

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
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205
all docs

205
docs citations

205
times ranked

3410
citing authors

#	ARTICLE	IF	CITATIONS
1	Stochastic models of intracellular transport. <i>Reviews of Modern Physics</i> , 2013, 85, 135-196.	45.6	492
2	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
3	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
4	Spatiotemporal dynamics of continuum neural fields. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2012, 45, 033001.	2.1	310
5	Stochastic Processes in Cell Biology. <i>Interdisciplinary Applied Mathematics</i> , 2014, , .	0.3	210
6	Anatomical Substrates for Functional Columns in Macaque Monkey Primary Visual Cortex. <i>Cerebral Cortex</i> , 2003, 13, 15-24.	2.9	199
7	Circuits and Mechanisms for Surround Modulation in Visual Cortex. <i>Annual Review of Neuroscience</i> , 2017, 40, 425-451.	10.7	190
8	What Geometric Visual Hallucinations Tell Us about the Visual Cortex. <i>Neural Computation</i> , 2002, 14, 473-491.	2.2	181
9	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
10	Breathing Pulses in an Excitatory Neural Network. <i>SIAM Journal on Applied Dynamical Systems</i> , 2004, 3, 378-407.	1.6	128
11	Stochastic Neural Field Theory and the System-Size Expansion. <i>SIAM Journal on Applied Mathematics</i> , 2010, 70, 1488-1521.	1.8	125
12	Dynamics of Strongly Coupled Spiking Neurons. <i>Neural Computation</i> , 2000, 12, 91-129.	2.2	124
13	Traveling fronts and wave propagation failure in an inhomogeneous neural network. <i>Physica D: Nonlinear Phenomena</i> , 2001, 155, 83-100.	2.8	122
14	Mode locking and Arnold tongues in integrate-and-fire neural oscillators. <i>Physical Review E</i> , 1999, 60, 2086-2096.	2.1	97
15	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
16	Response Facilitation From the "Suppressive" Receptive Field Surround of Macaque V1 Neurons. <i>Journal of Neurophysiology</i> , 2007, 98, 2168-2181.	1.8	89
17	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
18	Stochastic switching in biology: from genotype to phenotype. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 133001.	2.1	88

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19	Breathers in Two-Dimensional Neural Media. <i>Physical Review Letters</i> , 2005, 95, 208107.	7.8	84
20	Strong Recurrent Networks Compute the Orientation Tuning of Surround Modulation in the Primate Primary Visual Cortex. <i>Journal of Neuroscience</i> , 2012, 32, 308-321.	3.6	84
21	Dynamics of a Ring of Pulse-Coupled Oscillators: Group-Theoretic Approach. <i>Physical Review Letters</i> , 1997, 79, 2791-2794.	7.8	81
22	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
23	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
24	Front Propagation in Stochastic Neural Fields. <i>SIAM Journal on Applied Dynamical Systems</i> , 2012, 11, 708-740.	1.6	71
25	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
26	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
27	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
28	Waves in Neural Media. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , .	0.4	64
29	Synchrony in an Array of Integrate-and-Fire Neurons with Dendritic Structure. <i>Physical Review Letters</i> , 1997, 78, 4665-4668.	7.8	61
30	Physics of the Extended Neuron. <i>International Journal of Modern Physics B</i> , 1997, 11, 2343-2392.	2.0	60
31	Oscillatory Waves in Inhomogeneous Neural Media. <i>Physical Review Letters</i> , 2003, 91, 178101.	7.8	60
32	Traveling waves and pulses in a one-dimensional network of excitable integrate-and-fire neurons. <i>Journal of Mathematical Biology</i> , 2000, 40, 169-198.	1.9	58
33	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
34	Desynchronization, Mode Locking, and Bursting in Strongly Coupled Integrate-and-Fire Oscillators. <i>Physical Review Letters</i> , 1998, 81, 2168-2171.	7.8	54
35	The visual cortex as a crystal. <i>Physica D: Nonlinear Phenomena</i> , 2002, 173, 226-258.	2.8	54
36	Spatially periodic modulation of cortical patterns by long-range horizontal connections. <i>Physica D: Nonlinear Phenomena</i> , 2003, 185, 131-157.	2.8	54

