

# Jean-Marie Bilbault

## List of Publications by Year in descending order

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44  
papers

977  
citations

623734

14  
h-index

434195

31  
g-index

44  
all docs

44  
docs citations

44  
times ranked

502  
citing authors

#	ARTICLE	IF	CITATIONS
1	Detection and measurement of radio frequency feedback for an on-frequency repeater. International Journal of Communication Systems, 2017, 30, e3269.	2.5	0
2	Global dynamical behaviors in a physical shallow water system. Communications in Nonlinear Science and Numerical Simulation, 2016, 36, 285-302.	3.3	6
3	Artificial Electrical Morris-Lecar Neuron. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 1875-1884.	11.3	23
4	Experimental active spike responses of analog electrical neuron: beyond "integrate-and-fire" transmission. Nonlinear Dynamics, 2015, 82, 1595-1604.	5.2	6
5	Bifurcations of phase portraits of a Singular Nonlinear Equation of the Second Class. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2590-2601.	3.3	21
6	Analysis of an experimental model of in vitro cardiac tissue using phase space reconstruction. Biomedical Signal Processing and Control, 2014, 13, 313-326.	5.7	8
7	Electrical Morris-Lecar neuron. , 2013, 2013, 5001-4.		1
8	Phase space reconstruction of an experimental model of cardiac field potential in normal and arrhythmic conditions. , 2013, 2013, 3274-7.		3
9	Nonlinear mechanics of DNA double strand: existence of the compact-envelope bright solitary wave. , 2012, 2012, 5428-31.		0
10	Active spike transmission in the neuron model with a winding threshold manifold. Neurocomputing, 2012, 83, 205-211.	5.9	5
11	A hybrid stimulation strategy for suppression of spiral waves in cardiac tissue. Chaos, Solitons and Fractals, 2011, 44, 633-639.	5.1	7
12	STATISTICAL MECHANICS OF NONCLASSIC SOLITONIC STRUCTURES-BEARING DNA SYSTEM. International Journal of Modern Physics B, 2011, 25, 3185-3197.	2.0	2
13	INVESTIGATION OF MICRO SPIRAL WAVES AT CELLULAR LEVEL USING A MICROELECTRODE ARRAYS TECHNOLOGY. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 209-223.	1.7	11
14	Polymorphic and regular localized activity structures in a two-dimensional two-component reaction-diffusion lattice with complex threshold excitation. Physica D: Nonlinear Phenomena, 2010, 239, 972-987.	2.8	5
15	Reaction-diffusion network for geometric multiscale high speed image processing. Image and Vision Computing, 2010, 28, 914-926.	4.5	5
16	Spiral wave induced numerically using electrical stimulation and comparison with experimental results. , 2010, 2010, 2650-3.		0
17	Heteroclinic contours and self-replicated solitary waves in a reaction-diffusion lattice with complex threshold excitation. Physica D: Nonlinear Phenomena, 2008, 237, 2463-2475.	2.8	11
18	Experimental study of low-voltage surge protection device response in realistic systems. Electronics Letters, 2008, 44, 1420.	1.0	1

#	ARTICLE	IF	CITATIONS
19	ANALYTICAL DETERMINATION OF INITIAL CONDITIONS LEADING TO FIRING IN NERVE FIBERS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3697-3701.	1.7	0
20	A THEORETICAL APPROACH OF THE PROPAGATION THROUGH GEOMETRICAL CONSTRAINTS IN CARDIAC TISSUE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 4417-4424.	1.7	2
21	Experimental study of electrical FitzHugh-Nagumo neurons with modified excitability. Neural Networks, 2006, 19, 684-693.	5.9	65
22	Synaptic Coupling Between Two Electronic Neurons. Nonlinear Dynamics, 2006, 44, 29-36.	5.2	24
23	Contrast Enhancement with a Nonlinear Oscillators Network. Nonlinear Dynamics, 2006, 44, 173-180.	5.2	2
24	PROPAGATING INTERFACES IN A TWO-LAYER BISTABLE NEURAL NETWORK. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 589-600.	1.7	1
25	EXPERIMENTAL PROPAGATION FAILURE IN A NONLINEAR ELECTRICAL LATTICE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 1819-1830.	1.7	8
26	PINNING OF A KINK IN A NONLINEAR DIFFUSIVE MEDIUM WITH A GEOMETRICAL BIFURCATION: THEORY AND EXPERIMENTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 257-262.	1.7	0
27	3-D shape reconstruction in an active stereo vision system using genetic algorithms. Pattern Recognition, 2003, 36, 2143-2159.	8.1	31
28	Experimental study of bifurcations in modified FitzHugh-Nagumo cell. Electronics Letters, 2003, 39, 961.	1.0	27
29	DIGITAL INFORMATION RECEIVER BASED ON STOCHASTIC RESONANCE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 233-236.	1.7	11
30	PATTERN DYNAMICS IN A NONLINEAR ELECTRICAL LATTICE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 483-492.	1.7	1
31	NOISE-ENHANCED PROPAGATION IN A DISSIPATIVE CHAIN OF TRIGGERS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 629-633.	1.7	11
32	Propagation failure induced by coupling inhomogeneities in a nonlinear diffusive medium. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 294, 304-307.	2.1	8
33	CONTOUR DETECTION BASED ON NONLINEAR DISCRETE DIFFUSION IN A CELLULAR NONLINEAR NETWORK. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 179-183.	1.7	14
34	Diffusion effects in a nonlinear electrical lattice. Physical Review E, 1998, 57, 6075-6078.	2.1	19
35	Experimental nonlinear electrical reaction-diffusion lattice. Electronics Letters, 1998, 34, 1061.	1.0	9
36	Energy localization in a nonlinear discrete system. Physical Review E, 1996, 53, 5403-5408.	2.1	21

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37	Modulational instability and critical regime in a highly birefringent fiber. <i>Physical Review A</i> , 1996, 54, 3519-3534.	2.5	67
38	Nonlinear Schrödinger models and modulational instability in real electrical lattices. <i>Physica D: Nonlinear Phenomena</i> , 1995, 87, 371-374.	2.8	45
39	Observation of nonlinear localized modes in an electrical lattice. <i>Physical Review E</i> , 1995, 51, 6127-6133.	2.1	248
40	Modulational instability of two counterpropagating waves in an experimental transmission line. <i>Physical Review E</i> , 1995, 51, 817-820.	2.1	39
41	Generation of envelope and hole solitons in an experimental transmission line. <i>Physical Review E</i> , 1994, 49, 828-835.	2.1	171
42	Bistability and nonlinear standing waves in an experimental transmission line. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1993, 174, 250-254.	2.1	15
43	Gap solitons and transmissivity of one-dimensional asymmetric systems. <i>Physical Review B</i> , 1993, 47, 5748-5755.	3.2	7
44	Gap solitons in nonlinear electrical superlattices. <i>Journal of Applied Physics</i> , 1991, 70, 4544-4550.	2.5	16