

Paul Bressloff

List of Publications by Year in descending order

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201
papers

7,387
citations

53794

45
h-index

71685

76
g-index

205
all docs

205
docs citations

205
times ranked

3410
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffusion-mediated surface reactions and stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 275002.	2.1	19
2	Diffusion-mediated absorption by partially-reactive targets: Brownian functionals and generalized propagators. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 205001.	2.1	29
3	Narrow capture problem: An encounter-based approach to partially reactive targets. <i>Physical Review E</i> , 2022, 105, 034141.	2.1	10
4	Local accumulation time for diffusion in cells with gap junction coupling. <i>Physical Review E</i> , 2022, 105, 034404.	2.1	2
5	Accumulation time of diffusion in a two-dimensional singularly perturbed domain. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2022, 478, .	2.1	3
6	Stochastic Neural Field Theory. , 2022, , 3329-3333.		0
7	The Narrow Capture Problem with Partially Absorbing Targets and Stochastic Resetting. <i>Multiscale Modeling and Simulation</i> , 2022, 20, 857-881.	1.6	3
8	Diffusion in a partially absorbing medium with position and occupation time resetting. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2022, 2022, 063207.	2.3	4
9	Local accumulation times in a diffusion-trapping model of receptor dynamics at proximal axodendritic synapses. <i>Physical Review E</i> , 2022, 105, .	2.1	4
10	Asymptotic Analysis of Target Fluxes in the Three-Dimensional Narrow Capture Problem. <i>Multiscale Modeling and Simulation</i> , 2021, 19, 612-632.	1.6	9
11	First-passage processes and the target-based accumulation of resources. <i>Physical Review E</i> , 2021, 103, 012101.	2.1	4
12	Asymptotic analysis of extended two-dimensional narrow capture problems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20200771.	2.1	12
13	Multi-spike solutions of a hybrid reaction-transport model. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, 20200829.	2.1	0
14	Construction of stochastic hybrid path integrals using operator methods. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 185001.	2.1	7
15	Coherent spin states and stochastic hybrid path integrals. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2021, 2021, 043207.	2.3	5
16	Drift-diffusion on a Cayley tree with stochastic resetting: the localization-delocalization transition. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2021, 2021, 063206.	2.3	9
17	Accumulation time of stochastic processes with resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 354001.	2.1	11
18	Search processes with stochastic resetting and partially absorbing targets. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 404004.	2.1	22

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19	Directional Search-and-Capture Model of Cytoneme-Based Morphogenesis. SIAM Journal on Applied Mathematics, 2021, 81, 919-938.	1.8	1
20	Queuing model of axonal transport. Brain Multiphysics, 2021, 2, 100042.	2.3	5
21	Queueing theory of search processes with stochastic resetting. Physical Review E, 2020, 102, 032109.	2.1	15
22	Stochastic Turing Pattern Formation in a Model with Active and Passive Transport. Bulletin of Mathematical Biology, 2020, 82, 144.	1.9	3
23	Search processes with stochastic resetting and multiple targets. Physical Review E, 2020, 102, 022115.	2.1	24
24	Stochastic resetting and the mean-field dynamics of focal adhesions. Physical Review E, 2020, 102, 022134.	2.1	10
25	Occupation time of a run-and-tumble particle with resetting. Physical Review E, 2020, 102, 042135.	2.1	24
26	Switching diffusions and stochastic resetting. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 275003.	2.1	12
27	Modeling active cellular transport as a directed search process with stochastic resetting and delays. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 355001.	2.1	39
28	Phase Reduction of Stochastic Biochemical Oscillators. SIAM Journal on Applied Dynamical Systems, 2020, 19, 151-180.	1.6	3
29	Active suppression of Ostwald ripening: Beyond mean-field theory. Physical Review E, 2020, 101, 042804.	2.1	11
30	Wandering bumps in a stochastic neural field: A variational approach. Physica D: Nonlinear Phenomena, 2020, 406, 132403.	2.8	6
31	Stochastically gated diffusion model of selective nuclear transport. Physical Review E, 2020, 101, 042404.	2.1	0
32	Directed intermittent search with stochastic resetting. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 105001.	2.1	33
33	Two-dimensional droplet ripening in a concentration gradient. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 365002.	2.1	5
34	Diffusive search for a stochastically-gated target with resetting. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 425001.	2.1	21
35	Target competition for resources under multiple search-and-capture events with stochastic resetting. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200475.	2.1	9
36	Effective Permeability of a Gap Junction with Age-Structured Switching. SIAM Journal on Applied Mathematics, 2020, 80, 312-337.	1.8	3

