Markus Diesmann

List of Publications by Year
in descending order

177 papers	10,030 citations	66250 44 h-index	46524 93 g-index
194 all docs	194 docs citations	194 times ranked	6577 citing authors

#	Article	IF	Citations
1	Global organization of neuronal activity only requires unstructured local connectivity. ELife, 2022, 11, .	2.8	13
2	Sub-realtime simulation of a neuronal network of natural density. Neuromorphic Computing and Engineering, 2022, 2, 021001.	2.8	15
3	A Modular Workflow for Performance Benchmarking of Neuronal Network Simulations. Frontiers in Neuroinformatics, 2022, 16, .	1.3	6
4	Sequence learning, prediction, and replay in networks of spiking neurons. PLoS Computational Biology, 2022, 18, e1010233.	1.5	8
5	Unitary Event Analysis. , 2022, , 3489-3493.		0
6	NEST: The Neural Simulation Tool. , 2022, , 2187-2189.		0
7	Routing brain traffic through the von Neumann bottleneck: Efficient cache usage in spiking neural network simulation code on general purpose computers. Parallel Computing, 2022, 113, 102952.	1.3	6
8	Usage and Scaling of an Open-Source Spiking Multi-Area Model of Monkey Cortex. Lecture Notes in Computer Science, 2021, , 47-59.	1.0	5
9	Event-Based Update of Synapses in Voltage-Based Learning Rules. Frontiers in Neuroinformatics, 2021, 15, 609147.	1.3	2
10	NEST Desktop, an Educational Application for Neuroscience. ENeuro, 2021, 8, ENEURO.0274-21.2021.	0.9	4
11	Simulating the Cortical Microcircuit Significantly Faster Than Real Time on the IBM INC-3000 Neural Supercomputer. Frontiers in Neuroscience, 2021, 15, 728460.	1.4	8
12	Routing Brain Traffic Through the Von Neumann Bottleneck: Parallel Sorting and Refactoring. Frontiers in Neuroinformatics, 2021, 15, 785068.	1.3	7
13	Dynamical Characteristics of Recurrent Neuronal Networks Are Robust Against Low Synaptic Weight Resolution. Frontiers in Neuroscience, 2021, 15, 757790.	1.4	4
14	Efficient Communication in Distributed Simulations of Spiking Neuronal Networks With Gap Junctions. Frontiers in Neuroinformatics, 2020, 14, 12.	1.3	7
15	Conditions for wave trains in spiking neural networks. Physical Review Research, 2020, 2, .	1.3	15
16	Unitary Event Analysis. , 2020, , 1-5.		0
17	The speed of sequence processing in biological neuronal networks. , 2020, , .		0
18	Constraints on sequence processing speed in biological neuronal networks. , 2019, , .		2

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19	Reconstructing neuronal circuitry from parallel spike trains. Nature Communications, 2019, 10, 4468.	5.8	53
20	Second type of criticality in the brain uncovers rich multiple-neuron dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13051-13060.	3.3	67
21	The Scientific Case for Brain Simulations. Neuron, 2019, 102, 735-744.	3.8	123
22	Deterministic networks for probabilistic computing. Scientific Reports, 2019, 9, 18303.	1.6	10
23	NEST: The Neural Simulation Tool. , 2019, , 1-3.		0
24	LFP beta amplitude is linked to mesoscopic spatio-temporal phase patterns. Scientific Reports, 2018, 8, 5200.	1.6	45
25	Multi-scale account of the network structure of macaque visual cortex. Brain Structure and Function, 2018, 223, 1409-1435.	1.2	80
26	International Neuroscience Initiatives through the Lens of High-Performance Computing. Computer, 2018, 51, 50-59.	1.2	8
27	Computational Neuroscience: Mathematical and Statistical Perspectives. Annual Review of Statistics and Its Application, 2018, 5, 183-214.	4.1	48
28	A Model of Spatial Reach in LFP Recordings. Springer Series in Computational Neuroscience, 2018, , 509-533.	0.3	0
29	VIOLAâ€"A Multi-Purpose and Web-Based Visualization Tool for Neuronal-Network Simulation Output. Frontiers in Neuroinformatics, 2018, 12, 75.	1.3	12
30	A multi-scale layer-resolved spiking network model of resting-state dynamics in macaque visual cortical areas. PLoS Computational Biology, 2018, 14, e1006359.	1.5	91
31	Criteria on Balance, Stability, and Excitability in Cortical Networks for Constraining Computational Models. Frontiers in Computational Neuroscience, 2018, 12, 44.	1.2	1
32	Perfect Detection of Spikes in the Linear Sub-threshold Dynamics of Point Neurons. Frontiers in Neuroinformatics, 2018, 11, 75.	1.3	8
33	Extremely Scalable Spiking Neuronal Network Simulation Code: From Laptops to Exascale Computers. Frontiers in Neuroinformatics, 2018, 12, 2.	1.3	92
34	Performance Comparison of the Digital Neuromorphic Hardware SpiNNaker and the Neural Network Simulation Software NEST for a Full-Scale Cortical Microcircuit Model. Frontiers in Neuroscience, 2018, 12, 291.	1.4	100
35	Constructing Neuronal Network Models in Massively Parallel Environments. Frontiers in Neuroinformatics, 2017, 11, 30.	1.3	31
36	Integration of Continuous-Time Dynamics in a Spiking Neural Network Simulator. Frontiers in Neuroinformatics, 2017, 11, 34.	1.3	23

