

# Markus Diesmann

## List of Publications by Year in descending order

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177  
papers

10,030  
citations

57758

44  
h-index

40979

93  
g-index

194  
all docs

194  
docs citations

194  
times ranked

5713  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spike Synchronization and Rate Modulation Differentially Involved in Motor Cortical Function. <i>Science</i> , 1997, 278, 1950-1953.	12.6	910
2	Stable propagation of synchronous spiking in cortical neural networks. <i>Nature</i> , 1999, 402, 529-533.	27.8	889
3	NEST (NEural Simulation Tool). <i>Scholarpedia Journal</i> , 2007, 2, 1430.	0.3	831
4	Simulation of networks of spiking neurons: A review of tools and strategies. <i>Journal of Computational Neuroscience</i> , 2007, 23, 349-398.	1.0	639
5	Phenomenological models of synaptic plasticity based on spike timing. <i>Biological Cybernetics</i> , 2008, 98, 459-478.	1.3	455
6	Modeling the Spatial Reach of the LFP. <i>Neuron</i> , 2011, 72, 859-872.	8.1	393
7	The Cell-Type Specific Cortical Microcircuit: Relating Structure and Activity in a Full-Scale Spiking Network Model. <i>Cerebral Cortex</i> , 2014, 24, 785-806.	2.9	338
8	Spike-Timing-Dependent Plasticity in Balanced Random Networks. <i>Neural Computation</i> , 2007, 19, 1437-1467.	2.2	284
9	Unitary Events in Multiple Single-Neuron Spiking Activity: I. Detection and Significance. <i>Neural Computation</i> , 2002, 14, 43-80.	2.2	200
10	PyNEST: A convenient interface to the NEST simulator. <i>Frontiers in Neuroinformatics</i> , 2008, 2, 12.	2.5	170
11	Advancing the Boundaries of High-Connectivity Network Simulation with Distributed Computing. <i>Neural Computation</i> , 2005, 17, 1776-1801.	2.2	161
12	Decorrelation of Neural-Network Activity by Inhibitory Feedback. <i>PLoS Computational Biology</i> , 2012, 8, e1002596.	3.2	159
13	Activity dynamics and propagation of synchronous spiking in locally connected random networks. <i>Biological Cybernetics</i> , 2003, 88, 395-408.	1.3	149
14	Unitary Events in Multiple Single-Neuron Spiking Activity: II. Nonstationary Data. <i>Neural Computation</i> , 2002, 14, 81-119.	2.2	146
15	CoCoMac 2.0 and the future of tract-tracing databases. <i>Frontiers in Neuroinformatics</i> , 2012, 6, 30.	2.5	140
16	Exact digital simulation of time-invariant linear systems with applications to neuronal modeling. <i>Biological Cybernetics</i> , 1999, 81, 381-402.	1.3	131
17	The Local Field Potential Reflects Surplus Spike Synchrony. <i>Cerebral Cortex</i> , 2011, 21, 2681-2695.	2.9	130
18	The Scientific Case for Brain Simulations. <i>Neuron</i> , 2019, 102, 735-744.	8.1	123