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37	Stochastic neural fields as gradient dynamical systems. <i>Physical Review E</i> , 2019, 100, 012402.	2.1	2
38	Modeling the Role of Feedback in the Adaptive Response of Bacterial Quorum Sensing. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 1479-1505.	1.9	5
39	Impulsive signaling model of cytoneme-based morphogen gradient formation. <i>Physical Biology</i> , 2019, 16, 056005.	1.8	4
40	Stochastic neural field theory of wandering bumps on a sphere. <i>Physica D: Nonlinear Phenomena</i> , 2019, 399, 138-152.	2.8	2
41	Search-and-capture model of cytoneme-mediated morphogen gradient formation. <i>Physical Review E</i> , 2019, 99, 052401.	2.1	29
42	Stochastic neural field model of stimulus-dependent variability in cortical neurons. <i>PLoS Computational Biology</i> , 2019, 15, e1006755.	3.2	15
43	Protein concentration gradients and switching diffusions. <i>Physical Review E</i> , 2019, 99, 032409.	2.1	23
44	Node-to-Node and Node-to-Medium Synchronization in Quorum Sensing Networks Affected by State-Dependent Noise. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019, 18, 1934-1953.	1.6	9
45	Propagation of Extrinsic Fluctuations in Biochemical Birth-Death Processes. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 800-829.	1.9	4
46	Bidirectional transport model of morphogen gradient formation via cytonemes. <i>Physical Biology</i> , 2018, 15, 026010.	1.8	20
47	Symmetric Bifurcations in a Neural Field Model for Encoding the Direction of Spatial Contrast Gradients. <i>SIAM Journal on Applied Dynamical Systems</i> , 2018, 17, 1-51.	1.6	4
48	Direct vs. Synaptic Coupling in a Mathematical Model of Cytoneme-Based Morphogen Gradient Formation. <i>SIAM Journal on Applied Mathematics</i> , 2018, 78, 2323-2347.	1.8	10
49	Stochastic Hybrid Systems in Cellular Neuroscience. <i>Journal of Mathematical Neuroscience</i> , 2018, 8, 12.	2.4	10
50	Synchronization of stochastic hybrid oscillators driven by a common switching environment. <i>Chaos</i> , 2018, 28, 123123.	2.5	5
51	A Variational Method for Analyzing Stochastic Limit Cycle Oscillators. <i>SIAM Journal on Applied Dynamical Systems</i> , 2018, 17, 2205-2233.	1.6	19
52	Robustness of Stochastic Chemical Reaction Networks to Extrinsic Noise: The Role of Deficiency. <i>Multiscale Modeling and Simulation</i> , 2018, 16, 1519-1541.	1.6	2
53	Diffusion in an age-structured randomly switching environment. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2018, 51, 315001.	2.1	1
54	A variational method for analyzing limit cycle oscillations in stochastic hybrid systems. <i>Chaos</i> , 2018, 28, 063105.	2.5	6