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37	Fundamental Activity Constraints Lead to Specific Interpretations of the Connectome. PLoS Computational Biology, 2017, 13, e1005179.	1.5	27
38	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. BMC Neuroscience, 2017, 18, .	0.8	7
39	A Collaborative Simulation-Analysis Workflow for Computational Neuroscience Using HPC. Lecture Notes in Computer Science, 2017, , 243-256.	1.0	11
40	Hybrid Scheme for Modeling Local Field Potentials from Point-Neuron Networks. Cerebral Cortex, 2016, 26, 4461-4496.	1.6	89
41	Reaction-diffusion-like formalism for plastic neural networks reveals dissipative solitons at criticality. Physical Review E, 2016, 93, 062303.	0.8	1
42	Effect of Heterogeneity on Decorrelation Mechanisms in Spiking Neural Networks: A Neuromorphic-Hardware Study. Physical Review X, 2016, 6, .	2.8	15
43	High-Performance Computing in Neuroscience for Data-Driven Discovery, Integration, and Dissemination. Neuron, 2016, 92, 628-631.	3.8	31
44	Dynamic effective connectivity in cortically embedded systems of recurrently coupled synfire chains. Journal of Computational Neuroscience, 2016, 40, 1-26.	0.6	5
45	Identifying Anatomical Origins of Coexisting Oscillations in the Cortical Microcircuit. PLoS Computational Biology, 2016, 12, e1005132.	1.5	36
46	Including Gap Junctions into Distributed Neuronal Network Simulations. Lecture Notes in Computer Science, 2016, , 43-57.	1.0	1
47	Hybrid scheme for modeling local field potentials from point-neuron networks. BMC Neuroscience, 2015, 16, .	0.8	7
48	Modulated escape from a metastable state driven by colored noise. Physical Review E, 2015, 92, 052119.	0.8	28
49	Deterministic neural networks as sources of uncorrelated noise for probabilistic computations. BMC Neuroscience, 2015, 16, .	0.8	2
50	Limits to the scalability of cortical network models. BMC Neuroscience, 2015, 16, .	0.8	0
51	Effective connectivity analysis explains metastable states of ongoing activity in cortically embedded systems of coupled synfire chains. BMC Neuroscience, 2015, 16, .	0.8	0
52	Functional consequences of non-equilibrium dynamics caused by antisymmetric and symmetric learning rules. BMC Neuroscience, 2015, 16, .	0.8	0
53	Identifying and exploiting the anatomical origin of population rate oscillations in multi-layered spiking networks. BMC Neuroscience, 2015, 16, .	0.8	0
54	Python in neuroscience. Frontiers in Neuroinformatics, 2015, 9, 11.	1.3	60

