G Bard Ermentrout

List of Publications by Year
in descending order

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220 papers	14,331 citations	31902 53 h-index	27345 106 g-index

231 all docs	231 docs citations	231 times ranked	8016 citing authors

#	Article	IF	Citations
1	A multiscale multicellular spatiotemporal model of local influenza infection and immune response. Journal of Theoretical Biology, 2022, 532, 110918.	0.8	7
2	BioSimulators: a central registry of simulation engines and services for recommending specific tools. Nucleic Acids Research, 2022, 50, W108-W114.	6.5	11
3	Phase Models, Noisy. , 2022, , 2726-2732.		0
4	Flicker-Induced Phosphenes. , 2022, , 1449-1454.		0
5	The Dynamics of Bilateral Olfactory Search and Navigation. SIAM Review, 2021, 63, 100-120.	4.2	6
6	Noise-Driven Oscillations in Coupled Excitable Systems. SIAM Journal on Applied Dynamical Systems, 2021, 20, 826-852.	0.7	1
7	Traveling waves in non-local pulse-coupled networks. Journal of Mathematical Biology, 2021, 82, 18.	0.8	5
8	Synchronization and locking in oscillators with flexible periods. Chaos, 2021, 31, 033143.	1.0	5
9	Compartmental Model Suggests Importance of Innate Immune Response to COVID-19 Infection in Rhesus Macaques. Bulletin of Mathematical Biology, 2021, 83, 79.	0.9	12
10	A computational model of the shrimp-goby escape and communication system. Journal of Computational Neuroscience, 2021, 49, 395-405.	0.6	1
11	Olfactory navigation in the real world: Simple local search strategies for turbulent environments. Journal of Theoretical Biology, 2021, 516, 110607.	0.8	3
12	Kcns3 deficiency disrupts Parvalbumin neuron physiology in mouse prefrontal cortex: Implications for the pathophysiology of schizophrenia. Neurobiology of Disease, 2021, 155, 105382.	2.1	5
13	Direction-selective motion discrimination by traveling waves in visual cortex. PLoS Computational Biology, 2020, 16, e1008164.	1.5	11
14	Noise-Induced Synchronization and Antiresonance in Interacting Excitable Systems: Applications to Deep Brain Stimulation in Parkinsonâ€™s Disease. Physical Review X, 2020, 10, .	2.8	15
15	Mouse Navigation Strategies for Odor Source Localization. Frontiers in Neuroscience, 2020, 14, 218.	1.4	30
16	Phase Models Beyond Weak Coupling. Physical Review Letters, 2019, 123, 164101.	2.9	26
17	Recent advances in coupled oscillator theory. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190092.	1.6	25
18	When is sync globally stable in sparse networks of identical Kuramoto oscillators?. Physica A: Statistical Mechanics and Its Applications, 2019, 533, 122070.	1.2	5

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19	Synchronization of oscillators via active media. Physical Review E, 2019, 99, 052218.	0.8	3
20	Augmented Phase Reduction of (Not So) Weakly Perturbed Coupled Oscillators. SIAM Review, 2019, 61, 277-315.	4.2	33
21	Olfactory Navigation and the Receptor Nonlinearity. Journal of Neuroscience, 2019, 39, 3713-3727.	1.7	19
22	Interactions of solitary pulses of E. coli in a one-dimensional nutrient gradient. Physica D: Nonlinear Phenomena, 2019, 395, 24-36.	1.3	2
23	Relationship between the mechanisms of gamma rhythm generation and the magnitude of the macroscopic phase response function in a population of excitatory and inhibitory modified quadratic integrate-and-fire neurons. Physical Review E, 2018, 97, 012209.	0.8	16
24	Traveling waves in a spatially-distributed Wilsonâ€“Cowan model of cortex: From fronts to pulses. Physica D: Nonlinear Phenomena, 2018, 369, 30-46.	1.3	7
25	Scalar Reduction of a Neural Field Model with Spike Frequency Adaptation. SIAM Journal on Applied Dynamical Systems, 2018, 17, 931-981.	0.7	3
26	Greater accuracy and broadened applicability of phase reduction using isostable coordinates. Journal of Mathematical Biology, 2018, 76, 37-66.	0.8	61
27	Oscillations in working memory and neural binding: A mechanism for multiple memories and their interactions. PLoS Computational Biology, 2018, 14, e1006517.	1.5	30
28	A multiple timescales approach to bridging spiking- and population-level dynamics. Chaos, 2018, 28, 083123.	1.0	2
29	An Operational Definition of Phase Characterizes the Transient Response of Perturbed Limit Cycle Oscillators. SIAM Journal on Applied Dynamical Systems, 2018, 17, 2516-2543.	0.7	20
30	Emergent mechanics of actomyosin drive punctuated contractions and shape network morphology in the cell cortex. PLoS Computational Biology, 2018, 14, e1006344.	1.5	10
31	Information-theoretic analysis of realistic odor plumes: What cues are useful for determining location?. PLoS Computational Biology, 2018, 14, e1006275.	1.5	43
32	Emergent Dynamical Properties of the BCM Learning Rule. Journal of Mathematical Neuroscience, 2017, 7, 2.	2.4	17
33	Actomyosin meshwork mechanosensing enables tissue shape to orient cell force. Nature Communications, 2017, 8, 15014.	5.8	125
34	Macroscopic phase-resetting curves for spiking neural networks. Physical Review E, 2017, 96, 042311.	0.8	31
35	A model of cardiac ryanodine receptor gating predicts experimental Ca2+-dynamics and Ca2+-triggered arrhythmia in the long QT syndrome. Chaos, 2017, 27, 093940.	1.0	15
36	Discrete Dynamical Modeling of Influenza Virus Infection Suggests Age-Dependent Differences in Immunity. Journal of Virology, 2017, 91, .	1.5	9