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37	Breakdown of Fast-Slow Analysis in an Excitable System with Channel Noise. <i>Physical Review Letters</i> , 2013, 111, 128101.	7.8	54
38	An Amplitude Equation Approach to Contextual Effects in Visual Cortex. <i>Neural Computation</i> , 2002, 14, 493-525.	2.2	53
39	Synaptically Generated Wave Propagation in Excitable Neural Media. <i>Physical Review Letters</i> , 1999, 82, 2979-2982.	7.8	52
40	Mean-field theory of globally coupled integrate-and-fire neural oscillators with dynamic synapses. <i>Physical Review E</i> , 1999, 60, 2160-2170.	2.1	52
41	Neural field model of binocular rivalry waves. <i>Journal of Computational Neuroscience</i> , 2012, 32, 233-252.	1.0	52
42	Front Bifurcations in an Excitatory Neural Network. <i>SIAM Journal on Applied Mathematics</i> , 2004, 65, 131-151.	1.8	49
43	Traveling Waves in a Chain of Pulse-Coupled Oscillators. <i>Physical Review Letters</i> , 1998, 80, 4815-4818.	7.8	48
44	Scalar and pseudoscalar bifurcations motivated by pattern formation on the visual cortex. <i>Nonlinearity</i> , 2001, 14, 739-775.	1.4	48
45	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
46	Metastability in a Stochastic Neural Network Modeled as a Velocity Jump Markov Process. <i>SIAM Journal on Applied Dynamical Systems</i> , 2013, 12, 1394-1435.	1.6	45
47	Path integrals and large deviations in stochastic hybrid systems. <i>Physical Review E</i> , 2014, 89, 042701.	2.1	45
48	Escape from Subcellular Domains with Randomly Switching Boundaries. <i>Multiscale Modeling and Simulation</i> , 2015, 13, 1420-1445.	1.6	45
49	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
50	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
51	Local synaptic signaling enhances the stochastic transport of motor-driven cargo in neurons. <i>Physical Biology</i> , 2010, 7, 036004.	1.8	42
52	Bloch Waves, Periodic Feature Maps, and Cortical Pattern Formation. <i>Physical Review Letters</i> , 2002, 89, 088101.	7.8	41
53	Diffusion-trapping model of receptor trafficking in dendrites. <i>Physical Review E</i> , 2007, 75, 041915.	2.1	41
54	A Dynamical Theory of Spike Train Transitions in Networks of Integrate-and-Fire Oscillators. <i>SIAM Journal on Applied Mathematics</i> , 2000, 60, 820-841.	1.8	40

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55	Modeling active cellular transport as a directed search process with stochastic resetting and delays. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 355001.	2.1	39
56	Quasi-steady-state analysis of two-dimensional random intermittent search processes. <i>Physical Review E</i> , 2011, 83, 061139.	2.1	38
57	Stochastically gated diffusion-limited reactions for a small target in a bounded domain. <i>Physical Review E</i> , 2015, 92, 062117.	2.1	38
58	Moment equations for a piecewise deterministic PDE. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 105001.	2.1	36
59	Saltatory Waves in the Spike-Diffuse-Spike Model of Active Dendritic Spines. <i>Physical Review Letters</i> , 2003, 91, 028102.	7.8	35
60	Fluctuation-driven rhythmogenesis in an excitatory neuronal network with slow adaptation. <i>Journal of Computational Neuroscience</i> , 2008, 25, 317-333.	1.0	35
61	Stability of bumps in piecewise smooth neural fields with nonlinear adaptation. <i>Physica D: Nonlinear Phenomena</i> , 2010, 239, 1048-1060.	2.8	34
62	New Mechanism for Neural Pattern Formation. <i>Physical Review Letters</i> , 1996, 76, 4644-4647.	7.8	33
63	Directed intermittent search for a hidden target on a dendritic tree. <i>Physical Review E</i> , 2009, 80, 021913.	2.1	33
64	Directed intermittent search with stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 105001.	2.1	33
65	Dynamical Mechanism for Sharp Orientation Tuning in an Integrate-and-Fire Model of a Cortical Hypercolumn. <i>Neural Computation</i> , 2000, 12, 2473-2511.	2.2	32
66	Solitary Waves in a Model of Dendritic Cable with Active Spines. <i>SIAM Journal on Applied Mathematics</i> , 2000, 61, 432-453.	1.8	31
67	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
68	Spike Train Dynamics Underlying Pattern Formation in Integrate-and-Fire Oscillator Networks. <i>Physical Review Letters</i> , 1998, 81, 2384-2387.	7.8	30
69	Stochastic hybrid model of spontaneous dendritic NMDA spikes. <i>Physical Biology</i> , 2014, 11, 016006.	1.8	30
70	Random iterative networks. <i>Physical Review A</i> , 1990, 41, 1126-1137.	2.5	29
71	A Dynamic Corral Model of Receptor Trafficking at a Synapse. <i>Biophysical Journal</i> , 2009, 96, 1786-1802.	0.5	29
72	Search-and-capture model of cytoneme-mediated morphogen gradient formation. <i>Physical Review E</i> , 2019, 99, 052401.	2.1	29

