Tiina Manninen

List of Publications by Year
in descending order

		840776	888059
27 papers	480 citations	11 h-index	17 g-index
28 all docs	28 docs citations	28 times ranked	651 citing authors

#	Article	IF	Citations
1	Sustainable computational science: the ReScience initiative. PeerJ Computer Science, 2017, 3, e142.	4.5	86
2	Computational Models for Calcium-Mediated Astrocyte Functions. Frontiers in Computational Neuroscience, 2018, 12, 14.	2.1	64
3	Developing ItÃ´ stochastic differential equation models for neuronal signal transduction pathways. Computational Biology and Chemistry, 2006, 30, 280-291.	2.3	51
4	Postsynaptic Signal Transduction Models for Long-Term Potentiation and Depression. Frontiers in Computational Neuroscience, 2010, 4, 152.	2.1	46
5	Cerebellar Purkinje cells control eye movements with a rapid rate code that is invariant to spike irregularity. ELife, 2019, 8, .	6.0	41
6	Simulation tools for biochemical networks: evaluation of performance and usability. Bioinformatics, 2005, 21, 357-363.	4.1	37
7	Effects of Transmitters and Amyloid-Beta Peptide on Calcium Signals in Rat Cortical Astrocytes: Fura-2AM Measurements and Stochastic Model Simulations. PLoS ONE, 2011, 6, e17914.	2.5	37
8	Reproducibility and Comparability of Computational Models for Astrocyte Calcium Excitability. Frontiers in Neuroinformatics, 2017, 11, 11.	2.5	31
9	Challenges in Reproducibility, Replicability, and Comparability of Computational Models and Tools for Neuronal and Glial Networks, Cells, and Subcellular Structures. Frontiers in Neuroinformatics, 2018, 12, 20.	2.5	22
10	Astrocyte-mediated spike-timing-dependent long-term depression modulates synaptic properties in the developing cortex. PLoS Computational Biology, 2020, 16, e1008360.	3.2	18
11	Computational study of noise in a large signal transduction network. BMC Bioinformatics, 2011, 12, 252.	2.6	12
12	Modeling Signal Transduction Leading to Synaptic Plasticity: Evaluation and Comparison of Five Models. Eurasip Journal on Bioinformatics and Systems Biology, 2011, 2011, 797250.	1.4	9
13	Computational Models of Astrocytes andÂAstrocyteâ€"Neuron Interactions: Characterization, Reproducibility, andÂFuture Perspectives. Springer Series in Computational Neuroscience, 2019, , 423-454.	0.3	8
14	Neuronâ€"Glia Interactions and Brain Circuits. Advances in Experimental Medicine and Biology, 2022, 1359, 87-103.	1.6	7
15	A novel approach to model neuronal signal transduction using stochastic differential equations. Neurocomputing, 2006, 69, 1066-1069.	5.9	5
16	Discrete stochastic simulation of cell signaling: comparison of computational tools. , 2006, 2006, 2013-6.		4
17	A model integrating the cerebellar granule neuron excitability and calcium signaling pathways. Neurocomputing, 2004, 58-60, 569-574.	5.9	1
18	Numerical characterization of noisy fluctuations in two different types of stochastic differential equation models of neural signaling. BMC Neuroscience, 2015, 16, .	1.9	1

#	Article	IF	Citations
19	Estimation of Neuronal Signaling Model Parameters using Deterministic and Stochastic in Silico Training Data: Evaluation of Four Parameter Estimation Methods. , 2007, , .		0
20	Parameter Estimation and Tuning of Firefly Luciferase Pathway Model. , 2007, , .		0
21	Modeling signal transduction in synaptic plasticity: comparison of models and methods. BMC Neuroscience, 2010, 11, .	1.9	0
22	Comparison of discrete- and continuous-state stochastic methods to model neuronal signal transduction. , 2010, , .		0
23	Contribution of SERCA and IP3 sensitivity to calcium signaling in astrocytes: a computational study. BMC Neuroscience, 2011, 12, .	1.9	0
24	Extending computational models of astrocyte-neuron interactions with biochemical mechanisms on the postsynaptic terminal. BMC Neuroscience, 2015, 16, .	1.9	0
25	Regular and irregular stimuli result in changes in mice eye movement and cerebellar nuclei neuron model behavior. BMC Neuroscience, 2015, 16, .	1.9	0
26	Modeling Neuron-Astrocyte Interactions: Towards Understanding Synaptic Plasticity and Learning in the Brain. Lecture Notes in Computer Science, 2017, , 157-168.	1.3	0
27	Discrete stochastic simulation of cell signaling: comparison of computational tools. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0