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55	A unified framework for spiking and gap-junction interactions in distributed neuronal network simulations. Frontiers in Neuroinformatics, 2015, 9, 22.	1.3	20
56	Scalability of Asynchronous Networks Is Limited by One-to-One Mapping between Effective Connectivity and Correlations. PLoS Computational Biology, 2015, 11, e1004490.	1.5	52
57	Efficient generation of connectivity in neuronal networks from simulator-independent descriptions. Frontiers in Neuroinformatics, 2014, 8, 43.	1.3	8
58	Spiking network simulation code for petascale computers. Frontiers in Neuroinformatics, 2014, 8, 78.	1.3	87
59	The Correlation Structure of Local Neuronal Networks Intrinsically Results from Recurrent Dynamics. PLoS Computational Biology, 2014, 10, e1003428.	1.5	91
60	The Cell-Type Specific Cortical Microcircuit: Relating Structure and Activity in a Full-Scale Spiking Network Model. Cerebral Cortex, 2014, 24, 785-806.	1.6	338
61	High-capacity embedding of synfire chains in a cortical network model. Journal of Computational Neuroscience, 2013, 34, 185-209.	0.6	21
62	Relating excess spike synchrony to LFP-locked firing rates modulations. BMC Neuroscience, 2013, 14, .	0.8	0
63	Recurrence and external sources differentially shape network correlations. BMC Neuroscience, 2013, 14, .	0.8	0
64	Hybrid scheme for modeling LFPs from spiking cortical network models. BMC Neuroscience, 2013, 14, .	0.8	0
65	How pattern formation in ring networks of excitatory and inhibitory spiking neurons depends on the input current regime. BMC Neuroscience, 2013, 14, .	0.8	5
66	Interactive visualization of brain-scale spiking activity. BMC Neuroscience, 2013, 14, .	0.8	0
67	Influence of different types of downscaling on a cortical microcircuit model. BMC Neuroscience, 2013, 14, .	0.8	1
68	Integrating multi-scale data for a network model of macaque visual cortex. BMC Neuroscience, 2013, 14, .	0.8	0
69	From laptops to supercomputers: a single highly scalable code base for spiking neuronal network simulations. BMC Neuroscience, 2013, 14, .	0.8	2
70	NMDA-receptor inhibition increases spine stability of denervated mouse dentate granule cells and accelerates spine density recovery following entorhinal denervation in vitro. Neurobiology of Disease, 2013, 59, 267-276.	2.1	31
71	Invariance of covariances arises out of noise. , 2013, , .		5
72	Noise Suppression and Surplus Synchrony by Coincidence Detection. PLoS Computational Biology, 2013, 9, e1002904.	1.5	13

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73	Echoes in correlated neural systems. New Journal of Physics, 2013, 15, 023002.	1.2	42
74	Spatial and Feature-Based Attention in a Layered Cortical Microcircuit Model. PLoS ONE, 2013, 8, e80788.	1.1	20
75	Compositionality in neural control: an interdisciplinary study of scribbling movements in primates. Frontiers in Computational Neuroscience, 2013, 7, 103.	1.2	11
76	A unified view on weakly correlated recurrent networks. Frontiers in Computational Neuroscience, 2013, 7, 131.	1.2	61
77	How pattern formation in ring networks of excitatory and inhibitory spiking neurons depends on the input current regime. Frontiers in Computational Neuroscience, 2013, 7, 187.	1.2	35
78	NEST: The Neural Simulation Tool. , 2013, , 1-4.		3
79	Complex Network Topology and Dynamics in Networks Supporting Precisely-Timed Activity Patterns. , 2013, , 317-322.		1
80	Multi-population Network Models of the Cortical Microcircuit. , 2013, , 91-96.		0
81	Spike-Timing Dependence of Structural Plasticity Explains Cooperative Synapse Formation in the Neocortex. PLoS Computational Biology, 2012, 8, e1002689.	1.5	42
82	Virtues, Pitfalls, and Methodology of Neuronal Network Modeling and Simulations on Supercomputers. , 2012, , 283-315.		18
83	Supercomputers Ready for Use as Discovery Machines for Neuroscience. Frontiers in Neuroinformatics, 2012, 6, 26.	1.3	50
84	CoCoMac 2.0 and the future of tract-tracing databases. Frontiers in Neuroinformatics, 2012, 6, 30.	1.3	140
85	Is a 4-Bit Synaptic Weight Resolution Enough? â€“ Constraints on Enabling Spike-Timing Dependent Plasticity in Neuromorphic Hardware. Frontiers in Neuroscience, 2012, 6, 90.	1.4	77
86	Detecting synfire chains in parallel spike data. Journal of Neuroscience Methods, 2012, 206, 54-64.	1.3	32
87	Decorrelation of Neural-Network Activity by Inhibitory Feedback. PLoS Computational Biology, 2012, 8, e1002596.	1.5	159
88	Spatial and feature-based attentional processing by top-down signals in a visual cortical layered microcircuit model. Neuroscience Research, 2011, 71, e175.	1.0	0
89	Modeling the Spatial Reach of the LFP. Neuron, 2011, 72, 859-872.	3.8	393
90	A Compositionality Machine Realized by a Hierarchic Architecture of Synfire Chains. Frontiers in Computational Neuroscience, 2011, 4, 154.	1.2	18