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73	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
74	Dynamics of a compartmental model integrate-and-fire neuron with somatic potential reset. <i>Physica D: Nonlinear Phenomena</i> , 1995, 80, 399-412.	2.8	28
75	Resonantlike synchronization and bursting in a model of pulse-coupled neurons with active dendrites. <i>Journal of Computational Neuroscience</i> , 1999, 6, 237-249.	1.0	28
76	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
77	Diffusion in Cells with Stochastically Gated Gap Junctions. <i>SIAM Journal on Applied Mathematics</i> , 2016, 76, 1658-1682.	1.8	28
78	Directed intermittent search for hidden targets. <i>New Journal of Physics</i> , 2009, 11, 023033.	2.9	27
79	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
80	Stochastic synchronization of neuronal populations with intrinsic and extrinsic noise. <i>Journal of Mathematical Neuroscience</i> , 2011, 1, 2.	2.4	26
81	Inhomogeneity-induced bifurcation of stationary and oscillatory pulses. <i>Physica D: Nonlinear Phenomena</i> , 2005, 202, 177-199.	2.8	25
82	Spontaneous symmetry breaking in self-organizing neural fields. <i>Biological Cybernetics</i> , 2005, 93, 256-274.	1.3	25
83	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
84	Search processes with stochastic resetting and multiple targets. <i>Physical Review E</i> , 2020, 102, 022115.	2.1	24
85	Occupation time of a run-and-tumble particle with resetting. <i>Physical Review E</i> , 2020, 102, 042135.	2.1	24
86	Protein concentration gradients and switching diffusions. <i>Physical Review E</i> , 2019, 99, 032409.	2.1	23
87	A diffusion-activation model of CaMKII translocation waves in dendrites. <i>Journal of Computational Neuroscience</i> , 2010, 28, 77-89.	1.0	22
88	Search processes with stochastic resetting and partially absorbing targets. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 404004.	2.1	22
89	Weakly Interacting Pulses in Synaptically Coupled Neural Media. <i>SIAM Journal on Applied Mathematics</i> , 2005, 66, 57-81.	1.8	21
90	Diffusive search for a stochastically-gated target with resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 425001.	2.1	21