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19	MEA-Tools: an open source toolbox for the analysis of multi-electrode data with matlab. <i>Journal of Neuroscience Methods</i> , 2002, 117, 33-42.	2.5	120
20	Propagation of synchronous spiking activity in feedforward neural networks. <i>Journal of Physiology (Paris)</i> , 1996, 90, 243-247.	2.1	109
21	Exact Subthreshold Integration with Continuous Spike Times in Discrete-Time Neural Network Simulations. <i>Neural Computation</i> , 2007, 19, 47-79.	2.2	101
22	Performance Comparison of the Digital Neuromorphic Hardware SpiNNaker and the Neural Network Simulation Software NEST for a Full-Scale Cortical Microcircuit Model. <i>Frontiers in Neuroscience</i> , 2018, 12, 291.	2.8	100
23	Correlations and Population Dynamics in Cortical Networks. <i>Neural Computation</i> , 2008, 20, 2185-2226.	2.2	99
24	Extremely Scalable Spiking Neuronal Network Simulation Code: From Laptops to Exascale Computers. <i>Frontiers in Neuroinformatics</i> , 2018, 12, 2.	2.5	92
25	The Correlation Structure of Local Neuronal Networks Intrinsically Results from Recurrent Dynamics. <i>PLoS Computational Biology</i> , 2014, 10, e1003428.	3.2	91
26	A multi-scale layer-resolved spiking network model of resting-state dynamics in macaque visual cortical areas. <i>PLoS Computational Biology</i> , 2018, 14, e1006359.	3.2	91
27	Hybrid Scheme for Modeling Local Field Potentials from Point-Neuron Networks. <i>Cerebral Cortex</i> , 2016, 26, 4461-4496.	2.9	89
28	Run-Time Interoperability Between Neuronal Network Simulators Based on the MUSIC Framework. <i>Neuroinformatics</i> , 2010, 8, 43-60.	2.8	88
29	Spiking network simulation code for petascale computers. <i>Frontiers in Neuroinformatics</i> , 2014, 8, 78.	2.5	87
30	Detecting unitary events without discretization of time. <i>Journal of Neuroscience Methods</i> , 1999, 94, 67-79.	2.5	85
31	Multi-scale account of the network structure of macaque visual cortex. <i>Brain Structure and Function</i> , 2018, 223, 1409-1435.	2.3	80
32	Propagation of cortical synfire activity: survival probability in single trials and stability in the mean. <i>Neural Networks</i> , 2001, 14, 657-673.	5.9	79
33	A Spiking Neural Network Model of an Actor-Critic Learning Agent. <i>Neural Computation</i> , 2009, 21, 301-339.	2.2	79
34	Is a 4-Bit Synaptic Weight Resolution Enough? â€œ Constraints on Enabling Spike-Timing Dependent Plasticity in Neuromorphic Hardware. <i>Frontiers in Neuroscience</i> , 2012, 6, 90.	2.8	77
35	Breaking Synchrony by Heterogeneity in Complex Networks. <i>Physical Review Letters</i> , 2004, 92, 074103.	7.8	75
36	Detecting Synfire Chain Activity Using Massively Parallel Spike Train Recording. <i>Journal of Neurophysiology</i> , 2008, 100, 2165-2176.	1.8	73

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37	A comprehensive workflow for general-purpose neural modeling with highly configurable neuromorphic hardware systems. <i>Biological Cybernetics</i> , 2011, 104, 263-296.	1.3	72
38	Dependence of Neuronal Correlations on Filter Characteristics and Marginal Spike Train Statistics. <i>Neural Computation</i> , 2008, 20, 2133-2184.	2.2	69
39	Dynamical changes and temporal precision of synchronized spiking activity in monkey motor cortex during movement preparation. <i>Journal of Physiology (Paris)</i> , 2000, 94, 569-582.	2.1	68
40	Second type of criticality in the brain uncovers rich multiple-neuron dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13051-13060.	7.1	67
41	A unified view on weakly correlated recurrent networks. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 131.	2.1	61
42	Python in neuroscience. <i>Frontiers in Neuroinformatics</i> , 2015, 9, 11.	2.5	60
43	Reconstructing neuronal circuitry from parallel spike trains. <i>Nature Communications</i> , 2019, 10, 4468.	12.8	53
44	Scalability of Asynchronous Networks Is Limited by One-to-One Mapping between Effective Connectivity and Correlations. <i>PLoS Computational Biology</i> , 2015, 11, e1004490.	3.2	52
45	Efficient Parallel Simulation of Large-Scale Neuronal Networks on Clusters of Multiprocessor Computers. <i>Lecture Notes in Computer Science</i> , 2007, , 672-681.	1.3	50
46	Supercomputers Ready for Use as Discovery Machines for Neuroscience. <i>Frontiers in Neuroinformatics</i> , 2012, 6, 26.	2.5	50
47	A General and Efficient Method for Incorporating Precise Spike Times in Globally Time-Driven Simulations. <i>Frontiers in Neuroinformatics</i> , 2010, 4, 113.	2.5	49
48	Computational Neuroscience: Mathematical and Statistical Perspectives. <i>Annual Review of Statistics and Its Application</i> , 2018, 5, 183-214.	7.0	48
49	LFP beta amplitude is linked to mesoscopic spatio-temporal phase patterns. <i>Scientific Reports</i> , 2018, 8, 5200.	3.3	45
50	Surrogate spike train generation through dithering in operational time. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 127.	2.1	44
51	An Imperfect Dopaminergic Error Signal Can Drive Temporal-Difference Learning. <i>PLoS Computational Biology</i> , 2011, 7, e1001133.	3.2	44
52	Effect of cross-trial nonstationarity on joint-spike events. <i>Biological Cybernetics</i> , 2003, 88, 335-351.	1.3	43
53	Spike-Timing Dependence of Structural Plasticity Explains Cooperative Synapse Formation in the Neocortex. <i>PLoS Computational Biology</i> , 2012, 8, e1002689.	3.2	42
54	Meeting the Memory Challenges of Brain-Scale Network Simulation. <i>Frontiers in Neuroinformatics</i> , 2011, 5, 35.	2.5	42