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55	Effects of cell geometry on reversible vesicular transport. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 055601.	2.1	13
56	Stochastically gated local and occupation times of a Brownian particle. <i>Physical Review E</i> , 2017, 95, 012130.	2.1	7
57	Stochastic switching in biology: from genotype to phenotype. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 133001.	2.1	88
58	Circuits and Mechanisms for Surround Modulation in Visual Cortex. <i>Annual Review of Neuroscience</i> , 2017, 40, 425-451.	10.7	190
59	On the Hamiltonian structure of large deviations in stochastic hybrid systems. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2017, 2017, 033206.	2.3	20
60	Feynman-Kac formula for stochastic hybrid systems. <i>Physical Review E</i> , 2017, 95, 012138.	2.1	9
61	Dynamically Active Compartments Coupled by a Stochastically Gated Gap Junction. <i>Journal of Nonlinear Science</i> , 2017, 27, 1487-1512.	2.1	11
62	Population Model of Quorum Sensing with Multiple Parallel Pathways. <i>Bulletin of Mathematical Biology</i> , 2017, 79, 2599-2626.	1.9	5
63	On balance relations for irreversible chemical reaction networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 475004.	2.1	3
64	Hybrid colored noise process with space-dependent switching rates. <i>Physical Review E</i> , 2017, 96, 012129.	2.1	11
65	Turing mechanism for homeostatic control of synaptic density during <i>C. elegans</i> growth. <i>Physical Review E</i> , 2017, 96, 012413.	2.1	6
66	Stochastic Liouville equation for particles driven by dichotomous environmental noise. <i>Physical Review E</i> , 2017, 95, 012124.	2.1	11
67	Diffusive transport in the presence of stochastically gated absorption. <i>Physical Review E</i> , 2017, 96, 022102.	2.1	4
68	Coupling sample paths to the thermodynamic limit in Monte Carlo estimators with applications to gene expression. <i>Journal of Computational Physics</i> , 2017, 346, 1-13.	3.8	1
69	Temporal disorder as a mechanism for spatially heterogeneous diffusion. <i>Physical Review E</i> , 2017, 95, 060101.	2.1	17
70	Diffusion in Cells with Stochastically Gated Gap Junctions. <i>SIAM Journal on Applied Mathematics</i> , 2016, 76, 1658-1682.	1.8	28
71	A Stochastic Hybrid Framework for Obtaining Statistics of Many Random Walkers in a Switching Environment. <i>Multiscale Modeling and Simulation</i> , 2016, 14, 1417-1433.	1.6	7
72	Model of reversible vesicular transport with exclusion. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 345602.	2.1	11

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73	Ultrasensitivity and noise amplification in a model of V. harvey quorum sensing. <i>Physical Review E</i> , 2016, 93, 062418.	2.1	10
74	A Mechanism for Turing Pattern Formation with Active and Passive Transport. <i>SIAM Journal on Applied Dynamical Systems</i> , 2016, 15, 1823-1843.	1.6	9
75	Stochastic Fokker-Planck equation in random environments. <i>Physical Review E</i> , 2016, 94, 042129.	2.1	13
76	Diffusion on a tree with stochastically gated nodes. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 245601.	2.1	19
77	Stochastic Network Models in Neuroscience: A Festschrift for Jack Cowan. Introduction to the Special Issue. <i>Journal of Mathematical Neuroscience</i> , 2016, 6, 4.	2.4	4
78	Phase Equation for Patterns of Orientation Selectivity in a Neural Field Model of Visual Cortex. <i>SIAM Journal on Applied Dynamical Systems</i> , 2016, 15, 60-83.	1.6	6
79	Aggregation-fragmentation model of vesicular transport in neurons. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 145601.	2.1	7
80	Quasicycles in the stochastic hybrid Morris-Lecar neural model. <i>Physical Review E</i> , 2015, 92, 012704.	2.1	17
81	Quasi-steady-state analysis of coupled flashing ratchets. <i>Physical Review E</i> , 2015, 92, 042129.	2.1	7
82	Stochastically gated diffusion-limited reactions for a small target in a bounded domain. <i>Physical Review E</i> , 2015, 92, 062117.	2.1	38
83	A frequency-dependent decoding mechanism for axonal length sensing. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 281.	3.7	8
84	Escape from a potential well with a randomly switching boundary. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 225001.	2.1	20
85	Escape from Subcellular Domains with Randomly Switching Boundaries. <i>Multiscale Modeling and Simulation</i> , 2015, 13, 1420-1445.	1.6	45
86	Nonlinear Langevin Equations for Wandering Patterns in Stochastic Neural Fields. <i>SIAM Journal on Applied Dynamical Systems</i> , 2015, 14, 305-334.	1.6	17
87	Moment equations for a piecewise deterministic PDE. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 105001.	2.1	36
88	Delayed Feedback Model of Axonal Length Sensing. <i>Biophysical Journal</i> , 2015, 108, 2408-2419.	0.5	16
89	Synaptic Democracy and Vesicular Transport in Axons. <i>Physical Review Letters</i> , 2015, 114, 168101.	7.8	20
90	Stochastic Active-Transport Model of Cell Polarization. <i>SIAM Journal on Applied Mathematics</i> , 2015, 75, 652-678.	1.8	12

