Francisco A Rodrigues

List of Publications by Citations

Source: https://exaly.com/author-pdf/2464166/francisco-a-rodrigues-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

110
4,383
25
h-index

122
ext. papers

4,383
25
h-index

5,320
ext. citations

4.2
avg, IF

L-index

#	Paper	IF	Citations
110	Characterization of complex networks: A survey of measurements. <i>Advances in Physics</i> , 2007 , 56, 167-2	42 8.4	1428
109	The Kuramoto model in complex networks. <i>Physics Reports</i> , 2016 , 610, 1-98	27.7	430
108	Analyzing and modeling real-world phenomena with complex networks: a survey of applications. <i>Advances in Physics</i> , 2011 , 60, 329-412	18.4	422
107	Clustering algorithms: A comparative approach. <i>PLoS ONE</i> , 2019 , 14, e0210236	3.7	149
106	A systematic comparison of supervised classifiers. <i>PLoS ONE</i> , 2014 , 9, e94137	3.7	119
105	Cluster explosive synchronization in complex networks. <i>Physical Review Letters</i> , 2013 , 110, 218701	7.4	115
104	Role of centrality for the identification of influential spreaders in complex networks. <i>Physical Review E</i> , 2014 , 90, 032812	2.4	91
103	Fundamentals of spreading processes in single and multilayer complex networks. <i>Physics Reports</i> , 2018 , 756, 1-59	27.7	91
102	Keystone species in seed dispersal networks are mainly determined by dietary specialization. <i>Oikos</i> , 2015 , 124, 1031-1039	4	79
101	Explosive synchronization enhanced by time-delayed coupling. <i>Physical Review E</i> , 2012 , 86, 016102	2.4	65
100	Crime prediction through urban metrics and statistical learning. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018 , 505, 435-443	3.3	54
99	Community structure and dynamics in climate networks. Climate Dynamics, 2011, 37, 933-940	4.2	53
98	Complex networks: the key to systems biology. <i>Genetics and Molecular Biology</i> , 2008 , 31, 591-601	2	53
97	The structure and resilience of financial market networks. <i>Chaos</i> , 2012 , 22, 013117	3.3	46
96	Determination of the critical coupling of explosive synchronization transitions in scale-free networks by mean-field approximations. <i>Physical Review E</i> , 2012 , 86, 056108	2.4	46
95	Network Centrality: An Introduction. Advances in Dynamics, Patterns, Cognition, 2019, 177-196	0.7	42
94	Disease Localization in Multilayer Networks. <i>Physical Review X</i> , 2017 , 7,	9.1	41

(2020-2011)

93	An entropy-based approach to automatic image segmentation of satellite images. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2011 , 390, 512-518	3.3	41
92	A survey on symbolic data-based music genre classification. <i>Expert Systems With Applications</i> , 2016 , 60, 190-210	7.8	38
91	Entropy of weighted recurrence plots. <i>Physical Review E</i> , 2014 , 90, 042919	2.4	36
90	Collective behavior in financial markets. <i>Europhysics Letters</i> , 2011 , 96, 48004	1.6	36
89	Quantifying the interdisciplinarity of scientific journals and fields. <i>Journal of Informetrics</i> , 2013 , 7, 469-4	17371	35
88	Estimating complex cortical networks via surface recordings- a critical note. <i>NeuroImage</i> , 2010 , 53, 439-	- 49 .9	31
87	Universality in the spectral and eigenfunction properties of random networks. <i>Physical Review E</i> , 2015 , 91, 032122	2.4	27
86	Effects of assortative mixing in the second-order Kuramoto model. <i>Physical Review E</i> , 2015 , 91, 052805	2.4	26
85	Analysis of cluster explosive synchronization in complex networks. <i>Physical Review E</i> , 2014 , 90, 062810	2.4	25
84	SURVIVING OPINIONS IN SZNAJD MODELS ON COMPLEX NETWORKS. <i>International Journal of Modern Physics C</i> , 2005 , 16, 1785-1792	1.1	25
83	Thermodynamic characterization of networks using graph polynomials. <i>Physical Review E</i> , 2015 , 92, 032	.8 <u>1</u> .0	24
82	Multiple pathways analysis of brain functional networks from EEG signals: an application to real data. <i>Brain Topography</i> , 2011 , 23, 344-54	4.3	23
81	Multiplex Networks. SpringerBriefs in Complexity, 2018,	0.3	23
80	Collective dynamics in two populations of noisy oscillators with asymmetric interactions. <i>Physical Review E</i> , 2015 , 91, 062910	2.4	22
79	Insights into the assembly rules of a continent-wide multilayer network. <i>Nature Ecology and Evolution</i> , 2019 , 3, 1525-1532	12.3	22
78	The nested structural organization of the worldwide trade multi-layer network. <i>Scientific Reports</i> , 2019 , 9, 2866	4.9	21
77	Exploration of the antiplatelet activity profile of betulinic acid on human platelets. <i>Journal of Agricultural and Food Chemistry</i> , 2012 , 60, 6977-83	5.7	21
76	Complex systems: Features, similarity and connectivity. <i>Physics Reports</i> , 2020 , 861, 1-41	27.7	21