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37	Traveling Pulses in a Nonlocal Equation Arising Near a Saddle-Node Infinite Cycle Bifurcation. SIAM Journal on Applied Mathematics, 2017, 77, 1204-1229.	0.8	2
38	Stochastic Pacing Inhibits Spatially Discordant Cardiac Alternans. Biophysical Journal, 2017, 113, 2552-2572.	0.2	5
39	Optogenetic Stimulation Shifts the Excitability of Cerebral Cortex from Type I to Type II: Oscillation Onset and Wave Propagation. PLoS Computational Biology, 2017, 13, e1005349.	1.5	11
40	Phase-locked patterns of the Kuramoto model on 3-regular graphs. Chaos, 2016, 26, 094820.	1.0	13
41	Neurons as oscillators. Journal of Neurophysiology, 2016, 116, 2950-2960.	0.9	49
42	Rotating waves in simple scalar excitable media: approximations and numerical solutions. Journal of Mathematical Biology, 2016, 73, 1321-1351.	0.8	2
43	Pattern formation in oscillatory media without lateral inhibition. Physical Review E, 2016, 94, 012412.	0.8	11
44	Heterogeneity and Oscillations in Small Swarms. SIAM Journal on Applied Dynamical Systems, 2016, 15, 1455-1484.	0.7	0
45	Transition matrix model for evolutionary game dynamics. Physical Review E, 2016, 93, 032138.	0.8	11
46	Sensory dynamics of visual hallucinations in the normal population. ELife, 2016, 5, .	2.8	26
47	Stochastic Network Models in Neuroscience: A Festschrift for Jack Cowan. Introduction to the Special Issue. Journal of Mathematical Neuroscience, 2016, 6, 4.	2.4	4
48	Weakly coupled oscillators in a slowly varying world. Journal of Computational Neuroscience, 2016, 40, 269-281.	0.6	32
49	Propagating Waves as a Cortical Mechanism of Direction-Selectivity in V1 Motion Cells. , 2016, , .		2
50	Fast and accurate representations of stochastic ion channel fluctuations. BMC Neuroscience, 2015, 16, P258.	0.8	0
51	442. Critical Care Medicine, 2015, 43, 112.	0.4	0
52	A Three-Tiered Study of Differences in Murine Intrahost Immune Response to Multiple Pneumococcal Strains. PLoS ONE, 2015, 10, e0134012.	1.1	6
53	Bifurcations in the Wilson--Cowan Equations with Nonsmooth Firing Rate. SIAM Journal on Applied Dynamical Systems, 2015, 14, 43-72.	0.7	27
54	Stochastic representations of ion channel kinetics and exact stochastic simulation of neuronal dynamics. Journal of Computational Neuroscience, 2015, 38, 67-82.	0.6	35

