Michele Bonnin

List of Publications by Year
in descending order

74	464	758635 12	794141 19
papers	citations	h-index	g-index

74	74	74	216
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phase Noise and Noise Induced Frequency Shift in Stochastic Nonlinear Oscillators. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 2104-2115.	3.5	35
2	ON GLOBAL DYNAMIC BEHAVIOR OF WEAKLY CONNECTED OSCILLATORY NETWORKS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 1377-1393.	0.7	33
3	WEAKLY CONNECTED OSCILLATORY NETWORK MODELS FOR ASSOCIATIVE AND DYNAMIC MEMORIES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4365-4379.	0.7	33
4	Amplitude and phase dynamics of noisy oscillators. International Journal of Circuit Theory and Applications, 2017, 45, 636-659.	1.3	29
5	Periodic Oscillations in Weakly Connected Cellular Nonlinear Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 1671-1684.	3.5	28
6	Waves and patterns in ring lattices with delays. Physica D: Nonlinear Phenomena, 2009, 238, 77-87.	1.3	22
7	Harmonic Balance, Melnikov method and nonlinear oscillators under resonant perturbation. International Journal of Circuit Theory and Applications, 2008, 36, 247-274.	1.3	21
8	Phase Space Decomposition for Phase Noise and Synchronization Analysis of Planar Nonlinear Oscillators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 638-642.	2.2	21
9	An Impedance Matching Solution to Increase the Harvested Power and Efficiency of Nonlinear Piezoelectric Energy Harvesters. Energies, 2022, 15, 2764.	1.6	20
10	Leveraging circuit theory and nonlinear dynamics for the efficiency improvement of energy harvesting. Nonlinear Dynamics, 2021, 104, 367-382.	2.7	19
11	Analysis of influence of nonlinearities and noise correlation time in a single-DOF energy-harvesting system via power balance description. Nonlinear Dynamics, 2020, 100, 119-133.	2.7	17
12	Influence of Noise on the Phase and Amplitude of Second-Order Oscillators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2014, 61, 158-162.	2.2	13
13	Equivalent circuits for small signal performance of spin Â½ particles. International Journal of Circuit Theory and Applications, 2006, 34, 165-182.	1.3	12
14	On the Application of the Describing Function Technique to the Bifurcation Analysis of Nonlinear Systems. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2007, 54, 343-347.	2.3	12
15	Noise in oscillators: a review of state space decomposition approaches. Journal of Computational Electronics, 2015, 14, 51-61.	1.3	12
16	A mixed time-frequency-domain approach for the analysis of a hysteretic oscillator. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 525-529.	2.3	9
17	BIFURCATIONS, STABILITY AND SYNCHRONIZATION IN DELAYED OSCILLATORY NETWORKS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4033-4048.	0.7	9
18	Equivalent circuits for two-state quantum systems. International Journal of Circuit Theory and Applications, 2007, 35, 265-280.	1.3	9

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19	PHASE MODEL REDUCTION AND SYNCHRONIZATION OF PERIODICALLY FORCED NONLINEAR OSCILLATORS. Journal of Circuits, Systems and Computers, 2010, 19, 749-762.	1.0	8
20	Influence of Amplitude Fluctuations on the Noise-Induced Frequency Shift of Noisy Oscillators. IEEE Transactions on Circuits and Systems II: Express Briefs, 2016, 63, 698-702.	2.2	8
21	Colored Noise in Oscillators. Phase-Amplitude Analysis and a Method to Avoid the itÃ´-Stratonovich Dilemma. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3917-3927.	3.5	8
22	Phase noise, and phase models: Recent developments, new insights and open problems. Nonlinear Theory and Its Applications IEICE, 2014, 5, 365-378.	0.4	7
23	Weakly connected oscillatory networks for dynamic pattern recognition. , 2005, , .		6
24	Phase oscillator model for noisy oscillators. European Physical Journal: Special Topics, 2017, 226, 3227-3237.	1.2	5
25	Basic concepts of quantum systems versus classical networks. International Journal of Circuit Theory and Applications, 2004, 32, 383-405.	1.3	4
26	Circuit models for small signal performance of nanodevices based on two-state quantum systems. , 0, , .		4
27	Phase model reduction and synchronization of nonlinear oscillators by a periodic force. , 2009, , .		4
28	A mathematical framework for amplitude and phase noise analysis of coupled oscillators. European Physical Journal: Special Topics, 2016, 225, 171-186.	1.2	4
29	Existence, number, and stability of limit cycles in weakly dissipative, strongly nonlinear oscillators. Nonlinear Dynamics, 2010, 62, 321-332.	2.7	3
30	PHASE MODEL REDUCTION AND PHASE LOCKING OF COUPLED NONLINEAR OSCILLATORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 645-656.	0.7	3
31	Emerging dynamics in neuronal networks of diffusively coupled hard oscillators. Neural Networks, 2011, 24, 466-475.	3.3	3
32	MULTIPLE ATTRACTORS AND BIFURCATIONS IN HARD OSCILLATORS DRIVEN BY CONSTANT INPUTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250267.	0.7	3
33	An image cascaded twoâ€port model for singleâ€particle quantum propagation in crystals. International Journal of Circuit Theory and Applications, 2013, 41, 552-562.	1.3	3
34	Efficient spectral domain technique for the frequency locking analysis of nonlinear oscillators. European Physical Journal Plus, 2018, 133, 1.	1.2	3
35	On the application of circuit theory and nonlinear dynamics to the design of highly efficient energy harvesting systems. , 2021, , .		3
36	On Global Dynamic Behavior of Weakly Connected Cellular Nonlinear Networks. , 0, , .		2