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91	Path-Integral Methods for Analyzing the Effects of Fluctuations in Stochastic Hybrid Neural Networks. <i>Journal of Mathematical Neuroscience</i> , 2015, 5, 4.	2.4	25
92	Model of Growth Cone Membrane Polarization via Microtubule Length Regulation. <i>Biophysical Journal</i> , 2015, 109, 2203-2214.	0.5	8
93	Laminar Neural Field Model of Laterally Propagating Waves of Orientation Selectivity. <i>PLoS Computational Biology</i> , 2015, 11, e1004545.	3.2	14
94	Spatiotemporal Dynamics of Neural Fields on Product Spaces. <i>SIAM Journal on Applied Dynamical Systems</i> , 2014, 13, 1620-1653.	1.6	7
95	Path integrals and large deviations in stochastic hybrid systems. <i>Physical Review E</i> , 2014, 89, 042701.	2.1	45
96	Single Neuron Modeling. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 3-62.	0.4	0
97	Stochastic hybrid model of spontaneous dendritic NMDA spikes. <i>Physical Biology</i> , 2014, 11, 016006.	1.8	30
98	Wave Propagation Along Spiny Dendrites. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 101-136.	0.4	0
99	Waves in Neural Media. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , .	0.4	64
100	Isolation of rare recombinants without using selectable markers for one-step seamless BAC mutagenesis. <i>Nature Methods</i> , 2014, 11, 966-970.	19.0	11
101	Stochastic Processes in Cell Biology. <i>Interdisciplinary Applied Mathematics</i> , 2014, , .	0.3	210
102	Binocular rivalry waves in a directionally selective neural field model. <i>Physica D: Nonlinear Phenomena</i> , 2014, 285, 8-17.	2.8	2
103	First Passage Time Problems in Biophysical Jump Processes with Fast Kinetics. , 2014, , 277-305.		1
104	Traveling Waves in One-Dimensional Excitable Media. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 63-99.	0.4	9
105	Calcium Waves and Sparks. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 137-181.	0.4	1
106	Waves in Excitable Neural Fields. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 271-318.	0.4	3
107	Population Models and Neural Fields. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 233-269.	0.4	0
108	Waves in Synaptically Coupled Spiking Networks. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 185-231.	0.4	0

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109	Waves in the Developing and the Diseased Brain. Lecture Notes on Mathematical Modelling in the Life Sciences, 2014, , 349-404.	0.4	0
110	Neural Field Model of Binocular Rivalry Waves. Lecture Notes on Mathematical Modelling in the Life Sciences, 2014, , 319-345.	0.4	2
111	Stochastic Neural Field Theory. , 2014, , 235-268.		1
112	Transport Processes in Cells. Interdisciplinary Applied Mathematics, 2014, , 343-437.	0.3	0
113	Stochastic Ion Channels. Interdisciplinary Applied Mathematics, 2014, , 103-158.	0.3	0
114	Neural "Bubble" Dynamics Revisited. Cognitive Computation, 2013, 5, 281-294.	5.2	15
115	Dispersal and noise: Various modes of synchrony in ecological oscillators. Journal of Mathematical Biology, 2013, 67, 1669-1690.	1.9	4
116	Propagation of CaMKII translocation waves in heterogeneous spiny dendrites. Journal of Mathematical Biology, 2013, 66, 1499-1525.	1.9	15
117	Stochastic models of intracellular transport. Reviews of Modern Physics, 2013, 85, 135-196.	45.6	492
118	Breakdown of Fast-Slow Analysis in an Excitable System with Channel Noise. Physical Review Letters, 2013, 111, 128101.	7.8	54
119	The effects of noise on binocular rivalry waves: a stochastic neural field model. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P03001.	2.3	15
120	Metastability in a Stochastic Neural Network Modeled as a Velocity Jump Markov Process. SIAM Journal on Applied Dynamical Systems, 2013, 12, 1394-1435.	1.6	45
121	Stochastic Neural Field Theory. , 2013, , 1-6.		0
122	Filling of a Poisson trap by a population of random intermittent searchers. Physical Review E, 2012, 85, 031909.	2.1	6
123	From invasion to extinction in heterogeneous neural fields. Journal of Mathematical Neuroscience, 2012, 2, 6.	2.4	11
124	Front Propagation in Stochastic Neural Fields. SIAM Journal on Applied Dynamical Systems, 2012, 11, 708-740.	1.6	71
125	Two-pool model of cooperative vesicular transport. Physical Review E, 2012, 86, 031911.	2.1	3
126	Strong Recurrent Networks Compute the Orientation Tuning of Surround Modulation in the Primate Primary Visual Cortex. Journal of Neuroscience, 2012, 32, 308-321.	3.6	84