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55	Echoes in correlated neural systems. <i>New Journal of Physics</i> , 2013, 15, 023002.	2.9	42
56	Structural plasticity controlled by calcium based correlation detection. <i>Frontiers in Computational Neuroscience</i> , 2008, 2, 7.	2.1	39
57	Identifying Anatomical Origins of Coexisting Oscillations in the Cortical Microcircuit. <i>PLoS Computational Biology</i> , 2016, 12, e1005132.	3.2	36
58	Limits to the development of feed-forward structures in large recurrent neuronal networks. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 160.	2.1	35
59	How pattern formation in ring networks of excitatory and inhibitory spiking neurons depends on the input current regime. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 187.	2.1	35
60	Layer-Dependent Attentional Processing by Top-down Signals in a Visual Cortical Microcircuit Model. <i>Frontiers in Computational Neuroscience</i> , 2011, 5, 31.	2.1	32
61	Detecting synfire chains in parallel spike data. <i>Journal of Neuroscience Methods</i> , 2012, 206, 54-64.	2.5	32
62	NMDA-receptor inhibition increases spine stability of denervated mouse dentate granule cells and accelerates spine density recovery following entorhinal denervation in vitro. <i>Neurobiology of Disease</i> , 2013, 59, 267-276.	4.4	31
63	High-Performance Computing in Neuroscience for Data-Driven Discovery, Integration, and Dissemination. <i>Neuron</i> , 2016, 92, 628-631.	8.1	31
64	Constructing Neuronal Network Models in Massively Parallel Environments. <i>Frontiers in Neuroinformatics</i> , 2017, 11, 30.	2.5	31
65	Effectiveness of systematic spike dithering depends on the precision of cortical synchronization. <i>Brain Research</i> , 2008, 1225, 39-46.	2.2	30
66	Enabling Functional Neural Circuit Simulations with Distributed Computing of Neuromodulated Plasticity. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 141.	2.1	29
67	Instantaneous Non-Linear Processing by Pulse-Coupled Threshold Units. <i>PLoS Computational Biology</i> , 2010, 6, e1000929.	3.2	28
68	Modulated escape from a metastable state driven by colored noise. <i>Physical Review E</i> , 2015, 92, 052119.	2.1	28
69	Fundamental Activity Constraints Lead to Specific Interpretations of the Connectome. <i>PLoS Computational Biology</i> , 2017, 13, e1005179.	3.2	27
70	The spread of rate and correlation in stationary cortical networks. <i>Neurocomputing</i> , 2003, 52-54, 949-954.	5.9	24
71	A refferent and feed-forward model of song syntax generation in the Bengalese finch. <i>Journal of Computational Neuroscience</i> , 2011, 31, 509-532.	1.0	24
72	State space analysis of synchronous spiking in cortical neural networks. <i>Neurocomputing</i> , 2001, 38-40, 565-571.	5.9	23