75	Low-dimensional behavior of Kuramoto model with inertia in complex networks. <i>Scientific Reports</i> , 2014 , 4, 4783	4.9	20
74	On degreeflegree correlations in multilayer networks. <i>Physica D: Nonlinear Phenomena</i> , 2016 , 323-324, 5-11	3.3	19
73	Multilayer Networks: Metrics and Spectral Properties. <i>Understanding Complex Systems</i> , 2016 , 17-35	0.4	19
72	Rumor propagation with heterogeneous transmission in social networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2017 , 2017, 023401	1.9	18
71	Epidemic spreading with awareness and different timescales in multiplex networks. <i>Physical Review E</i> , 2019 , 100, 032313	2.4	18
70	Unfolding the Complexity of the Global Value Chain: Strength and Entropy in the Single-Layer, Multiplex, and Multi-Layer International Trade Networks. <i>Entropy</i> , 2018 , 20,	2.8	18
69	A general Markov chain approach for disease and rumour spreading in complex networks. <i>Journal of Complex Networks</i> , 2018 , 6, 215-242	1.7	17
68	Beyond the average: Detecting global singular nodes from local features in complex networks. <i>Europhysics Letters</i> , 2009 , 87, 18008	1.6	17
67	Impact of the distribution of recovery rates on disease spreading in complex networks. <i>Physical Review Research</i> , 2020 , 2,	3.9	17
66	Scaling properties of multilayer random networks. <i>Physical Review E</i> , 2017 , 96, 012307	2.4	16
65	Seeking for simplicity in complex networks. <i>Europhysics Letters</i> , 2009 , 85, 48001	1.6	16
64	A complex networks approach for data clustering. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012 , 391, 6174-6183	3.3	15
63	Influence maximization by rumor spreading on correlated networks through community identification. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020 , 83, 105094	3.7	14
62	Influence of network topology on cooperative problem-solving systems. <i>Theory in Biosciences</i> , 2016 , 135, 101-10	1.3	13
61	A pattern recognition approach to complex networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2010 , 2010, P11015	1.9	13
60	Modeling worldwide highway networks. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009 , 374, 22-27	2.3	13
59	Chain motifs: the tails and handles of complex networks. <i>Physical Review E</i> , 2008 , 77, 026106	2.4	13
58	Automatic network fingerprinting through single-node motifs. <i>PLoS ONE</i> , 2011 , 6, e15765	3.7	13