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91	Layer-Dependent Attentional Processing by Top-down Signals in a Visual Cortical Microcircuit Model. Frontiers in Computational Neuroscience, 2011, 5, 31.	1.2	32
92	Finite Post Synaptic Potentials Cause a Fast Neuronal Response. Frontiers in Neuroscience, 2011, 5, 19.	1.4	9
93	Multi-scale, multi-modal neural modeling and simulation. Neural Networks, 2011, 24, 917.	3.3	2
94	Compositionality of arm movements can be realized by propagating synchrony. Journal of Computational Neuroscience, 2011, 30, 675-697.	0.6	11
95	A reafferent and feed-forward model of song syntax generation in the Bengalese finch. Journal of Computational Neuroscience, 2011, 31, 509-532.	0.6	24
96	A comprehensive workflow for general-purpose neural modeling with highly configurable neuromorphic hardware systems. Biological Cybernetics, 2011, 104, 263-296.	0.6	72
97	Correlation transmission of spiking neurons is boosted by synchronous input. BMC Neuroscience, 2011, 12, .	0.8	0
98	Fail-safe detection of threshold crossings of linear integrate-and-fire neuron models in time-driven simulations. BMC Neuroscience, 2011, 12, .	0.8	1
99	The Local Field Potential Reflects Surplus Spike Synchrony. Cerebral Cortex, 2011, 21, 2681-2695.	1.6	130
100	An Imperfect Dopaminergic Error Signal Can Drive Temporal-Difference Learning. PLoS Computational Biology, 2011, 7, e1001133.	1.5	44
101	Meeting the Memory Challenges of Brain-Scale Network Simulation. Frontiers in Neuroinformatics, 2011, 5, 35.	1.3	42
102	Run-Time Interoperability Between Neuronal Network Simulators Based on the MUSIC Framework. Neuroinformatics, 2010, 8, 43-60.	1.5	88
103	Estimating the contribution of assembly activity to cortical dynamics from spike and population measures. Journal of Computational Neuroscience, 2010, 29, 599-613.	0.6	11
104	High storage capacity of synfire chains in large-scale cortical networks of conductance-based spiking neurons. BMC Neuroscience, 2010, 11, .	0.8	1
105	Decorrelation of low-frequency neural activity by inhibitory feedback. BMC Neuroscience, 2010, 11, .	0.8	4
106	Random wiring limits the development of functional structure in large recurrent neuronal networks. BMC Neuroscience, 2010, 11, .	0.8	4
107	A reafferent model of song syntax generation in the Bengalese finch. BMC Neuroscience, 2010, 11, .	0.8	3
108	Phase locking between excess spike synchrony and LFP is independent of rate covariation. BMC Neuroscience, 2010, 11, .	0.8	0