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55	Synchrony, waves and ripple in spatially coupled Kuramoto oscillators with Mexican hat connectivity. Biological Cybernetics, 2015, 109, 333-347.	0.6	17
56	Waves and Patterns on Regular Graphs. SIAM Journal on Applied Dynamical Systems, 2015, 14, 1102-1129.	0.7	7
57	The inflammatory response to influenza A virus (H1N1): An experimental and mathematical study. Journal of Theoretical Biology, 2015, 374, 83-93.	0.8	46
58	A Boundary Value Approach to Optimization with an Application to Salmonella Competition. Bulletin of Mathematical Biology, 2015, 77, 1327-1348.	0.9	6
59	Qualitative Effects of Monovalent Vaccination Against Rotavirus: A Comparison of North America and South America. Bulletin of Mathematical Biology, 2015, 77, 1854-1885.	0.9	2
60	The rhythms of steady posture: Motor commands as spatially organized oscillation patterns. Neurocomputing, 2015, 170, 3-14.	3.5	9
61	Functional Maturation of GABA Synapses During Postnatal Development of the Monkey Dorsolateral Prefrontal Cortex. Cerebral Cortex, 2015, 25, 4076-4093.	1.6	61
62	Spatiotemporal Pattern Formation in Neural Fields with Linear Adaptation. , 2014, , 119-151.		7
63	Phase Models, Noisy. , 2014, , 1-9.		0
64	Population dynamics of the modified theta model: macroscopic phase reduction and bifurcation analysis link microscopic neuronal interactions to macroscopic gamma oscillation. Journal of the Royal Society Interface, 2014, 11, 20140058.	1.5	39
65	Testing Turingâ€™s theory of morphogenesis in chemical cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4397-4402.	3.3	168
66	A mathematical model of intrahost pneumococcal pneumonia infection dynamics in murine strains. Journal of Theoretical Biology, 2014, 353, 44-54.	0.8	29
67	Stimulus features, resetting curves, and the dependence on adaptation. Journal of Computational Neuroscience, 2013, 34, 505-520.	0.6	6
68	Optimizing Working Memory with Heterogeneity of Recurrent Cortical Excitation. Journal of Neuroscience, 2013, 33, 18999-19011.	1.7	57
69	Modeling the interactions of bacteria and Toll-like receptor-mediated inflammation in necrotizing enterocolitis. Journal of Theoretical Biology, 2013, 321, 83-99.	0.8	25
70	In vivo, in vitro, and in silico studies suggest a conserved immune module that regulates malaria parasite transmission from mammals to mosquitoes. Journal of Theoretical Biology, 2013, 334, 173-186.	0.8	11
71	Analysis of Synchronization in a Slowly Changing Environment: How Slow Coupling Becomes Fast Weak Coupling. Physical Review Letters, 2013, 110, 204101.	2.9	12
72	Wandering Bumps in Stochastic Neural Fields. SIAM Journal on Applied Dynamical Systems, 2013, 12, 61-94.	0.7	80

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73	From cognitive networks to seizures: Stimulus evoked dynamics in a coupled cortical network. Chaos, 2013, 23, 043111.	1.0	7
74	Impact of neuronal heterogeneity on correlated colored noise-induced synchronization. Frontiers in Computational Neuroscience, 2013, 7, 113.	1.2	39
75	Flicker-Induced Phosphenes. , 2013, , 1-6.		0
76	Evolution of patterns on Conus shells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E234-41.	3.3	20
77	Response of traveling waves to transient inputs in neural fields. Physical Review E, 2012, 85, 021910.	0.8	14
78	Pattern Formation in a Model of Acute Inflammation. SIAM Journal on Applied Dynamical Systems, 2012, 11, 629-660.	0.7	23
79	Bifurcations of Stationary Solutions in an Interacting Pair of E-I Neural Fields. SIAM Journal on Applied Dynamical Systems, 2012, 11, 895-938.	0.7	13
80	Intrinsic heterogeneity in oscillatory dynamics limits correlation-induced neural synchronization. Journal of Neurophysiology, 2012, 108, 2115-2133.	0.9	45
81	The Shape of Phase-Resetting Curves in Oscillators with a Saddle Node on an Invariant Circle Bifurcation. Neural Computation, 2012, 24, 3111-3125.	1.3	32
82	Local Spatial and Temporal Processes of Influenza in Pennsylvania, USA: 2003â€“2009. PLoS ONE, 2012, 7, e34245.	1.1	19
83	Phase Resetting Neural Oscillators: Topological Theory Versus the RealWorld. , 2012, , 33-51.		14
84	Phase Response Curves to Measure Ion Channel Effects on Neurons. , 2012, , 207-236.		9
85	A model for complex sequence learning and reproduction in neural populations. Journal of Computational Neuroscience, 2012, 32, 403-423.	0.6	22
86	Rotational model for actin filament alignment by myosin. Journal of Theoretical Biology, 2012, 300, 344-359.	0.8	6
87	Dopamine and gamma band synchrony in schizophrenia â€“ insights from computational and empirical studies. European Journal of Neuroscience, 2012, 36, 2146-2155.	1.2	40
88	Hallucinogen persisting perception disorder in neuronal networks with adaptation. Journal of Computational Neuroscience, 2012, 32, 25-53.	0.6	20
89	Phase-resetting curve determines how BK currents affect neuronal firing. Journal of Computational Neuroscience, 2011, 30, 211-223.	0.6	21
90	The variance of phase-resetting curves. Journal of Computational Neuroscience, 2011, 31, 185-197.	0.6	49