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127	Traveling pulses in a stochastic neural field model of direction selectivity. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 90.	2.1	10
128	Spatiotemporal dynamics of continuum neural fields. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 033001.	2.1	310
129	Neural field model of binocular rivalry waves. <i>Journal of Computational Neuroscience</i> , 2012, 32, 233-252.	1.0	52
130	Effects of Demographic Noise on the Synchronization of a Metapopulation in a Fluctuating Environment. <i>Physical Review Letters</i> , 2011, 107, 118102.	7.8	15
131	Two-Dimensional Bumps in Piecewise Smooth Neural Fields with Synaptic Depression. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 379-408.	1.8	28
132	Stochastic synchronization of neuronal populations with intrinsic and extrinsic noise. <i>Journal of Mathematical Neuroscience</i> , 2011, 1, 2.	2.4	26
133	Quasi-steady-state analysis of two-dimensional random intermittent search processes. <i>Physical Review E</i> , 2011, 83, 061139.	2.1	38
134	Effects of synaptic depression and adaptation on spatiotemporal dynamics of an excitatory neuronal network. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 547-560.	2.8	88
135	Quasi-steady State Reduction of Molecular Motor-Based Models of Directed Intermittent Search. <i>Bulletin of Mathematical Biology</i> , 2010, 72, 1840-1866.	1.9	81
136	A diffusion-activation model of CaMKII translocation waves in dendrites. <i>Journal of Computational Neuroscience</i> , 2010, 28, 77-89.	1.0	22
137	Spatially structured oscillations in a two-dimensional excitatory neuronal network with synaptic depression. <i>Journal of Computational Neuroscience</i> , 2010, 28, 193-209.	1.0	67
138	Stability of bumps in piecewise smooth neural fields with nonlinear adaptation. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 1048-1060.	2.8	34
139	Local synaptic signaling enhances the stochastic transport of motor-driven cargo in neurons. <i>Physical Biology</i> , 2010, 7, 036004.	1.8	42
140	Theory for the alignment of cortical feature maps during development. <i>Physical Review E</i> , 2010, 82, 021920.	2.1	4
141	Metastable states and quasicycles in a stochastic Wilson-Cowan model of neuronal population dynamics. <i>Physical Review E</i> , 2010, 82, 051903.	2.1	93
142	Stochastic Neural Field Theory and the System-Size Expansion. <i>SIAM Journal on Applied Mathematics</i> , 2010, 70, 1488-1521.	1.8	125
143	Binocular Rivalry in a Competitive Neural Network with Synaptic Depression. <i>SIAM Journal on Applied Dynamical Systems</i> , 2010, 9, 1303-1347.	1.6	43
144	Directed intermittent search for a hidden target on a dendritic tree. <i>Physical Review E</i> , 2009, 80, 021913.	2.1	33

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145	Cable theory of protein receptor trafficking in a dendritic tree. <i>Physical Review E</i> , 2009, 79, 041904.	2.1	16
146	Directed intermittent search for hidden targets. <i>New Journal of Physics</i> , 2009, 11, 023033.	2.9	27
147	A Dynamic Corral Model of Receptor Trafficking at a Synapse. <i>Biophysical Journal</i> , 2009, 96, 1786-1802.	0.5	29
148	Fluctuation-driven rhythmogenesis in an excitatory neuronal network with slow adaptation. <i>Journal of Computational Neuroscience</i> , 2008, 25, 317-333.	1.0	35
149	Modeling the role of lateral membrane diffusion in AMPA receptor trafficking along a spiny dendrite. <i>Journal of Computational Neuroscience</i> , 2008, 25, 366-389.	1.0	31
150	Diffusion of Protein Receptors on a Cylindrical Dendritic Membrane with Partially Absorbing Traps. <i>SIAM Journal on Applied Mathematics</i> , 2008, 68, 1223-1246.	1.8	55
151	Traveling Pulses and Wave Propagation Failure in Inhomogeneous Neural Media. <i>SIAM Journal on Applied Dynamical Systems</i> , 2008, 7, 161-185.	1.6	69
152	Nonlocal Ginzburg-Landau equation for cortical pattern formation. <i>Physical Review E</i> , 2008, 78, 041916.	2.1	19
153	Diffusion-trapping model of receptor trafficking in dendrites. <i>Physical Review E</i> , 2007, 75, 041915.	2.1	41
154	Response Facilitation From the "Suppressive" Receptive Field Surround of Macaque V1 Neurons. <i>Journal of Neurophysiology</i> , 2007, 98, 2168-2181.	1.8	89
155	The Role of Feedback in Shaping the Extra-Classical Receptive Field of Cortical Neurons: A Recurrent Network Model. <i>Journal of Neuroscience</i> , 2006, 26, 9117-9129.	3.6	167
156	Contribution of feedforward, lateral and feedback connections to the classical receptive field center and extra-classical receptive field surround of primate V1 neurons. <i>Progress in Brain Research</i> , 2006, 154, 93-120.	1.4	386
157	Biophysical Model of AMPA Receptor Trafficking and Its Regulation during Long-Term Potentiation/Long-Term Depression. <i>Journal of Neuroscience</i> , 2006, 26, 12362-12373.	3.6	81
158	Stochastic model of intraflagellar transport. <i>Physical Review E</i> , 2006, 73, 061916.	2.1	16
159	Stochastic model of protein receptor trafficking prior to synaptogenesis. <i>Physical Review E</i> , 2006, 74, 031910.	2.1	14
160	Course 11 Pattern formation in visual cortex. <i>Les Houches Summer School Proceedings</i> , 2005, 80, 477-574.	0.2	3
161	Inhomogeneity-induced bifurcation of stationary and oscillatory pulses. <i>Physica D: Nonlinear Phenomena</i> , 2005, 202, 177-199.	2.8	25
162	Spontaneous symmetry breaking in self-organizing neural fields. <i>Biological Cybernetics</i> , 2005, 93, 256-274.	1.3	25