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91	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
92	Synaptic Democracy and Vesicular Transport in Axons. <i>Physical Review Letters</i> , 2015, 114, 168101.	7.8	20
93	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
94	Bidirectional transport model of morphogen gradient formation via cytonemes. <i>Physical Biology</i> , 2018, 15, 026010.	1.8	20
95	Compartmental-model response function for dendritic trees. <i>Biological Cybernetics</i> , 1993, 70, 199-207.	1.3	19
96	Nonlocal Ginzburg-Landau equation for cortical pattern formation. <i>Physical Review E</i> , 2008, 78, 041916.	2.1	19
97	Diffusion on a tree with stochastically gated nodes. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 245601.	2.1	19
98	A Variational Method for Analyzing Stochastic Limit Cycle Oscillators. <i>SIAM Journal on Applied Dynamical Systems</i> , 2018, 17, 2205-2233.	1.6	19
99	Diffusion-mediated surface reactions and stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022, 55, 275002.	2.1	19
100	Quasicycles in the stochastic hybrid Morris-Lecar neural model. <i>Physical Review E</i> , 2015, 92, 012704.	2.1	17
101	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
102	Temporal disorder as a mechanism for spatially heterogeneous diffusion. <i>Physical Review E</i> , 2017, 95, 060101.	2.1	17
103	Stochastic model of intraflagellar transport. <i>Physical Review E</i> , 2006, 73, 061916.	2.1	16
104	Cable theory of protein receptor trafficking in a dendritic tree. <i>Physical Review E</i> , 2009, 79, 041904.	2.1	16
105	Delayed Feedback Model of Axonal Length Sensing. <i>Biophysical Journal</i> , 2015, 108, 2408-2419.	0.5	16
106	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
107	Neural "Bubble" Dynamics Revisited. <i>Cognitive Computation</i> , 2013, 5, 281-294.	5.2	15
108	Propagation of CaMKII translocation waves in heterogeneous spiny dendrites. <i>Journal of Mathematical Biology</i> , 2013, 66, 1499-1525.	1.9	15

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109	The effects of noise on binocular rivalry waves: a stochastic neural field model. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2013, 2013, P03001.	2.3	15
110	Stochastic neural field model of stimulus-dependent variability in cortical neurons. <i>PLoS Computational Biology</i> , 2019, 15, e1006755.	3.2	15
111	Queueing theory of search processes with stochastic resetting. <i>Physical Review E</i> , 2020, 102, 032109.	2.1	15
112	Stochastic model of protein receptor trafficking prior to synaptogenesis. <i>Physical Review E</i> , 2006, 74, 031910.	2.1	14
113	Laminar Neural Field Model of Laterally Propagating Waves of Orientation Selectivity. <i>PLoS Computational Biology</i> , 2015, 11, e1004545.	3.2	14
114	Stochastic Fokker-Planck equation in random environments. <i>Physical Review E</i> , 2016, 94, 042129.	2.1	13
115	Effects of cell geometry on reversible vesicular transport. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 055601.	2.1	13
116	Stochastic Active-Transport Model of Cell Polarization. <i>SIAM Journal on Applied Mathematics</i> , 2015, 75, 652-678.	1.8	12
117	Switching diffusions and stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 275003.	2.1	12
118	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
119	From invasion to extinction in heterogeneous neural fields. <i>Journal of Mathematical Neuroscience</i> , 2012, 2, 6.	2.4	11
120	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
121	Model of reversible vesicular transport with exclusion. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 345602.	2.1	11
122	Dynamically Active Compartments Coupled by a Stochastically Gated Gap Junction. <i>Journal of Nonlinear Science</i> , 2017, 27, 1487-1512.	2.1	11
123	Hybrid colored noise process with space-dependent switching rates. <i>Physical Review E</i> , 2017, 96, 012129.	2.1	11
124	Stochastic Liouville equation for particles driven by dichotomous environmental noise. <i>Physical Review E</i> , 2017, 95, 012124.	2.1	11
125	Active suppression of Ostwald ripening: Beyond mean-field theory. <i>Physical Review E</i> , 2020, 101, 042804.	2.1	11
126	Accumulation time of stochastic processes with resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 354001.	2.1	11