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91	Finite-size and correlation-induced effects in mean-field dynamics. Journal of Computational Neuroscience, 2011, 31, 453-484.	0.6	29
92	The mechanisms for compression and reflection of cortical waves. Biological Cybernetics, 2011, 105, 253-268.	0.6	13
93	The dynamics of a forced coupled network of active elements. Physica D: Nonlinear Phenomena, 2011, 240, 554-567.	1.3	3
94	Analytic approximations of statistical quantities and response of noisy oscillators. Physica D: Nonlinear Phenomena, 2011, 240, 719-731.	1.3	12
95	Correlation transfer in stochastically driven neural oscillators over long and short time scales. Physical Review E, 2011, 84, 061914.	0.8	18
96	Glutamate Receptor Subtypes Mediating Synaptic Activation of Prefrontal Cortex Neurons: Relevance for Schizophrenia. Journal of Neuroscience, 2011, 31, 142-156.	1.7	136
97	A Model for the Origin and Properties of Flicker-Induced Geometric Phosphenes. PLoS Computational Biology, 2011, 7, e1002158.	1.5	45
98	Sparse Gamma Rhythms Arising through Clustering in Adapting Neuronal Networks. PLoS Computational Biology, 2011, 7, e1002281.	1.5	51
99	A mathematical model of pulmonary gas exchange under inflammatory stress. Journal of Theoretical Biology, 2010, 264, 161-173.	0.8	32
100	Balancing organization and flexibility in foraging dynamics. Journal of Theoretical Biology, 2010, 266, 391-400.	0.8	15
101	Phase-response curves and synchronized neural networks. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 2407-2422.	1.8	155
102	Coupling regularizes individual units in noisy populations. Physical Review E, 2010, 81, 011911.	0.8	15
103	Dynamics of Limit-Cycle Oscillators Subject to General Noise. Physical Review Letters, 2010, 105, 154101.	2.9	102
104	Stimulus-Driven Traveling Solutions in Continuum Neuronal Models with a General Smooth Firing Rate Function. SIAM Journal on Applied Mathematics, 2010, 70, 3039-3064.	0.8	39
105	Amplification of Asynchronous Inhibition-Mediated Synchronization by Feedback in Recurrent Networks. PLoS Computational Biology, 2010, 6, e1000679.	1.5	16
106	Analysis of Recurrent Networks of Pulse-Coupled Noisy Neural Oscillators. SIAM Journal on Applied Dynamical Systems, 2010, 9, 113-137.	0.7	15
107	Complex Times for Earthquakes, Stocks, and the Brain's Activity. Neuron, 2010, 66, 329-331.	3.8	11
108	Mathematical Foundations of Neuroscience. Interdisciplinary Applied Mathematics, 2010, , .	0.2	852

