

Juan G Restrepo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3671809/publications.pdf>

Version: 2024-02-01

58
papers

2,678
citations

218677

26
h-index

189892

50
g-index

60
all docs

60
docs citations

60
times ranked

2094
citing authors

#	ARTICLE	IF	CITATIONS
1	A Rabbit Ventricular Action Potential Model Replicating Cardiac Dynamics at Rapid Heart Rates. <i>Biophysical Journal</i> , 2008, 94, 392-410.	0.5	370
2	Onset of synchronization in large networks of coupled oscillators. <i>Physical Review E</i> , 2005, 71, 036151.	2.1	248
3	Characterizing the Dynamical Importance of Network Nodes and Links. <i>Physical Review Letters</i> , 2006, 97, 094102.	7.8	199
4	Predicting Criticality and Dynamic Range in Complex Networks: Effects of Topology. <i>Physical Review Letters</i> , 2011, 106, 058101.	7.8	158
5	Calsequestrin-Mediated Mechanism for Cellular Calcium Transient Alternans. <i>Biophysical Journal</i> , 2008, 95, 3767-3789.	0.5	143
6	Approximating the largest eigenvalue of network adjacency matrices. <i>Physical Review E</i> , 2007, 76, 056119.	2.1	113
7	Synchronization in large directed networks of coupled phase oscillators. <i>Chaos</i> , 2006, 16, 015107.	2.5	85
8	The effect of heterogeneity on hypergraph contagion models. <i>Chaos</i> , 2020, 30, 103117.	2.5	84
9	Cluster synchrony in systems of coupled phase oscillators with higher-order coupling. <i>Physical Review E</i> , 2011, 84, 036208.	2.1	70
10	Inhibition Causes Ceaseless Dynamics in Networks of Excitable Nodes. <i>Physical Review Letters</i> , 2014, 112, 138103.	7.8	67
11	Hierarchical synchrony of phase oscillators in modular networks. <i>Physical Review E</i> , 2012, 85, 016208.	2.1	65
12	Higher-order simplicial synchronization of coupled topological signals. <i>Communications Physics</i> , 2021, 4, .	5.3	64
13	Statistical properties of avalanches in networks. <i>Physical Review E</i> , 2012, 85, 066131.	2.1	62
14	Shattered time: can a dissipative time crystal survive many-body correlations?. <i>New Journal of Physics</i> , 2018, 20, 123003.	2.9	61
15	Downlink Performance Analysis for a Generalized Shotgun Cellular System. <i>IEEE Transactions on Wireless Communications</i> , 2014, 13, 6684-6696.	9.2	60
16	Spatiotemporal intracellular calcium dynamics during cardiac alternans. <i>Chaos</i> , 2009, 19, 037115.	2.5	57
17	Emergence of synchronization in complex networks of interacting dynamical systems. <i>Physica D: Nonlinear Phenomena</i> , 2006, 224, 114-122.	2.8	54
18	Weighted Percolation on Directed Networks. <i>Physical Review Letters</i> , 2008, 100, 058701.	7.8	48

#	ARTICLE	IF	CITATIONS
19	Spatial patterns of desynchronization bursts in networks. <i>Physical Review E</i> , 2004, 69, 066215.	2.1	41
20	Mean-field theory of assortative networks of phase oscillators. <i>Europhysics Letters</i> , 2014, 107, 60006.	2.0	41
21	Emergence of Coherence in Complex Networks of Heterogeneous Dynamical Systems. <i>Physical Review Letters</i> , 2006, 96, 254103.	7.8	40
22	Dynamics and pattern formation in large systems of spatially-coupled oscillators with finite response times. <i>Chaos</i> , 2011, 21, 023122.	2.5	40
23	Downlink coverage analysis in a heterogeneous cellular network. , 2012, , .		40
24	Spontaneous synchronization of coupled oscillator systems with frequency adaptation. <i>Physical Review E</i> , 2010, 81, 046214.	2.1	39
25	Effects of degree-frequency correlations on network synchronization: Universality and full phase-locking. <i>Europhysics Letters</i> , 2013, 101, 20001.	2.0	38
26	Effects of network topology, transmission delays, and refractoriness on the response of coupled excitable systems to a stochastic stimulus. <i>Chaos</i> , 2011, 21, 025117.	2.5	34
27	Complex macroscopic behavior in systems of phase oscillators with adaptive coupling. <i>Physica D: Nonlinear Phenomena</i> , 2014, 267, 27-35.	2.8	31
28	Using machine learning to assess short term causal dependence and infer network links. <i>Chaos</i> , 2019, 29, 121104.	2.5	26
29	Carrier to Interference Ratio Analysis for the Shotgun Cellular System. , 2009, , .		25
30	Multi-Tier Network Performance Analysis Using a Shotgun Cellular System. , 2011, , .		24
31	Frequency assortativity can induce chaos in oscillator networks. <i>Physical Review E</i> , 2015, 91, 060902.	2.1	24
32	Desynchronization Waves and Localized Instabilities in Oscillator Arrays. <i>Physical Review Letters</i> , 2004, 93, 114101.	7.8	23
33	Analysis of Downlink Connectivity Models in a Heterogeneous Cellular Network via Stochastic Geometry. <i>IEEE Transactions on Wireless Communications</i> , 2016, 15, 3895-3907.	9.2	20
34	Feedback control stabilization of critical dynamics via resource transport on multilayer networks: How glia enable learning dynamics in the brain. <i>Physical Review E</i> , 2016, 94, 042310.	2.1	20
35	Coexisting chaotic and multi-periodic dynamics in a model of cardiac alternans. <i>Chaos</i> , 2014, 24, 043126.	2.5	15
36	Stochastic Ordering Based Carrier-to-Interference Ratio Analysis for the Shotgun Cellular Systems. <i>IEEE Wireless Communications Letters</i> , 2012, 1, 565-568.	5.0	13

