Michele Bonnin

List of Publications by Year in Descending Order

46 papers	297 citations	10 h-index	15 g-index
74 ext. papers	403 ext. citations	2.6 avg, IF	3.84 L-index

#	Paper	IF	Citations
46	Coupled Oscillator Networks for von Neumann and Non-von Neumann Computing. *Learning and Analytics in Intelligent Systems*, **2022**, 179-207	0.3	0
45	An Impedance Matching Solution to Increase the Harvested Power and Efficiency of Nonlinear Piezoelectric Energy Harvesters. *Energies*, **2022**, 15, 2764	3.1	4
44	The Complex World of Oscillator Noise: Modern Approaches to Oscillator (Phase and Amplitude) Noise Analysis. *IEEE Microwave Magazine*, **2021**, 22, 24-32	1.2	1
43	Leveraging circuit theory and nonlinear dynamics for the efficiency improvement of energy harvesting. *Nonlinear Dynamics*, **2021**, 104, 367-382	5	9
42	On the application of circuit theory and nonlinear dynamics to the design of highly efficient energy harvesting systems **2021**,		1
41	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	5	9
40	Colored Noise in Oscillators. Phase-Amplitude Analysis and a Method to Avoid the Itô–Stratonovich Dilemma. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2019**, 66, 3917-3927	3.9	4
39	Efficient spectral domain technique for the frequency locking analysis of nonlinear oscillators. *European Physical Journal Plus*, **2018**, 133, 1	3.1	3
38	Logic Gates Implementation with Coupled Oscillators **2018**,		1
37	Amplitude and phase dynamics of noisy oscillators. *International Journal of Circuit Theory and Applications*, **2017**, 45, 636-659	2	19
36	Phase oscillator model for noisy oscillators. *European Physical Journal: Special Topics*, **2017**, 226, 3227-3237	2.3	3
35	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	3.5	4
34	A mathematical framework for amplitude and phase noise analysis of coupled oscillators. *European Physical Journal: Special Topics*, **2016**, 225, 171-186	2.3	2
33	Noise in oscillators: a review of state space decomposition approaches. *Journal of Computational Electronics*, **2015**, 14, 51-61	1.8	11
32	Phase noise spectrum of oscillators described by Itô stochastic differential equations **2015**,		1
31	Phase and amplitude dynamics of noisy oscillators described by Itô stochastic differential equations **2015**,		1
30	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	3.5	11

29	Phase noise, and phase models: Recent developments, new insights and open problems. *Nonlinear Theory and Its Applications IEICE*, **2014**, 5, 365-378	0.6	4
28	An image cascaded two-port model for single-particle quantum propagation in crystals. *International Journal of Circuit Theory and Applications*, **2013**, 41, 552-562	2	1
27	Horseshoe chaos and subharmonic orbits in the nanoelectromechanical Casimir nonlinear oscillator. *International Journal of Circuit Theory and Applications*, **2013**, 41, 583-602	2	2
26	Evaluating the influence of noise on the spectrum of an oscillator **2013**,		1
25	Phase Noise and Noise Induced Frequency Shift in Stochastic Nonlinear Oscillators. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2013**, 60, 2104-2115	3.9	29
24	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	3.5	17
23	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	2	2
22	Emerging dynamics in neuronal networks of diffusively coupled hard oscillators. *Neural Networks*, **2011**, 24, 466-75	9.1	3
21	PHASE MODEL REDUCTION AND SYNCHRONIZATION OF PERIODICALLY FORCED NONLINEAR OSCILLATORS. *Journal of Circuits, Systems and Computers*, **2010**, 19, 749-762	0.9	7
20	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	2	3
19	A phase model approach for synchronization analysis of coupled nonlinear oscillators **2010**,		1
18	Existence, number, and stability of limit cycles in weakly dissipative, strongly nonlinear oscillators. *Nonlinear Dynamics*, **2010**, 62, 321-332	5	3
17	Phase model reduction and synchronization of nonlinear oscillators by a periodic force **2009**,		3
16	DILIBERTO'S THEOREM IN HIGHER DIMENSION. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2009**, 19, 629-637	2	0
15	Waves and patterns in ring lattices with delays. *Physica D: Nonlinear Phenomena*, **2009**, 238, 77-87	3.3	21
14	Periodic Oscillations in Weakly Connected Cellular Nonlinear Networks. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2008**, 55, 1671-1684	3.9	16
13	THE HARMONIC BALANCE TECHNIQUE ANALYSIS OF OPEN QUANTUM SYSTEMS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2008**, 18, 1973-1982	2	
12	Harmonic Balance, Melnikov method and nonlinear oscillators under resonant perturbation. *International Journal of Circuit Theory and Applications*, **2008**, 36, 247-274	2	19

11	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		7
10	Equivalent circuits for two-state quantum systems. *International Journal of Circuit Theory and Applications*, **2007**, 35, 265-280	2	6
9	BIFURCATIONS, STABILITY AND SYNCHRONIZATION IN DELAYED OSCILLATORY NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2007**, 17, 4033-4048	2	7
8	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	2	21
7	Equivalent circuits for small signal performance of spin particles. *International Journal of Circuit Theory and Applications*, **2006**, 34, 165-182	2	5
6	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		8
5	Weakly connected oscillatory networks for dynamic pattern recognition **2005**,		6
4	ON GLOBAL DYNAMIC BEHAVIOR OF WEAKLY CONNECTED OSCILLATORY NETWORKS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2005**, 15, 1377-1393	2	14
3	Basic concepts of quantum systems versus classical networks. *International Journal of Circuit Theory and Applications*, **2004**, 32, 383-405	2	4
2	Circuit models for small signal performance of nanodevices based on two-state quantum systems		1
1	Information and image processing through bio-inspired oscillatory cellular nonlinear networks		2