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37	Periodic oscillations in weakly connected cellular nonlinear networks. , 0, , .		2
38	Information and Image Processing through Bio-inspired Oscillatory Cellular Nonlinear Networks. , 0, , .		2
39	Circuit Models for Small Signal Performance of Spin 1/2 Quantum Systems. , 0, , .		2
40	DILIBERTO'S THEOREM IN HIGHER DIMENSION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 629-637.	0.7	2
41	Horseshoe chaos and subharmonic orbits in the nanoelectromechanical Casimir nonlinear oscillator. International Journal of Circuit Theory and Applications, 2013, 41, 583-602.	1.3	2
42	Logic Gates Implementation with Coupled Oscillators. , 2018, , .		2
43	The Complex World of Oscillator Noise: Modern Approaches to Oscillator (Phase and Amplitude) Noise Analysis. IEEE Microwave Magazine, 2021, 22, 24-32.	0.7	2
44	Oscillatory Behavior in Two-dimensional Weakly Connected Cellular Nonlinear Networks. , 0, , .		1
45	Analysis of a Hysteretic Oscillator through a Mixed Time-Frequency Domain Approach. , 0, , .		1
46	Frequency domain analysis of open two-state quantum systems. , 2007, , .		1
47	Small Amplitude, Phase Locked Response in Oscillatory Networks with Delays. , 2007, , .		1
48	Spatially Extended Spinning Quantum Systems. , 2008, , .		1
49	Waves and patterns in delayed oscillatory networks. , 2008, , .		1
50	Equivalent circuits for two-fermion four-state quantum systems. , 2009, , .		1
51	A phase model approach for synchronization analysis of coupled nonlinear oscillators. , 2010, , .		1
52	A transmission line model for the free electron-positron field. , 2010, , .		1
53	An equivalent circuit for a two-state quantum system coupled to a single-mode electromagnetic cavity. , 2011, , .		1
54	A cascaded two-port model for quantum particles propagation in crystals. , 2011, , .		1

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55	Evaluating the influence of noise on the spectrum of an oscillator. , 2013, , .		1
56	Phase noise spectrum of oscillators described by Itô stochastic differential equations. , 2015, , .		1
57	Phase and amplitude dynamics of noisy oscillators described by Itô stochastic differential equations. , 2015, , .		1
58	Coupled Oscillator Networks forÂvonÂNeumann and Non-von Neumann Computing. Learning and Analytics in Intelligent Systems, 2022, , 179-207.	0.5	1
59	Weakly connected oscillatory networks for dynamic pattern recognition. , 2006, , .		0
60	Weakly Connected Oscllatory Networks as Assoclative and Dynamic Memories. , 2006, , .		0
61	Open Two-State Quantum Systems Solved by Harmonic Balance. , 2007, , .		0
62	Harmonic balance, Melnikov method and nonlinear oscillators under resonant perturbation. , 2007, , .		0
63	Bio-inspired oscillating media supporting spiral waves patterns. , 2008, , .		0
64	THE HARMONIC BALANCE TECHNIQUE ANALYSIS OF OPEN QUANTUM SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1973-1982.	0.7	0
65	On the Global Dynamic Behavior of Trapped Ions in a Thermal Environment. , 2008, , .		0
66	Nondeterministic finite automata based on star cellular nonlinear networks. , 2008, , .		0
67	Synchronization phenomena in neural networks of hard oscillators. , 2011, , .		0
68	Influence of external input on Oscillatory Cellular Nonlinear Networks dynamics. , 2011, , .		0
69	On the phase space decomposition for weakly connected oscillatory networks with 2nd order cells. , 2012, , .		0
70	Phase model reduction for oscillatory networks subject to stochastic inputs. , 2012, , .		0
71	The spatial Cauchy problem for a dissipative infinite quantum waveguide supporting a single propagating mode. , 2013, , .		0
72	Efficient vibration energy harvesting through noise induced transitions. , 2017, , .		0

#	Article	IF	Citations
73	Kuramoto-like model of noisy oscillators. , 2017, , .		0
74	Vibration energy harvesting enhancement in systems with modulated noise. , 2017, , .		0