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73	Programmable Logic Construction Kits for Hyper-Real-Time Neuronal Modeling. <i>Neural Computation</i> , 2006, 18, 2651-2679.	2.2	23
74	Integration of Continuous-Time Dynamics in a Spiking Neural Network Simulator. <i>Frontiers in Neuroinformatics</i> , 2017, 11, 34.	2.5	23
75	Evoked Potentials in Motor Cortical Local Field Potentials Reflect Task Timing and Behavioral Performance. <i>Journal of Neurophysiology</i> , 2010, 104, 2338-2351.	1.8	22
76	The ground state of cortical feed-forward networks. <i>Neurocomputing</i> , 2002, 44-46, 673-678.	5.9	21
77	High-capacity embedding of synfire chains in a cortical network model. <i>Journal of Computational Neuroscience</i> , 2013, 34, 185-209.	1.0	21
78	Simplicity and Efficiency of Integrate-and-Fire Neuron Models. <i>Neural Computation</i> , 2009, 21, 353-359.	2.2	20
79	Spatial and Feature-Based Attention in a Layered Cortical Microcircuit Model. <i>PLoS ONE</i> , 2013, 8, e80788.	2.5	20
80	A unified framework for spiking and gap-junction interactions in distributed neuronal network simulations. <i>Frontiers in Neuroinformatics</i> , 2015, 9, 22.	2.5	20
81	Significance of joint-spike events based on trial-shuffling by efficient combinatorial methods. <i>Complexity</i> , 2003, 8, 79-86.	1.6	18
82	A Compositionality Machine Realized by a Hierarchic Architecture of Synfire Chains. <i>Frontiers in Computational Neuroscience</i> , 2011, 4, 154.	2.1	18
83	Virtues, Pitfalls, and Methodology of Neuronal Network Modeling and Simulations on Supercomputers. , 2012, , 283-315.		18
84	Impact of Higher-Order Correlations on Coincidence Distributions of Massively Parallel Data. <i>Lecture Notes in Computer Science</i> , 2008, , 96-114.	1.3	17
85	Effect of Heterogeneity on Decorrelation Mechanisms in Spiking Neural Networks: A Neuromorphic-Hardware Study. <i>Physical Review X</i> , 2016, 6, .	8.9	15
86	Conditions for wave trains in spiking neural networks. <i>Physical Review Research</i> , 2020, 2, .	3.6	15
87	Sub-realtime simulation of a neuronal network of natural density. <i>Neuromorphic Computing and Engineering</i> , 2022, 2, 021001.	5.9	15
88	Equilibrium and response properties of the integrate-and-fire neuron in discrete time. <i>Frontiers in Computational Neuroscience</i> , 2010, 3, 29.	2.1	14
89	Noise Suppression and Surplus Synchrony by Coincidence Detection. <i>PLoS Computational Biology</i> , 2013, 9, e1002904.	3.2	13
90	Global organization of neuronal activity only requires unstructured local connectivity. <i>ELife</i> , 2022, 11, .	6.0	13