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109	Spatially Localized Synchronous Oscillations in Synaptically Coupled Neuronal Networks: Conductance-based Models and Discrete Maps. SIAM Journal on Applied Dynamical Systems, 2010, 9, 1019-1060.	0.7	3
110	Firing Rate Models. Interdisciplinary Applied Mathematics, 2010, , 331-367.	0.2	7
111	Using a Mathematical Model to Analyze the Role of Probiotics and Inflammation in Necrotizing Enterocolitis. PLoS ONE, 2010, 5, e10066.	1.1	55
112	Working Memory Cells' Behavior May Be Explained by Cross-Regional Networks with Synaptic Facilitation. PLoS ONE, 2009, 4, e6399.	1.1	35
113	Stochastic Phase Reduction for a General Class of Noisy Limit Cycle Oscillators. Physical Review Letters, 2009, 102, 194102.	2.9	92
114	The neural origins of shell structure and pattern in aquatic mollusks. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6837-6842.	3.3	81
115	Subbarrel Patterns in Somatosensory Cortical Barrels Can Emerge from Local Dynamic Instabilities. PLoS Computational Biology, 2009, 5, e1000537.	1.5	5
116	Synchronization dynamics of two coupled neural oscillators receiving shared and unshared noisy stimuli. Journal of Computational Neuroscience, 2009, 26, 425-443.	0.6	44
117	Steady-state analysis of a continuum model for super-infection. Journal of Mathematical Biology, 2009, 59, 415-438.	0.8	1
118	Delays and weakly coupled neuronal oscillators. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1097-1115.	1.6	53
119	Type-II phase resetting curve is optimal for stochastic synchrony. Physical Review E, 2009, 80, 011911.	0.8	59
120	Canards, Clusters, and Synchronization in a Weakly Coupled Interneuron Model. SIAM Journal on Applied Dynamical Systems, 2009, 8, 253-278.	0.7	70
121	Multiple Rhythmic States in a Model of the Respiratory Central Pattern Generator. Journal of Neurophysiology, 2009, 101, 2146-2165.	0.9	129
122	From working memory to epilepsy: Dynamics of facilitation and inhibition in a cortical network. Chaos, 2009, 19, 015115.	1.0	9
123	Class-II neurons display a higher degree of stochastic synchronization than class-I neurons. Physical Review E, 2008, 77, 041918.	0.8	78
124	Reliability, synchrony and noise. Trends in Neurosciences, 2008, 31, 428-434.	4.2	231
125	Wave Formation through the Interactions between Clustered States and Local Coupling in Arrays of Neural Oscillators. SIAM Journal on Applied Dynamical Systems, 2008, 7, 491-509.	0.7	6
126	Computational Insights on the Competing Effects of Nitric Oxide in Regulating Apoptosis. PLoS ONE, 2008, 3, e2249.	1.1	21

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127	Optimal Time Scale for Spike-Time Reliability: Theory, Simulations, and Experiments. Journal of Neurophysiology, 2008, 99, 277-283.	0.9	71
128	Effects of axonal time delay on synchronization and wave formation in sparsely coupled neuronal oscillators. Physical Review E, 2007, 76, 056206.	0.8	64
129	Stochastic dynamics of uncoupled neural oscillators: Fokker-Planck studies with the finite element method. Physical Review E, 2007, 76, 056110.	0.8	45
130	Mathematical modeling in necrotizing enterocolitisâ€"a new look at an ongoing problem. Journal of Pediatric Surgery, 2007, 42, 445-453.	0.8	28
131	Pattern Formation in an Array of Oscillators with Electrical and Chemical Coupling. SIAM Journal on Applied Mathematics, 2007, 67, 512-529.	0.8	23
132	Relating Neural Dynamics to Neural Coding. Physical Review Letters, 2007, 99, 248103.	2.9	89
133	Reliability and stochastic synchronization in type I vs. type II neural oscillators. Neurocomputing, 2007, 70, 2102-2106.	3.5	23
134	Simulation of networks of spiking neurons: A review of tools and strategies. Journal of Computational Neuroscience, 2007, 23, 349-398.	0.6	639
135	Phase Boundaries as Electrically Induced Phosphenes. SIAM Journal on Applied Dynamical Systems, 2006, 5, 529-551.	0.7	5
136	Persistent Synchronized Bursting Activity in Cortical Tissues With Low Magnesium Concentration: A Modeling Study. Journal of Neurophysiology, 2006, 95, 1049-1067.	0.9	43
137	An Introduction to Simulation and Visualization of Biological Systems at Multiple Scales: A Summer Training Program for Interdisciplinary Research. Biotechnology Progress, 2006, 22, 179-185.	1.3	6
138	Spikes too kinky in the cortex?. Nature, 2006, 440, 999-1000.	13.7	12
139	A reduced mathematical model of the acute inflammatory response: I. Derivation of model and analysis of anti-inflammation. Journal of Theoretical Biology, 2006, 242, 220-236.	0.8	238
140	Actin filament branching and protrusion velocity in a simple 1D model of a motile cell. Journal of Theoretical Biology, 2006, 242, 265-279.	0.8	32
141	Reliability, discriminability and stochastic synchronization of olfactory neurons. Sensors and Actuators B: Chemical, 2006, 116, 168-173.	4.0	9
142	Phase resetting and coupling of noisy neural oscillators. Journal of Computational Neuroscience, 2006, 20, 179-190.	0.6	40
143	Predicting synchronized neural assemblies from experimentally estimated phase-resetting curves. Neurocomputing, 2006, 69, 1112-1115.	3.5	29
144	Gap junctions destroy persistent states in excitatory networks. Physical Review E, 2006, 74, 031918.	0.8	26