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109	Neurons hear their echo. BMC Neuroscience, 2010, 11, .	0.8	2
110	Equilibrium and response properties of the integrate-and-fire neuron in discrete time. Frontiers in Computational Neuroscience, 2010, 3, 29.	1.2	14
111	Surrogate spike train generation through dithering in operational time. Frontiers in Computational Neuroscience, 2010, 4, 127.	1.2	44
112	Enabling Functional Neural Circuit Simulations with Distributed Computing of Neuromodulated Plasticity. Frontiers in Computational Neuroscience, 2010, 4, 141.	1.2	29
113	Limits to the development of feed-forward structures in large recurrent neuronal networks. Frontiers in Computational Neuroscience, 2010, 4, 160.	1.2	35
114	A General and Efficient Method for Incorporating Precise Spike Times in Globally Time-Driven Simulations. Frontiers in Neuroinformatics, 2010, 4, 113.	1.3	49
115	Evoked Potentials in Motor Cortical Local Field Potentials Reflect Task Timing and Behavioral Performance. Journal of Neurophysiology, 2010, 104, 2338-2351.	0.9	22
116	Instantaneous Non-Linear Processing by Pulse-Coupled Threshold Units. PLoS Computational Biology, 2010, 6, e1000929.	1.5	28
117	Neural modulation of a realistic layered-microcircuit model of visual cortex based on bottom-up and top-down signals. Neuroscience Research, 2010, 68, e380.	1.0	0
118	Dependence of Spike-Count Correlations on Spike-Train Statistics and Observation TimeÂScale. , 2010, , 103-127.		1
119	Self-feedback shapes correlation functions. Neuroscience Research, 2010, 68, e106.	1.0	0
120	Estimating the spatial scale of local field potentials in a cortical population model. Neuroscience Research, 2010, 68, e212-e213.	1.0	0
121	Supercomputers as data integration facilities: brain-scale simulations. Neuroscience Research, 2010, 68, e31.	1.0	0
122	Unitary Event Analysis. , 2010, , 191-220.		10
123	Practically Trivial Parallel Data Processing in a Neuroscience Laboratory. , 2010, , 413-436.		6
124	Simplicity and Efficiency of Integrate-and-Fire Neuron Models. Neural Computation, 2009, 21, 353-359.	1.3	20
125	A Spiking Neural Network Model of an Actor-Critic Learning Agent. Neural Computation, 2009, 21, 301-339.	1.3	79
126	A spiking temporal-difference learning model based on dopamine-modulated plasticity. BMC Neuroscience, 2009, 10, .	0.8	2

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127	Implications of the specific cortical circuitry for the network dynamics of a layered cortical network model. BMC Neuroscience, 2009, 10, .	0.8	3
128	Estimating the spatial range of local field potentials in a cortical population model. BMC Neuroscience, 2009, 10, .	0.8	6
129	Finite synaptic potentials cause a non-linear instantaneous response of the integrate-and-fire model. BMC Neuroscience, 2009, 10, .	0.8	0
130	Estimating the contribution of assembly activity to cortical dynamics from spike and population measures. BMC Neuroscience, 2009, 10, .	0.8	0
131	An accretion based data mining algorithm for identification of sets of correlated neurons. BMC Neuroscience, 2009, 10, .	0.8	8
132	Bifurcation analysis of synchronization dynamics in cortical feed-forward networks in novel coordinates. BMC Neuroscience, 2009, 10, .	0.8	0
133	Synchronization and rate dynamics in embedded synfire chains: effect of network heterogeneity and feedback. BMC Neuroscience, 2009, 10, .	0.8	4
134	A model of free monkey scribbling based on the propagation of cell assembly activity. BMC Neuroscience, 2009, 10, .	0.8	2
135	The non-linear response of the integrate-and-fire neuron to finite synaptic potentials. Neuroscience Research, 2009, 65, S78.	1.0	0
136	Phenomenological models of synaptic plasticity based on spike timing. Biological Cybernetics, 2008, 98, 459-478.	0.6	455
137	Comparison of methods to calculate exact spike times in integrate-and-fire neurons with exponential currents. BMC Neuroscience, 2008, 9, .	0.8	1
138	Theory of neuronal spike densities for synchronous activity in cortical feed-forward networks. BMC Neuroscience, 2008, 9, P143.	0.8	1
139	Effectiveness of systematic spike dithering depends on the precision of cortical synchronization. Brain Research, 2008, 1225, 39-46.	1.1	30
140	Dependence of Neuronal Correlations on Filter Characteristics and Marginal Spike Train Statistics. Neural Computation, 2008, 20, 2133-2184.	1.3	69
141	Correlations and Population Dynamics in Cortical Networks. Neural Computation, 2008, 20, 2185-2226.	1.3	99
142	Detecting Synfire Chain Activity Using Massively Parallel Spike Train Recording. Journal of Neurophysiology, 2008, 100, 2165-2176.	0.9	73
143	Neural Dynamics in Cortical Networks - Precision of Joint-spiking Events. Novartis Foundation Symposium, 2008, 239, 193-207.	1.2	6
144	Structural plasticity controlled by calcium based correlation detection. Frontiers in Computational Neuroscience, 2008, 2, 7.	1.2	39