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91	VIOLA – A Multi-Purpose and Web-Based Visualization Tool for Neuronal-Network Simulation Output. <i>Frontiers in Neuroinformatics</i> , 2018, 12, 75.	2.5	12
92	Maintaining Causality in Discrete Time Neuronal Network Simulations. , 2007, , 267-278.		12
93	Consequences of realistic network size on the stability of embedded synfire chains. <i>Neurocomputing</i> , 2004, 58-60, 117-121.	5.9	11
94	Estimating the contribution of assembly activity to cortical dynamics from spike and population measures. <i>Journal of Computational Neuroscience</i> , 2010, 29, 599-613.	1.0	11
95	Compositionality of arm movements can be realized by propagating synchrony. <i>Journal of Computational Neuroscience</i> , 2011, 30, 675-697.	1.0	11
96	Compositionality in neural control: an interdisciplinary study of scribbling movements in primates. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 103.	2.1	11
97	A Collaborative Simulation-Analysis Workflow for Computational Neuroscience Using HPC. <i>Lecture Notes in Computer Science</i> , 2017, , 243-256.	1.3	11
98	Deterministic networks for probabilistic computing. <i>Scientific Reports</i> , 2019, 9, 18303.	3.3	10
99	Unitary Event Analysis. , 2010, , 191-220.		10
100	Finite Post Synaptic Potentials Cause a Fast Neuronal Response. <i>Frontiers in Neuroscience</i> , 2011, 5, 19.	2.8	9
101	An accretion based data mining algorithm for identification of sets of correlated neurons. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	8
102	Efficient generation of connectivity in neuronal networks from simulator-independent descriptions. <i>Frontiers in Neuroinformatics</i> , 2014, 8, 43.	2.5	8
103	International Neuroscience Initiatives through the Lens of High-Performance Computing. <i>Computer</i> , 2018, 51, 50-59.	1.1	8
104	Perfect Detection of Spikes in the Linear Sub-threshold Dynamics of Point Neurons. <i>Frontiers in Neuroinformatics</i> , 2018, 11, 75.	2.5	8
105	Simulating the Cortical Microcircuit Significantly Faster Than Real Time on the IBM INC-3000 Neural Supercomputer. <i>Frontiers in Neuroscience</i> , 2021, 15, 728460.	2.8	8
106	Sequence learning, prediction, and replay in networks of spiking neurons. <i>PLoS Computational Biology</i> , 2022, 18, e1010233.	3.2	8
107	Hybrid scheme for modeling local field potentials from point-neuron networks. <i>BMC Neuroscience</i> , 2015, 16, .	1.9	7
108	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. <i>BMC Neuroscience</i> , 2017, 18, .	1.9	7

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109	Efficient Communication in Distributed Simulations of Spiking Neuronal Networks With Gap Junctions. <i>Frontiers in Neuroinformatics</i> , 2020, 14, 12.	2.5	7
110	Bounds of the Ability to Destroy Precise Coincidences by Spike Dithering. , 2007, , 428-437.		7
111	Routing Brain Traffic Through the Von Neumann Bottleneck: Parallel Sorting and Refactoring. <i>Frontiers in Neuroinformatics</i> , 2021, 15, 785068.	2.5	7
112	Neural Dynamics in Cortical Networks - Precision of Joint-spiking Events. <i>Novartis Foundation Symposium</i> , 2008, 239, 193-207.	1.1	6
113	Estimating the spatial range of local field potentials in a cortical population model. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	6
114	Practically Trivial Parallel Data Processing in a Neuroscience Laboratory. , 2010, , 413-436.		6
115	A Modular Workflow for Performance Benchmarking of Neuronal Network Simulations. <i>Frontiers in Neuroinformatics</i> , 2022, 16, .	2.5	6
116	Routing brain traffic through the von Neumann bottleneck: Efficient cache usage in spiking neural network simulation code on general purpose computers. <i>Parallel Computing</i> , 2022, 113, 102952.	2.1	6
117	How pattern formation in ring networks of excitatory and inhibitory spiking neurons depends on the input current regime. <i>BMC Neuroscience</i> , 2013, 14, .	1.9	5
118	Invariance of covariances arises out of noise. , 2013, , .		5
119	Dynamic effective connectivity in cortically embedded systems of recurrently coupled synfire chains. <i>Journal of Computational Neuroscience</i> , 2016, 40, 1-26.	1.0	5
120	Usage and Scaling of an Open-Source Spiking Multi-Area Model of Monkey Cortex. <i>Lecture Notes in Computer Science</i> , 2021, , 47-59.	1.3	5
121	Synchronization and rate dynamics in embedded synfire chains: effect of network heterogeneity and feedback. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	4
122	Decorrelation of low-frequency neural activity by inhibitory feedback. <i>BMC Neuroscience</i> , 2010, 11, .	1.9	4
123	Random wiring limits the development of functional structure in large recurrent neuronal networks. <i>BMC Neuroscience</i> , 2010, 11, .	1.9	4
124	NEST Desktop, an Educational Application for Neuroscience. <i>ENeuro</i> , 2021, 8, ENEURO.0274-21.2021.	1.9	4
125	Dynamical Characteristics of Recurrent Neuronal Networks Are Robust Against Low Synaptic Weight Resolution. <i>Frontiers in Neuroscience</i> , 2021, 15, 757790.	2.8	4
126	Implications of the specific cortical circuitry for the network dynamics of a layered cortical network model. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	3

