

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	Observation of nonlinear localized modes in an electrical lattice. <i>Physical Review E</i> , 1995, 51, 6127-6133.	2.1	248
2	Generation of envelope and hole solitons in an experimental transmission line. <i>Physical Review E</i> , 1994, 49, 828-835.	2.1	171
3	Modulational instability and critical regime in a highly birefringent fiber. <i>Physical Review A</i> , 1996, 54, 3519-3534.	2.5	67
4	Experimental study of electrical FitzHugh-Nagumo neurons with modified excitability. <i>Neural Networks</i> , 2006, 19, 684-693.	5.9	65
5	Nonlinear Schrödinger models and modulational instability in real electrical lattices. <i>Physica D: Nonlinear Phenomena</i> , 1995, 87, 371-374.	2.8	45
6	Modulational instability of two counterpropagating waves in an experimental transmission line. <i>Physical Review E</i> , 1995, 51, 817-820.	2.1	39
7	3-D shape reconstruction in an active stereo vision system using genetic algorithms. <i>Pattern Recognition</i> , 2003, 36, 2143-2159.	8.1	31
8	Experimental study of bifurcations in modified FitzHugh-Nagumo cell. <i>Electronics Letters</i> , 2003, 39, 961.	1.0	27
9	Synaptic Coupling Between Two Electronic Neurons. <i>Nonlinear Dynamics</i> , 2006, 44, 29-36.	5.2	24
10	Artificial Electrical Morris-Lecar Neuron. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2015, 26, 1875-1884.	11.3	23
11	Energy localization in a nonlinear discrete system. <i>Physical Review E</i> , 1996, 53, 5403-5408.	2.1	21
12	Bifurcations of phase portraits of a Singular Nonlinear Equation of the Second Class. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014, 19, 2590-2601.	3.3	21
13	Diffusion effects in a nonlinear electrical lattice. <i>Physical Review E</i> , 1998, 57, 6075-6078.	2.1	19
14	Gap solitons in nonlinear electrical superlattices. <i>Journal of Applied Physics</i> , 1991, 70, 4544-4550.	2.5	16
15	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
16	CONTOUR DETECTION BASED ON NONLINEAR DISCRETE DIFFUSION IN A CELLULAR NONLINEAR NETWORK. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001, 11, 179-183.	1.7	14
17	NOISE-ENHANCED PROPAGATION IN A DISSIPATIVE CHAIN OF TRIGGERS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2002, 12, 629-633.	1.7	11
18	DIGITAL INFORMATION RECEIVER BASED ON STOCHASTIC RESONANCE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2003, 13, 233-236.	1.7	11

#	ARTICLE	IF	CITATIONS
19	Heteroclinic contours and self-replicated solitary waves in a reaction-diffusion lattice with complex threshold excitation. <i>Physica D: Nonlinear Phenomena</i> , 2008, 237, 2463-2475.	2.8	11
20	INVESTIGATION OF MICRO SPIRAL WAVES AT CELLULAR LEVEL USING A MICROELECTRODE ARRAYS TECHNOLOGY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2011, 21, 209-223.	1.7	11
21	Experimental nonlinear electrical reaction-diffusion lattice. <i>Electronics Letters</i> , 1998, 34, 1061.	1.0	9
22	Propagation failure induced by coupling inhomogeneities in a nonlinear diffusive medium. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2002, 294, 304-307.	2.1	8
23	EXPERIMENTAL PROPAGATION FAILURE IN A NONLINEAR ELECTRICAL LATTICE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004, 14, 1819-1830.	1.7	8
24	Analysis of an experimental model of in vitro cardiac tissue using phase space reconstruction. <i>Biomedical Signal Processing and Control</i> , 2014, 13, 313-326.	5.7	8
25	Gap solitons and transmissivity of one-dimensional asymmetric systems. <i>Physical Review B</i> , 1993, 47, 5748-5755.	3.2	7
26	A hybrid stimulation strategy for suppression of spiral waves in cardiac tissue. <i>Chaos, Solitons and Fractals</i> , 2011, 44, 633-639.	5.1	7
27	Experimental active spike responses of analog electrical neuron: beyond "integrate-and-fire" transmission. <i>Nonlinear Dynamics</i> , 2015, 82, 1595-1604.	5.2	6
28	Global dynamical behaviors in a physical shallow water system. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2016, 36, 285-302.	3.3	6
29	Polymorphic and regular localized activity structures in a two-dimensional two-component reaction-diffusion lattice with complex threshold excitation. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 972-987.	2.8	5
30	Reaction-diffusion network for geometric multiscale high speed image processing. <i>Image and Vision Computing</i> , 2010, 28, 914-926.	4.5	5
31	Active spike transmission in the neuron model with a winding threshold manifold. <i>Neurocomputing</i> , 2012, 83, 205-211.	5.9	5
32	Phase space reconstruction of an experimental model of cardiac field potential in normal and arrhythmic conditions. , 2013, 2013, 3274-7.		3
33	Contrast Enhancement with a Nonlinear Oscillators Network. <i>Nonlinear Dynamics</i> , 2006, 44, 173-180.	5.2	2
34	A THEORETICAL APPROACH OF THE PROPAGATION THROUGH GEOMETRICAL CONSTRAINTS IN CARDIAC TISSUE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007, 17, 4417-4424.	1.7	2
35	STATISTICAL MECHANICS OF NONCLASSIC SOLITONIC STRUCTURES-BEARING DNA SYSTEM. <i>International Journal of Modern Physics B</i> , 2011, 25, 3185-3197.	2.0	2
36	PATTERN DYNAMICS IN A NONLINEAR ELECTRICAL LATTICE. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2003, 13, 483-492.	1.7	1

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37	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
38	Experimental study of low-voltage surge protection device response in realistic systems. Electronics Letters, 2008, 44, 1420.	1.0	1
39	Electrical Morris-Lecar neuron. , 2013, 2013, 5001-4.		1
40	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
41	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
42	Spiral wave induced numerically using electrical stimulation and comparison with experimental results. , 2010, 2010, 2650-3.		0
43	Nonlinear mechanics of DNA double strand: existence of the compact-envelope bright solitary wave. , 2012, 2012, 5428-31.		0
44	Detection and measurement of radio frequency feedback for an on-frequency repeater. International Journal of Communication Systems, 2017, 30, e3269.	2.5	0