

Tom Tetzlaff

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/380165/publications.pdf>

Version: 2024-02-01

46
papers

1,511
citations

567281

15
h-index

377865

34
g-index

47
all docs

47
docs citations

47
times ranked

1630
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling the Spatial Reach of the LFP. <i>Neuron</i> , 2011, 72, 859-872.	8.1	393
2	Decorrelation of Neural-Network Activity by Inhibitory Feedback. <i>PLoS Computational Biology</i> , 2012, 8, e1002596.	3.2	159
3	Frequency Dependence of Signal Power and Spatial Reach of the Local Field Potential. <i>PLoS Computational Biology</i> , 2013, 9, e1003137.	3.2	133
4	Correlations and Population Dynamics in Cortical Networks. <i>Neural Computation</i> , 2008, 20, 2185-2226.	2.2	99
5	The Correlation Structure of Local Neuronal Networks Intrinsically Results from Recurrent Dynamics. <i>PLoS Computational Biology</i> , 2014, 10, e1003428.	3.2	91
6	Hybrid Scheme for Modeling Local Field Potentials from Point-Neuron Networks. <i>Cerebral Cortex</i> , 2016, 26, 4461-4496.	2.9	89
7	Dependence of Neuronal Correlations on Filter Characteristics and Marginal Spike Train Statistics. <i>Neural Computation</i> , 2008, 20, 2133-2184.	2.2	69
8	A unified view on weakly correlated recurrent networks. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 131.	2.1	61
9	Dynamical Response Properties of Neocortical Neuron Ensembles: Multiplicative versus Additive Noise. <i>Journal of Neuroscience</i> , 2009, 29, 1006-1010.	3.6	56
10	Echoes in correlated neural systems. <i>New Journal of Physics</i> , 2013, 15, 023002.	2.9	42
11	Dynamics of self-sustained asynchronous-irregular activity in random networks of spiking neurons with strong synapses. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 136.	2.1	38
12	Power Laws from Linear Neuronal Cable Theory: Power Spectral Densities of the Soma Potential, Soma Membrane Current and Single-Neuron Contribution to the EEG. <i>PLoS Computational Biology</i> , 2014, 10, e1003928.	3.2	38
13	The variability of tidewater-glacier calving: Origin of event-size and interval distributions. <i>Journal of Glaciology</i> , 2014, 60, 622-634.	2.2	27
14	The spread of rate and correlation in stationary cortical networks. <i>Neurocomputing</i> , 2003, 52-54, 949-954.	5.9	24
15	The ground state of cortical feed-forward networks. <i>Neurocomputing</i> , 2002, 44-46, 673-678.	5.9	21
16	Rate dynamics of leaky integrate-and-fire neurons with strong synapses. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 149.	2.1	20
17	Firing-rate models capture essential response dynamics of LGN relay cells. <i>Journal of Computational Neuroscience</i> , 2013, 35, 359-375.	1.0	16
18	Effect of Heterogeneity on Decorrelation Mechanisms in Spiking Neural Networks: A Neuromorphic-Hardware Study. <i>Physical Review X</i> , 2016, 6, .	8.9	15

#	ARTICLE	IF	CITATIONS
19	Conditions for wave trains in spiking neural networks. <i>Physical Review Research</i> , 2020, 2, .	3.6	15
20	Homologous Basal Ganglia Network Models in Physiological and Parkinsonian Conditions. <i>Frontiers in Computational Neuroscience</i> , 2017, 11, 79.	2.1	14
21	Firing-rate models for neurons with a broad repertoire of spiking behaviors. <i>Journal of Computational Neuroscience</i> , 2018, 45, 103-132.	1.0	13
22	Consequences of realistic network size on the stability of embedded synfire chains. <i>Neurocomputing</i> , 2004, 58-60, 117-121.	5.9	11
23	Deterministic networks for probabilistic computing. <i>Scientific Reports</i> , 2019, 9, 18303.	3.3	10
24	Firing rate homeostasis counteracts changes in stability of recurrent neural networks caused by synapse loss in Alzheimer's disease. <i>PLoS Computational Biology</i> , 2020, 16, e1007790.	3.2	10
25	Sequence learning, prediction, and replay in networks of spiking neurons. <i>PLoS Computational Biology</i> , 2022, 18, e1010233.	3.2	8
26	Hybrid scheme for modeling local field potentials from point-neuron networks. <i>BMC Neuroscience</i> , 2015, 16, .	1.9	7
27	Invariance of covariances arises out of noise. , 2013, , .		5
28	Synchronization and rate dynamics in embedded synfire chains: effect of network heterogeneity and feedback. <i>BMC Neuroscience</i> , 2009, 10, .	1.9	4
29	Decorrelation of low-frequency neural activity by inhibitory feedback. <i>BMC Neuroscience</i> , 2010, 11, .	1.9	4
30	Stability of bumps in a two-population neural-field model with quasi-power temporal kernels. <i>Nonlinear Analysis: Real World Applications</i> , 2011, 12, 3073-3094.	1.7	4
31	Effect of localized input on bump solutions in a two-population neural-field model. <i>Nonlinear Analysis: Real World Applications</i> , 2013, 14, 997-1025.	1.7	4
32	Dynamical Characteristics of Recurrent Neuronal Networks Are Robust Against Low Synaptic Weight Resolution. <i>Frontiers in Neuroscience</i> , 2021, 15, 757790.	2.8	4
33	Neurons hear their echo. <i>BMC Neuroscience</i> , 2010, 11, .	1.9	2
34	Deterministic neural networks as sources of uncorrelated noise for probabilistic computations. <i>BMC Neuroscience</i> , 2015, 16, .	1.9	2
35	Dependence of Spike-Count Correlations on Spike-Train Statistics and Observation Time Scale. , 2010, , 103-127.		1
36	Firing-rate models for neurons with a broad repertoire of spiking behaviors. <i>BMC Neuroscience</i> , 2013, 14, .	1.9	1

#	ARTICLE	IF	CITATIONS
37	Self-feedback shapes correlation functions. Neuroscience Research, 2010, 68, e106.	1.9	0
38	Estimating the spatial scale of local field potentials in a cortical population model. Neuroscience Research, 2010, 68, e212-e213.	1.9	0
39	Dynamics of self-sustained activity in random networks with strong synapses. BMC Neuroscience, 2011, 12, .	1.9	0
40	Rate dynamics of the retina-LGN connection. BMC Neuroscience, 2011, 12, .	1.9	0
41	Simplified model of the frequency dependence of the LFP's spatial reach. BMC Neuroscience, 2012, 13, .	1.9	0
42	Recurrence and external sources differentially shape network correlations. BMC Neuroscience, 2013, 14, .	1.9	0
43	Hybrid scheme for modeling LFPs from spiking cortical network models. BMC Neuroscience, 2013, 14, .	1.9	0
44	A Model of Spatial Reach in LFP Recordings. Springer Series in Computational Neuroscience, 2018, , 509-533.	0.3	0
45	The speed of sequence processing in biological neuronal networks. , 2020, , .		0
46	Sequence learning in a memristive crossbar array. , 0, , .		0