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127	A reafferent model of song syntax generation in the Bengalese finch. BMC Neuroscience, 2010, 11, .	1.9	3
128	NEST: The Neural Simulation Tool. , 2013, , 1-4.		3
129	Simulating macroscale brain circuits with microscale resolution. Frontiers in Neuroinformatics, 0, 3, .	2.5	3
130	Multithreaded and Distributed Simulation of Large Biological Neuronal Networks. Lecture Notes in Computer Science, 2007, , 391-392.	1.3	3
131	Cortical synfire-activity: Configuration space and survival probability. Neurocomputing, 2001, 38-40, 621-626.	5.9	2
132	A spiking temporal-difference learning model based on dopamine-modulated plasticity. BMC Neuroscience, 2009, 10, .	1.9	2
133	A model of free monkey scribbling based on the propagation of cell assembly activity. BMC Neuroscience, 2009, 10, .	1.9	2
134	Neurons hear their echo. BMC Neuroscience, 2010, 11, .	1.9	2
135	Multi-scale, multi-modal neural modeling and simulation. Neural Networks, 2011, 24, 917.	5.9	2
136	From laptops to supercomputers: a single highly scalable code base for spiking neuronal network simulations. BMC Neuroscience, 2013, 14, .	1.9	2
137	Deterministic neural networks as sources of uncorrelated noise for probabilistic computations. BMC Neuroscience, 2015, 16, .	1.9	2
138	Constraints on sequence processing speed in biological neuronal networks. , 2019, , .		2
139	Event-Based Update of Synapses in Voltage-Based Learning Rules. Frontiers in Neuroinformatics, 2021, 15, 609147.	2.5	2
140	Modeling the local field potential by a large-scale layered cortical network model. Frontiers in Neuroinformatics, 0, 3, .	2.5	2
141	Comparison of methods to calculate exact spike times in integrate-and-fire neurons with exponential currents. BMC Neuroscience, 2008, 9, .	1.9	1
142	Theory of neuronal spike densities for synchronous activity in cortical feed-forward networks. BMC Neuroscience, 2008, 9, P143.	1.9	1
143	High storage capacity of synfire chains in large-scale cortical networks of conductance-based spiking neurons. BMC Neuroscience, 2010, 11, .	1.9	1
144	Dependence of Spike-Count Correlations on Spike-Train Statistics and Observation TimeÂScale. , 2010, , 103-127.		1