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145	A homeostatic rule for inhibitory synapses promotes temporal sharpening and cortical reorganization. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16526-16531.	3.3	12
146	Correlation-Induced Synchronization of Oscillations in Olfactory Bulb Neurons. Journal of Neuroscience, 2006, 26, 3646-3655.	1.7	176
147	ELLIPTIC BURSTERS, DEPOLARIZATION BLOCK, AND WAVES. , 2005, , 385-396.		2
148	Phase-Response Curves Give the Responses of Neurons to Transient Inputs. Journal of Neurophysiology, 2005, 94, 1623-1635.	0.9	187
149	Efficient Estimation of Phase-Resetting Curves in Real Neurons and its Significance for Neural-Network Modeling. Physical Review Letters, 2005, 94, 158101.	2.9	222
150	Inflammatory Modulation of Hepatocyte Apoptosis by Nitric Oxide: In Vivo, In Vitro, and In Silico Studies. Current Molecular Medicine, 2004, 4, 753-762.	0.6	78
151	Chemical and electrical synapses perform complementary roles in the synchronization of interneuronal networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 15482-15487.	3.3	313
152	Model for Transition from Waves to Synchrony in the Olfactory Lobe of Limax. Journal of Computational Neuroscience, 2004, 17, 365-383.	0.6	25
153	Multiple-spike waves in a one-dimensional integrate-and-fire neural network. Journal of Mathematical Biology, 2004, 48, 243-274.	0.8	16
154	Analysis of a Canard Mechanism by Which Excitatory Synaptic Coupling Can Synchronize Neurons at Low Firing Frequencies. SIAM Journal on Applied Mathematics, 2004, 65, 69-92.	0.8	70
155	Pattern Formation in a Network of Excitatory and Inhibitory Cells with Adaptation. SIAM Journal on Applied Dynamical Systems, 2004, 3, 191-231.	0.7	40
156	A Mathematical Model of the Pancreatic Duct Cell Generating High Bicarbonate Concentrations in Pancreatic Juice. Pancreas, 2004, 29, e30-e40.	0.5	56
157	Spike generating dynamics and the conditions for spike-time precision in cortical neurons. Journal of Computational Neuroscience, 2003, 15, 91-103.	0.6	57
158	Nonlinear Coupling near a Degenerate Hopf (Bautin) Bifurcation. SIAM Journal on Applied Mathematics, 2003, 63, 1627-1647.	0.8	19
159	Dynamical Consequences of Fast-Rising, Slow-Decaying Synapses in Neuronal Networks. Neural Computation, 2003, 15, 2483-2522.	1.3	13
160	Slow excitation supports propagation of slow pulses in networks of excitatory and inhibitory populations. Physical Review E, 2002, 65, 061911.	0.8	34
161	Modeling neural oscillations. Physiology and Behavior, 2002, 77, 629-633.	1.0	75
162	Regular Traveling Waves in a One-Dimensional Network of Theta Neurons. SIAM Journal on Applied Mathematics, 2002, 62, 1197-1221.	0.8	25

