 2015, 72, 1-3.	2.5	4
44	On PageRank versatility for multiplex networks: properties and some useful bounds. Mathematical Methods in the Applied Sciences, 2020, 43, 8158-8176.	1.2	4
45	Enriched line graph: A new structure for searching language collocations. Chaos, Solitons and Fractals, 2021, 142, 110509.	2.5	4
46	SYNTACTIC ELEMENTS OF DECLARATIVE PROGRAMMING: SYMBOLIC LINEAR EQUATIONS. Fundamenta Informaticae, 1996, 25, 39-48.	0.3	3
47	Unification: Nothing but the Solution of a System of Linear Equations. Fundamenta Informaticae, 1997, 32, 267-280.	0.3	3
48	Optimal communication schemes in a complex network: From trees to bottleneck networks. European Physical Journal: Special Topics, 2007, 146, 145-154.	1.2	3
49	(Ï^,p,q)-vulnerabilities: A unified approach to network robustness. Chaos, 2009, 19, 013133.	1.0	3
50	Mathematical Foundations: Complex Networks and Graphs (A Review). SpringerBriefs in Optimization, 2015, , 9-36.	0.3	3
51	Introduction to Focus Issue: Complex Dynamics in Networks, Multilayered Structures and Systems. Chaos, 2016, 26, 065101.	1.0	3
52	Comparing series of rankings with ties by using complex networks: An analysis of the Spanish stock market (IBEX-35 index). Networks and Heterogeneous Media, 2015, 10, 101-125.	0.5	3
53	Probabilistic analysis of efficiency and vulnerability in the ErdÃ¶sâ€“RÃ©nji model. International Journal of Computer Mathematics, 2008, 85, 411-419.	1.0	2
54	On the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e140" altimg="si5.gif"><mml:mi>Î±</mml:mi></mml:math>-nonbacktracking centrality for complex networks: Existence and limit cases. Journal of Computational and Applied Mathematics, 2019, 350, 35-45.	1.1	2

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55	Modeling Bitcoin plus Ethereum as an Open System of Systems of Public Blockchains to Improve Their Resilience against Intentional Risk. Electronics (Switzerland), 2022, 11, 241.	1.8	2
56	On the spectrum of two-layer approach and Multiplex PageRank. Journal of Computational and Applied Mathematics, 2018, 344, 161-172.	1.1	1
57	Random Walkers. SpringerBriefs in Optimization, 2015, , 37-51.	0.3	0
58	Preface: Mesoscales and evolution in complex networks: Applications and related topics. Networks and Heterogeneous Media, 2012, 7, i-iii.	0.5	0
59	Towards the Implementation of the Model. SpringerBriefs in Optimization, 2015, , 103-120.	0.3	0
60	Intentional Risk and Cyber-Security: A Motivating Introduction. SpringerBriefs in Optimization, 2015, , 1-8.	0.3	0
61	The Role of Accessibility in the Static and Dynamic Risk Computation. SpringerBriefs in Optimization, 2015, , 53-63.	0.3	0
62	Mathematical Model II: Dynamic Intentional Risk. SpringerBriefs in Optimization, 2015, , 99-102.	0.3	0
63	Mathematical Model I: Static Intentional Risk. SpringerBriefs in Optimization, 2015, , 65-98.	0.3	0
64	Preface: "New trends, models and applications in complex and multiplex networks". Networks and Heterogeneous Media, 2015, 10, .	0.5	0