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145	Fail-safe detection of threshold crossings of linear integrate-and-fire neuron models in time-driven simulations. BMC Neuroscience, 2011, 12, .	1.9	1
146	Influence of different types of downscaling on a cortical microcircuit model. BMC Neuroscience, 2013, 14, .	1.9	1
147	Reaction-diffusion-like formalism for plastic neural networks reveals dissipative solitons at criticality. Physical Review E, 2016, 93, 062303.	2.1	1
148	Criteria on Balance, Stability, and Excitability in Cortical Networks for Constraining Computational Models. Frontiers in Computational Neuroscience, 2018, 12, 44.	2.1	1
149	Complex Network Topology and Dynamics in Networks Supporting Precisely-Timed Activity Patterns. , 2013, , 317-322.		1
150	Including Gap Junctions into Distributed Neuronal Network Simulations. Lecture Notes in Computer Science, 2016, , 43-57.	1.3	1
151	Finite synaptic potentials cause a non-linear instantaneous response of the integrate-and-fire model. BMC Neuroscience, 2009, 10, .	1.9	0
152	Estimating the contribution of assembly activity to cortical dynamics from spike and population measures. BMC Neuroscience, 2009, 10, .	1.9	0
153	Bifurcation analysis of synchronization dynamics in cortical feed-forward networks in novel coordinates. BMC Neuroscience, 2009, 10, .	1.9	0
154	The non-linear response of the integrate-and-fire neuron to finite synaptic potentials. Neuroscience Research, 2009, 65, S78.	1.9	0
155	Phase locking between excess spike synchrony and LFP is independent of rate covariation. BMC Neuroscience, 2010, 11, .	1.9	0
156	Neural modulation of a realistic layered-microcircuit model of visual cortex based on bottom-up and top-down signals. Neuroscience Research, 2010, 68, e380.	1.9	0
157	Self-feedback shapes correlation functions. Neuroscience Research, 2010, 68, e106.	1.9	0
158	Estimating the spatial scale of local field potentials in a cortical population model. Neuroscience Research, 2010, 68, e212-e213.	1.9	0
159	Supercomputers as data integration facilities: brain-scale simulations. Neuroscience Research, 2010, 68, e31.	1.9	0
160	Spatial and feature-based attentional processing by top-down signals in a visual cortical layered microcircuit model. Neuroscience Research, 2011, 71, e175.	1.9	0
161	Correlation transmission of spiking neurons is boosted by synchronous input. BMC Neuroscience, 2011, 12, .	1.9	0
162	Relating excess spike synchrony to LFP-locked firing rates modulations. BMC Neuroscience, 2013, 14, .	1.9	0

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163	Recurrence and external sources differentially shape network correlations. BMC Neuroscience, 2013, 14, .	1.9	0
164	Hybrid scheme for modeling LFPs from spiking cortical network models. BMC Neuroscience, 2013, 14, .	1.9	0
165	Interactive visualization of brain-scale spiking activity. BMC Neuroscience, 2013, 14, .	1.9	0
166	Integrating multi-scale data for a network model of macaque visual cortex. BMC Neuroscience, 2013, 14, .	1.9	0
167	Limits to the scalability of cortical network models. BMC Neuroscience, 2015, 16, .	1.9	0
168	Effective connectivity analysis explains metastable states of ongoing activity in cortically embedded systems of coupled synfire chains. BMC Neuroscience, 2015, 16, .	1.9	0
169	Functional consequences of non-equilibrium dynamics caused by antisymmetric and symmetric learning rules. BMC Neuroscience, 2015, 16, .	1.9	0
170	Identifying and exploiting the anatomical origin of population rate oscillations in multi-layered spiking networks. BMC Neuroscience, 2015, 16, .	1.9	0
171	A Model of Spatial Reach in LFP Recordings. Springer Series in Computational Neuroscience, 2018, , 509-533.	0.3	0
172	Multi-population Network Models of the Cortical Microcircuit. , 2013, , 91-96.		0
173	NEST: The Neural Simulation Tool. , 2019, , 1-3.		0
174	Unitary Event Analysis. , 2020, , 1-5.		0
175	The speed of sequence processing in biological neuronal networks. , 2020, , .		0
176	Unitary Event Analysis. , 2022, , 3489-3493.		0
177	NEST: The Neural Simulation Tool. , 2022, , 2187-2189.		0