#	ARTICLE	IF	CITATIONS
37	Line-defect patterns of unstable spiral waves in cardiac tissue. <i>Physical Review E</i> , 2009, 79, 030906.	2.1	12
38	Robust entropy requires strong and balanced excitatory and inhibitory synapses. <i>Chaos</i> , 2018, 28, 103115.	2.5	12
39	Network connectivity during mergers and growth: Optimizing the addition of a module. <i>Physical Review E</i> , 2011, 83, 066112.	2.1	11
40	Hypergraph assortativity: A dynamical systems perspective. <i>Chaos</i> , 2022, 32, .	2.5	11
41	Scale Dependence of Branching in Arterial and Bronchial Trees. <i>Physical Review Letters</i> , 2006, 96, 128101.	7.8	10
42	Unidirectional Pinning and Hysteresis of Spatially Discordant Alternans in Cardiac Tissue. <i>Physical Review Letters</i> , 2012, 108, 108103.	7.8	10
43	Heterogeneous cellular network performance analysis under open and closed access. , 2012, , .		8
44	Modeling of Interference from Cooperative Cognitive Radios for Low Power Primary Users. , 2010, , .		7
45	Spatiotemporal dynamics of calcium-driven cardiac alternans. <i>Physical Review E</i> , 2014, 89, 052707.	2.1	7
46	Geometry, Topology and Simplicial Synchronization. <i>Understanding Complex Systems</i> , 2022, , 269-299.	0.6	7
47	Onset of synchronization in the disordered Hamiltonian mean-field model. <i>Physical Review E</i> , 2014, 89, 052125.	2.1	6
48	Hamiltonian mean field model: Effect of network structure on synchronization dynamics. <i>Physical Review E</i> , 2015, 92, 052802.	2.1	6
49	A network-specific approach to percolation in complex networks with bidirectional links. <i>Europhysics Letters</i> , 2012, 98, 16007.	2.0	4
50	Dodge and survive: Modeling the predatory nature of dodgeball. <i>Physical Review E</i> , 2020, 102, 062302.	2.1	4
51	Dynamic regulation of resource transport induces criticality in interdependent networks of excitable units. <i>Physical Review E</i> , 2020, 101, 022303.	2.1	4
52	Optimal control of excitable systems near criticality. <i>Physical Review Research</i> , 2020, 2, .	3.6	4
53	Competitive suppression of synchronization and nonmonotonic transitions in oscillator communities with distributed time delay. <i>Physical Review Research</i> , 2019, 1, .	3.6	3
54	Uncovering low dimensional macroscopic chaotic dynamics of large finite size complex systems. <i>Chaos</i> , 2017, 27, 083121.	2.5	2

#	ARTICLE	IF	CITATIONS
55	Downlink analysis for a heterogeneous cellular network. , 2014, , .		1
56	Dynamics in hybrid complex systems of switches and oscillators. Chaos, 2013, 23, 033142.	2.5	0
57	Ensemble-based estimates of eigenvector error for empirical covariance matrices. Information and Inference, 2019, 8, 289-312.	1.6	0
58	Synchronization of Kuramoto oscillators in networks of networks. IEICE Proceeding Series, 2014, 1, 171-174.	0.0	0