Epaminondas Rosa Jr

List of Publications by Year
in descending order

40	832	567281 15	501196 28
papers	citations	h-index	g-index

40	40	40	524
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transition to Phase Synchronization of Chaos. Physical Review Letters, 1998, 80, 1642-1645.	7.8	217
2	Experimental Real-Time Phase Synchronization of a Paced Chaotic Plasma Discharge. Physical Review Letters, 2000, 85, 2929-2932.	7.8	123
3	PHASE SYNCHRONIZATION OF CHAOS IN A PLASMA DISCHARGE TUBE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2551-2563.	1.7	53
4	Phase synchronization in the perturbed Chua circuit. Physical Review E, 2003, 67, 056212.	2.1	37
5	Integrated chaotic communication scheme. Physical Review E, 2000, 62, 4835-4845.	2.1	34
6	Phase Oscillatory Network and Visual Pattern Recognition. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 1539-1544.	11.3	30
7	CHARACTERIZATION OF THE RÃ–SSLER SYSTEM IN PARAMETER SPACE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 965-973.	1.7	25
8	Dynamics of signal propagation and collision in axons. Physical Review E, 2015, 92, 032707.	2.1	25
9	Temperature-dependent stochastic dynamics of the Huber-Braun neuron model. Chaos, 2011, 21, 047510.	2.5	21
10	Experimental Chua-plasma phase synchronization of chaos. Physical Review E, 2003, 68, 025202.	2.1	20
11	On the role of subthreshold currents in the Huberâ€“Braun cold receptor model. Chaos, 2010, 20, 045107.	2.5	20
12	Artificial Intelligence for Biology. Integrative and Comparative Biology, 2022, 61, 2267-2275.	2.0	18
13	Learning Phase Synchronization from Nonsynchronized Chaotic Regimes. Physical Review Letters, 2001, 88, 014101.	7.8	17
14	Detecting phase synchronization between coupled non-phase-coherent oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 2146-2153.	2.1	17
15	Exploiting the Natural Redundancy of Chaotic Signals in Communication Systems. Physical Review Letters, 2000, 85, 2629-2632.	7.8	16
16	Communication through chaotic modeling of languages. Physical Review E, 2000, 61, 3590-3600.	2.1	15
17	Temperature effects on neuronal firing rates and tonic-to-bursting transitions. BioSystems, 2019, 180, 1-6.	2.0	13
18	Effects of reciprocal inhibitory coupling in model neurons. BioSystems, 2015, 127, 73-83.	2.0	11

#	Article	IF	Citations
19	Phase detection of chaos. Physical Review E, 2011, 83, 016209.	2.1	10
20	Analog implementation of a Hodgkinâ€“Huxley model neuron. American Journal of Physics, 2020, 88, 918-923.	0.7	10
21	Bifurcation transitions in gap-junction-coupled neurons. Physical Review E, 2016, 94, 042301.	2.1	9
22	Predicting slow and fast neuronal dynamics with machine learning. Chaos, 2019, 29, 113119.	2.5	9
23	COLOR MAP OF LYAPUNOV EXPONENTS OF INVARIANT SETS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 1459-1463.	1.7	7
24	Sporadically Fractal Basin Boundaries of Chaotic Systems. Physical Review Letters, 1999, 82, 3597-3600.	7.8	7
25	SIGNAL DROPOUT RECONSTRUCTION IN COMMUNICATION WITH CHAOS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1999, 09, 2291-2293.	1.7	7
26	A critical firing rate associated with tonic-to-bursting transitions in synchronized gap-junction coupled neurons. European Physical Journal: Special Topics, 2017, 226, 1939-1951.	2.6	7
27	Resolving the Rules of Robustness and Resilience in Biology Across Scales. Integrative and Comparative Biology, 2022, 61, 2163-2179.	2.0	7
28	Experimental issues in the observation of water drop dynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 248, 353-358.	2.1	6
29	Communication-Based on Topology Preservation of Chaotic Dynamics. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 2551-2560.	1.7	6
30	Mixed basin boundary structures of chaotic systems. Physical Review E, 1999, 59, 343-352.	2.1	5
31	DRIVING PHASE SYNCHRONOUS PLASMA DISCHARGES WITH SUPERIMPOSED SIGNALS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3513-3518.	1.7	5
32	The static scattering function and optical birefringence of a deformed, ideal polymer chain. Journal of Chemical Physics, 1991, 95, 9248-9257.	3.0	4
33	The elasticity of ideal polymer chains. Journal of Chemical Physics, 1994, 100, 3233-3246.	3.0	4
34	RECONSTRUCTION OF INFORMATION-BEARING CHAOTIC SIGNALS IN ADDITIVE WHITE GAUSSIAN NOISE: PERFORMANCE ANALYSIS AND EVALUATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 2631-2635.	1.7	4
35	IDENTIFYING PHASE SYNCHRONOUS REGIMES IN NON-COHERENT AND MULTIPLE SCROLL ATTRACTOR SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350179.	1.7	4
36	Synchronous tonic-to-bursting transitions in a neuronal hub motif. Chaos, 2018, 28, 106315.	2.5	4

#	Article	IF	Citations
37	Weak-winner phase synchronization: A curious case of weak interactions. Physical Review Research, 2021, 3, .	3.6	3
38	Experimental observation of synchronous competition in the Chua system. Physical Review E, 2007, 75, 056216.	2.1	2
39	Introduction to Focus Issue: Nonlinear science of living systems: From cellular mechanisms to functions. Chaos, 2018, 28, 106201.	2.5	0
40	On the Role of Intrinsic Neuronal Dynamics for Relay Synchronization. IEICE Proceeding Series, 2014, 1, 364-364.	0.0	0