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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	Ultrasensitivity and noise amplification in a model of V. harveyi quorum sensing. <i>Physical Review E</i> , 2016, 93, 062418.	2.1	10
129	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
130	Stochastic Hybrid Systems in Cellular Neuroscience. <i>Journal of Mathematical Neuroscience</i> , 2018, 8, 12.	2.4	10
131	Stochastic resetting and the mean-field dynamics of focal adhesions. <i>Physical Review E</i> , 2020, 102, 022134.	2.1	10
132	Narrow capture problem: An encounter-based approach to partially reactive targets. <i>Physical Review E</i> , 2022, 105, 034141.	2.1	10
133	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
134	Feynman-Kac formula for stochastic hybrid systems. <i>Physical Review E</i> , 2017, 95, 012138.	2.1	9
135	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
136	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
137	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
138	Traveling Waves in One-Dimensional Excitable Media. <i>Lecture Notes on Mathematical Modelling in the Life Sciences</i> , 2014, , 63-99.	0.4	9
139	Target competition for resources under multiple search-and-capture events with stochastic resetting. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2020, 476, 20200475.	2.1	9
140	A frequency-dependent decoding mechanism for axonal length sensing. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 281.	3.7	8
141	Model of Growth Cone Membrane Polarization via Microtubule Length Regulation. <i>Biophysical Journal</i> , 2015, 109, 2203-2214.	0.5	8
142	Spatiotemporal Dynamics of Neural Fields on Product Spaces. <i>SIAM Journal on Applied Dynamical Systems</i> , 2014, 13, 1620-1653.	1.6	7
143	Quasi-steady-state analysis of coupled flashing ratchets. <i>Physical Review E</i> , 2015, 92, 042129.	2.1	7
144	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

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145	Aggregation–fragmentation model of vesicular transport in neurons. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016, 49, 145601.	2.1	7
146	Stochastically gated local and occupation times of a Brownian particle. <i>Physical Review E</i> , 2017, 95, 012130.	2.1	7
147	Construction of stochastic hybrid path integrals using operator methods. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 185001.	2.1	7
148	Filling of a Poisson trap by a population of random intermittent searchers. <i>Physical Review E</i> , 2012, 85, 031909.	2.1	6
149	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
150	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
151	A variational method for analyzing limit cycle oscillations in stochastic hybrid systems. <i>Chaos</i> , 2018, 28, 063105.	2.5	6
152	Wandering bumps in a stochastic neural field: A variational approach. <i>Physica D: Nonlinear Phenomena</i> , 2020, 406, 132403.	2.8	6
153	Population Model of Quorum Sensing with Multiple Parallel Pathways. <i>Bulletin of Mathematical Biology</i> , 2017, 79, 2599-2626.	1.9	5
154	Synchronization of stochastic hybrid oscillators driven by a common switching environment. <i>Chaos</i> , 2018, 28, 123123.	2.5	5
155	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
156	Coherent spin states and stochastic hybrid path integrals. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2021, 2021, 043207.	2.3	5
157	Two-dimensional droplet ripening in a concentration gradient. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 365002.	2.1	5
158	Queuing model of axonal transport. <i>Brain Multiphysics</i> , 2021, 2, 100042.	2.3	5
159	Theory for the alignment of cortical feature maps during development. <i>Physical Review E</i> , 2010, 82, 021920.	2.1	4
160	Dispersal and noise: Various modes of synchrony in ecological oscillators. <i>Journal of Mathematical Biology</i> , 2013, 67, 1669-1690.	1.9	4
161	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
162	Diffusive transport in the presence of stochastically gated absorption. <i>Physical Review E</i> , 2017, 96, 022102.	2.1	4

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163	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
164	Impulsive signaling model of cytoneme-based morphogen gradient formation. <i>Physical Biology</i> , 2019, 16, 056005.	1.8	4
165	Propagation of Extrinsic Fluctuations in Biochemical Birth-Death Processes. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 800-829.	1.9	4
166	First-passage processes and the target-based accumulation of resources. <i>Physical Review E</i> , 2021, 103, 012101.	2.1	4
167	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
168	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
169	Course 11 Pattern formation in visual cortex. <i>Les Houches Summer School Proceedings</i> , 2005, 80, 477-574.	0.2	3
170	Two-pool model of cooperative vesicular transport. <i>Physical Review E</i> , 2012, 86, 031911.	2.1	3
171	On balance relations for irreversible chemical reaction networks. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017, 50, 475004.	2.1	3
172	Stochastic Turing Pattern Formation in a Model with Active and Passive Transport. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 144.	1.9	3
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