Correlations between climate network and relief data. Nonlinear Processes in Geophysics, 2014, 21, 1127-21.632 11 57 Protein lethality investigated in terms of long range dynamical interactions. *Molecular BioSystems*, 56 11 **2009**, 5, 385-90 Synchronization in clustered random networks. Physical Review E, 2013, 87, 55 2.4 10 Segmentation of large images based on super-pixels and community detection in graphs. IET Image 1.7 10 54 Processing, 2017, 11, 1219-1228 Tweaking synchronization by connectivity modifications. Physical Review E, 2016, 93, 062211 53 2.4 9 Centrality in earthquake multiplex networks. Chaos, 2018, 28, 063113 52 3.3 9 Cooperative behavior between oscillatory and excitable units: the peculiar role of positive 51 1.2 9 coupling-frequency correlations. European Physical Journal B, 2014, 87, 1 Structure and dynamics of functional networks in child-onset schizophrenia. Clinical 50 9 4.3 Neurophysiology, **2014**, 125, 1589-95 Resilience of protein-protein interaction networks as determined by their large-scale topological 9 49 features. Molecular BioSystems, 2011, 7, 1263-9 48 Border trees of complex networks. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 224005 2 9 The role of community structure on the nature of explosive synchronization. Chaos, 2018, 28, 033102 8 47 46 Protein domain connectivity and essentiality. Applied Physics Letters, 2006, 89, 174101 8 3.4 High prevalence regimes in the pair-quenched mean-field theory for the 8 45 2.4 susceptible-infected-susceptible model on networks. Physical Review E, 2020, 102, 012313 Onset of synchronization of Kuramoto oscillators in scale-free networks. Physical Review E, 2019, 44 2.4 100,042302 Mobility helps problem-solving systems to avoid groupthink. Physical Review E, 2019, 99, 032301 43 2.4 7 42 Spectra of random networks in the weak clustering regime. Europhysics Letters, 2018, 121, 68001 1.6 Diluted banded random matrices: scaling behavior of eigenfunction and spectral properties. 41 2 7 Journal of Physics A: Mathematical and Theoretical, 2017, 50, 495205 A structure-dynamic approach to cortical organization: number of paths and accessibility. Journal of 40 *Neuroscience Methods*, **2009**, 183, 57-62

39	A polynomial eigenvalue approach for multiplex networks. New Journal of Physics, 2018, 20, 095004	2.9	7
38	Multifractality in random networks with power-law decaying bond strengths. <i>Physical Review E</i> , 2019 , 99, 042303	2.4	6
37	Concentric network symmetry. <i>Information Sciences</i> , 2016 , 333, 61-80	7.7	6
36	A process of rumour scotching on finite populations. <i>Royal Society Open Science</i> , 2015 , 2, 150240	3.3	6
35	Segmentation of Large Images with Complex Networks 2012 ,		6
34	Generalized connectivity between any two nodes in a complex network. <i>Physical Review E</i> , 2010 , 81, 03	61.143	6
33	Sensitivity of complex networks measurements. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2010 , 2010, P03009	1.9	6
32	FAST COMMUNITY IDENTIFICATION BY HIERARCHICAL GROWTH. <i>International Journal of Modern Physics C</i> , 2007 , 18, 937-947	1.1	6
31	Analyzing trails in complex networks. <i>Physical Review E</i> , 2007 , 76, 046106	2.4	6
30	Disease and information spreading at different speeds in multiplex networks. <i>Physical Review E</i> , 2020 , 102, 022312	2.4	6
29	The Impact of Social Curiosity on Information Spreading on Networks 2017,		5
28	Signal propagation in cortical networks: a digital signal processing approach. <i>Frontiers in Neuroinformatics</i> , 2009 , 3, 24	3.9	5
27	Modeling connectivity in terms of network activity. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009 , 2009, L09005	1.9	4
26	A generalized approach to the modeling of the species-area relationship. <i>PLoS ONE</i> , 2014 , 9, e105132	3.7	4
25	Centrality anomalies in complex networks as a result of model over-simplification. <i>New Journal of Physics</i> , 2020 , 22, 013043	2.9	4
24	Topological versus spectral properties of random geometric graphs. <i>Physical Review E</i> , 2020 , 102, 0423	06.4	4
23	Spacing ratio characterization of the spectra of directed random networks. <i>Physical Review E</i> , 2020 , 102, 062305	2.4	4
22	Layer degradation triggers an abrupt structural transition in multiplex networks. <i>Physical Review E</i> , 2019 , 100, 012313	2.4	3