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145	PyNEST: A convenient interface to the NEST simulator. Frontiers in Neuroinformatics, 2008, 2, 12.	1.3	170
146	Impact of Higher-Order Correlations on Coincidence Distributions of Massively Parallel Data. Lecture Notes in Computer Science, 2008, , 96-114.	1.0	17
147	Efficient Parallel Simulation of Large-Scale Neuronal Networks on Clusters of Multiprocessor Computers. Lecture Notes in Computer Science, 2007, , 672-681.	1.0	50
148	Spike-Timing-Dependent Plasticity in Balanced Random Networks. Neural Computation, 2007, 19, 1437-1467.	1.3	284
149	Exact Subthreshold Integration with Continuous Spike Times in Discrete-Time Neural Network Simulations. Neural Computation, 2007, 19, 47-79.	1.3	101
150	Simulation of networks of spiking neurons: A review of tools and strategies. Journal of Computational Neuroscience, 2007, 23, 349-398.	0.6	639
151	Maintaining Causality in Discrete Time Neuronal Network Simulations. , 2007, , 267-278.		12
152	Bounds of the Ability to Destroy Precise Coincidences by Spike Dithering. , 2007, , 428-437.		7
153	NEST (NEural Simulation Tool). Scholarpedia Journal, 2007, 2, 1430.	0.3	831
154	Multithreaded and Distributed Simulation of Large Biological Neuronal Networks. Lecture Notes in Computer Science, 2007, , 391-392.	1.0	3
155	Programmable Logic Construction Kits for Hyper-Real-Time Neuronal Modeling. Neural Computation, 2006, 18, 2651-2679.	1.3	23
156	Advancing the Boundaries of High-Connectivity Network Simulation with Distributed Computing. Neural Computation, 2005, 17, 1776-1801.	1.3	161
157	Breaking Synchrony by Heterogeneity in Complex Networks. Physical Review Letters, 2004, 92, 074103.	2.9	75
158	Consequences of realistic network size on the stability of embedded synfire chains. Neurocomputing, 2004, 58-60, 117-121.	3.5	11
159	Activity dynamics and propagation of synchronous spiking in locally connected random networks. Biological Cybernetics, 2003, 88, 395-408.	0.6	149
160	Effect of cross-trial nonstationarity on joint-spike events. Biological Cybernetics, 2003, 88, 335-351.	0.6	43
161	The spread of rate and correlation in stationary cortical networks. Neurocomputing, 2003, 52-54, 949-954.	3.5	24
162	Significance of joint-spike events based on trial-shuffling by efficient combinatorial methods. Complexity, 2003, 8, 79-86.	0.9	18

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163	Unitary Events in Multiple Single-Neuron Spiking Activity: II. Nonstationary Data. Neural Computation, 2002, 14, 81-119.	1.3	146
164	The ground state of cortical feed-forward networks. Neurocomputing, 2002, 44-46, 673-678.	3.5	21
165	MEA-Tools: an open source toolbox for the analysis of multi-electrode data with matlab. Journal of Neuroscience Methods, 2002, 117, 33-42.	1.3	120
166	Unitary Events in Multiple Single-Neuron Spiking Activity: I. Detection and Significance. Neural Computation, 2002, 14, 43-80.	1.3	200
167	Propagation of cortical synfire activity: survival probability in single trials and stability in the mean. Neural Networks, 2001, 14, 657-673.	3.3	79
168	State space analysis of synchronous spiking in cortical neural networks. Neurocomputing, 2001, 38-40, 565-571.	3.5	23
169	Cortical synfire-activity: Configuration space and survival probability. Neurocomputing, 2001, 38-40, 621-626.	3.5	2
170	Dynamical changes and temporal precision of synchronized spiking activity in monkey motor cortex during movement preparation. Journal of Physiology (Paris), 2000, 94, 569-582.	2.1	68
171	Detecting unitary events without discretization of time. Journal of Neuroscience Methods, 1999, 94, 67-79.	1.3	85
172	Stable propagation of synchronous spiking in cortical neural networks. Nature, 1999, 402, 529-533.	13.7	889
173	Exact digital simulation of time-invariant linear systems with applications to neuronal modeling. Biological Cybernetics, 1999, 81, 381-402.	0.6	131
174	Spike Synchronization and Rate Modulation Differentially Involved in Motor Cortical Function. Science, 1997, 278, 1950-1953.	6.0	910
175	Propagation of synchronous spiking activity in feedforward neural networks. Journal of Physiology (Paris), 1996, 90, 243-247.	2.1	109
176	Simulating macroscale brain circuits with microscale resolution. Frontiers in Neuroinformatics, 0, 3, .	1.3	3
177	Modeling the local field potential by a large-scale layered cortical network model. Frontiers in Neuroinformatics, 0, 3, .	1.3	2