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163	Multiple Bumps in a Neuronal Model of Working Memory. SIAM Journal on Applied Mathematics, 2002, 63, 62-97.	0.8	216
164	Synchrony, stability, and firing patterns in pulse-coupled oscillators. Physica D: Nonlinear Phenomena, 2002, 163, 191-216.	1.3	179
165	The evolution of synaptically generated waves in one- and two-dimensional domains. Physica D: Nonlinear Phenomena, 2002, 163, 217-235.	1.3	37
166	The Effects of Spike Frequency Adaptation and Negative Feedback on the Synchronization of Neural Oscillators. Neural Computation, 2001, 13, 1285-1310.	1.3	208
167	Spatially Structured Activity in Synaptically Coupled Neuronal Networks: I. Traveling Fronts and Pulses. SIAM Journal on Applied Mathematics, 2001, 62, 206-225.	0.8	276
168	Spatially Structured Activity in Synaptically Coupled Neuronal Networks: II. Lateral Inhibition and Standing Pulses. SIAM Journal on Applied Mathematics, 2001, 62, 226-243.	0.8	162
169	Oscillations in a refractory neural net. Journal of Mathematical Biology, 2001, 43, 81-100.	0.8	18
170	A model for actin-filament length distribution in a lamellipod. Journal of Mathematical Biology, 2001, 43, 325-355.	0.8	35
171	Turning on and off with excitation: the role of spike-timing asynchrony and synchrony in sustained neural activity. Journal of Computational Neuroscience, 2001, 11, 121-134.	0.6	153
172	Bistability in Pulse Propagation in Networks of Excitatory and Inhibitory Populations. Physical Review Letters, 2001, 86, 4179-4182.	2.9	66
173	Effects of delay on the type and velocity of travelling pulses in neuronal networks with spatially decaying connectivity. Network: Computation in Neural Systems, 2000, 11, 221-246.	2.2	25
174	Phase locking in chains of multiple-coupled oscillators. Physica D: Nonlinear Phenomena, 2000, 143, 56-73.	1.3	33
175	A model of ocular dominance column development by competition for trophic factor: effects of excess trophic factor with monocular deprivation and effects of antagonist of trophic factor. Journal of Computational Neuroscience, 2000, 8, 227-250.	0.6	9
176	Models for spatial polymerization dynamics of rod-like polymers. Journal of Mathematical Biology, 2000, 40, 64-96.	0.8	23
177	The analysis of synaptically generated traveling waves. , 1998, 5, 191-208.		79
178	Dendritic and synaptic effects in systems of coupled cortical oscillators. Journal of Computational Neuroscience, 1998, 5, 315-329.	0.6	44
179	Wave propagation mediated by GABAB synapse and rebound excitation in an inhibitory network: a reduced model approach. Journal of Computational Neuroscience, 1998, 5, 53-69.	0.6	20
180	Models for the Length Distributions of Actin Filaments: I. Simple Polymerization and Fragmentation. Bulletin of Mathematical Biology, 1998, 60, 449-475.	0.9	59

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181	Models for the Length Distributions of Actin Filaments: II. Polymerization and Fragmentation by Gelsolin Acting Together. Bulletin of Mathematical Biology, 1998, 60, 477-503.	0.9	27
182	Monotonicity of Phaselocked Solutions in Chains and Arrays of Nearest-Neighbor Coupled Oscillators. SIAM Journal on Mathematical Analysis, 1998, 29, 208-234.	0.9	20
183	Linearization of F-I Curves by Adaptation. Neural Computation, 1998, 10, 1721-1729.	1.3	218
184	Dynamics of Membrane Excitability Determine Interspike Interval Variability: A Link Between Spike Generation Mechanisms and Cortical Spike Train Statistics. Neural Computation, 1998, 10, 1047-1065.	1.3	191
185	Spike Frequency Adaptation Affects the Synchronization Properties of Networks of Cortical Oscillators. Neural Computation, 1998, 10, 837-854.	1.3	97
186	Neural networks as spatio-temporal pattern-forming systems. Reports on Progress in Physics, 1998, 61, 353-430.	8.1	600
187	Spiral Waves in Spatially Discrete Î»-Ï‰ Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 33-40.	0.7	6
188	Minimal Model of Oscillations and Waves in the Limax Olfactory Lobe With Tests of the Model's Predictive Power. Journal of Neurophysiology, 1998, 79, 2677-2689.	0.9	46
189	Pattern formation in systems with one spatially distributed species. Bulletin of Mathematical Biology, 1997, 59, 533-549.	0.9	6
190	Pattern formation in systems with one spatially distributed species. Bulletin of Mathematical Biology, 1997, 59, 533-549.	0.9	28
191	Transition fronts and localized structures in bistable reactionâ€"diffusion equations. Physica D: Nonlinear Phenomena, 1997, 108, 147-167.	1.3	35
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