21	Collective dynamics of random Janus oscillator networks. <i>Physical Review Research</i> , 2020 , 2,	3.9	3
20	The drivers of systemic risk in financial networks: a data-driven machine learning analysis. <i>Chaos, Solitons and Fractals,</i> 2021 , 153, 111588	9.3	3
19	Comparison of the interactomic networks of different species in terms of accessibility. <i>Molecular BioSystems</i> , 2010 , 6, 234-40		2
18	Modeling Highway Networks with Path-Geographical Transformations. <i>Studies in Computational Intelligence</i> , 2009 , 115-126	0.8	2
17	Insights on the assembly rules of a continent-wide multilayer network		2
16	Role of time scale in the spreading of asymmetrically interacting diseases. <i>Physical Review Research</i> , 2021 , 3,	3.9	2
15	Traveling phase waves in asymmetric networks of noisy chaotic attractors. <i>Physical Review E</i> , 2016 , 94, 042210	2.4	1
14	The impact of information spreading on disease dynamics: Comment on "Coupled disease-behavior on complex networks: A review" by Z. Wang et al. <i>Physics of Life Reviews</i> , 2015 , 15, 37-8	2.1	1
13	The Influence of Network Properties on the Synchronization of Kuramoto Oscillators Quantified by a Bayesian Regression Analysis. <i>Journal of Statistical Physics</i> , 2013 , 152, 519-533	1.5	1
12	MODELING THE EVOLUTION OF COMPLEX NETWORKS THROUGH THE PATH-STAR TRANSFORMATION AND OPTIMAL MULTIVARIATE METHODS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 795-804	2	1
11	Multiscale Curvature Analysis of Asphaltic Aggregate Particles. <i>Journal of Computing in Civil Engineering</i> , 2010 , 24, 506-513	5	1
10	Power laws in the Roman Empire: a survival analysis. <i>Royal Society Open Science</i> , 2021 , 8, 210850	3.3	1
9	Evolving climate network perspectives on global surface air temperature effects of ENSO and strong volcanic eruptions. <i>European Physical Journal: Special Topics</i> , 2021 , 230, 3075	2.3	1
8	Epidemic spreading in populations of mobile agents with adaptive behavioral response. <i>Chaos, Solitons and Fractals,</i> 2022 , 156, 111849	9.3	1
7	Comparison of Different Spike Train Synchrony Measures Regarding Their Robustness to Erroneous Data From Bicuculline-Induced Epileptiform Activity. <i>Neural Computation</i> , 2020 , 32, 887-911	2.9	О
6	NeoBat Interactions: A data set of bat-plant interactions in the Neotropics <i>Ecology</i> , 2022 , e3640	4.6	O
5	Universality of eigenvector delocalization and the nature of the SIS phase transition in multiplex networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2020 , 2020, 103405	1.9	О
4	Nonuniform random graphs on the plane: A scaling study <i>Physical Review E</i> , 2022 , 105, 034304	2.4	O

3	Supervised Classification of Basaltic Aggregate Particles Based on Texture Properties. <i>Journal of Computing in Civil Engineering</i> , 2013 , 27, 177-182	5
2	Modelos de machine learning para predi l i do sucesso de startups. <i>Revista De Gest</i> l i <i>E Projetos</i> , 2021 , 12, 28-55	1.5
1	Complex Networks to Differentiate Elderly and Young People. <i>Communications in Computer and Information Science</i> , 2021 , 435-444	0.3