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163	Breathers in Two-Dimensional Neural Media. <i>Physical Review Letters</i> , 2005, 95, 208107.	7.8	84
164	Stimulus-Locked Traveling Waves and Breathers in an Excitatory Neural Network. <i>SIAM Journal on Applied Mathematics</i> , 2005, 65, 2067-2092.	1.8	64
165	Weakly Interacting Pulses in Synaptically Coupled Neural Media. <i>SIAM Journal on Applied Mathematics</i> , 2005, 66, 57-81.	1.8	21
166	Breathing Pulses in an Excitatory Neural Network. <i>SIAM Journal on Applied Dynamical Systems</i> , 2004, 3, 378-407.	1.6	128
167	Front Bifurcations in an Excitatory Neural Network. <i>SIAM Journal on Applied Mathematics</i> , 2004, 65, 131-151.	1.8	49
168	The functional geometry of local and horizontal connections in a model of V1. <i>Journal of Physiology (Paris)</i> , 2003, 97, 221-236.	2.1	44
169	Spatially periodic modulation of cortical patterns by long-range horizontal connections. <i>Physica D: Nonlinear Phenomena</i> , 2003, 185, 131-157.	2.8	54
170	Saltatory Waves in the Spike-Diffuse-Spike Model of Active Dendritic Spines. <i>Physical Review Letters</i> , 2003, 91, 028102.	7.8	35
171	A spherical model for orientation and spatial frequency tuning in a cortical hypercolumn. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2003, 358, 1643-1667.	4.0	47
172	Oscillatory Waves in Inhomogeneous Neural Media. <i>Physical Review Letters</i> , 2003, 91, 178101.	7.8	60
173	Anatomical Substrates for Functional Columns in Macaque Monkey Primary Visual Cortex. <i>Cerebral Cortex</i> , 2003, 13, 15-24.	2.9	199
174	SO(3) Symmetry Breaking Mechanism for Orientation and Spatial Frequency Tuning in the Visual Cortex. <i>Physical Review Letters</i> , 2002, 88, 078102.	7.8	26
175	Bloch Waves, Periodic Feature Maps, and Cortical Pattern Formation. <i>Physical Review Letters</i> , 2002, 89, 088101.	7.8	41
176	An Amplitude Equation Approach to Contextual Effects in Visual Cortex. <i>Neural Computation</i> , 2002, 14, 493-525.	2.2	53
177	What Geometric Visual Hallucinations Tell Us about the Visual Cortex. <i>Neural Computation</i> , 2002, 14, 473-491.	2.2	181
178	The visual cortex as a crystal. <i>Physica D: Nonlinear Phenomena</i> , 2002, 173, 226-258.	2.8	54
179	Geometric visual hallucinations, Euclidean symmetry and the functional architecture of striate cortex. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2001, 356, 299-330.	4.0	335
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