Dan F M Goodman

List of Publications by Year
in descending order

39 papers	3,213 citations	361388 20 h-index	330122 37 g-index
49 all docs	49 docs citations	49 times ranked	3551 citing authors

#	Article	IF	Citations
1	Assessing HRTF preprocessing methods for Ambisonics rendering through perceptual models. Acta Acustica, 2022, 6, 4.	1.0	8
2	Brian Spiking Neural Network Simulator. , 2022, , 580-582.		0
3	Further Towards Unambiguous Edge Bundling: Investigating Power-Confluent Drawings for Network Visualization. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 2244-2249.	4.4	2
4	Visualizing a joint future of neuroscience and neuromorphic engineering. Neuron, 2021, 109, 571-575.	8.1	31
5	Rate and Temporal Coding of Regular and Irregular Pulse Trains in Auditory Midbrain of Normal-Hearing and Cochlear-Implanted Rabbits. JARO - Journal of the Association for Research in Otolaryngology, 2021, 22, 319-347.	1.8	2
6	Towards Democratizing and Automating Online Conferences: Lessons from the Neuromatch Conferences. Trends in Cognitive Sciences, 2021, 25, 265-268.	7.8	13
7	Neural heterogeneity promotes robust learning. Nature Communications, 2021, 12, 5791.	12.8	90
8	Brian2GeNN: accelerating spiking neural network simulations with graphics hardware. Scientific Reports, 2020, 10, 410.	3.3	33
9	Improving on legacy conferences by moving online. ELife, 2020, 9, .	6.0	68
10	Graph Drawing by Stochastic Gradient Descent. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 2738-2748.	4.4	37
11	Modeling Neuronâ€“Glia Interactions withÂthe BrianÂ2 Simulator. Springer Series in Computational Neuroscience, 2019, , 471-505.	0.3	13
12	Short-term effects of sound localization training in virtual reality. Scientific Reports, 2019, 9, 18284.	3.3	27
13	Brian 2, an intuitive and efficient neural simulator. ELife, 2019, 8, .	6.0	418
14	Modelling firing regularity in the ventral cochlear nucleus: Mechanisms, and effects of stimulus level and synaptopathy. Hearing Research, 2018, 358, 98-110.	2.0	4
15	A framework for testing and comparing binaural models. Hearing Research, 2018, 360, 92-106.	2.0	18
16	Code Generation in Computational Neuroscience: A Review of Tools and Techniques. Frontiers in Neuroinformatics, 2018, 12, 68.	2.5	32
17	Spike sorting for large, dense electrode arrays. Nature Neuroscience, 2016, 19, 634-641.	14.8	671
18	Multi-compartmental modeling in Brian 2. BMC Neuroscience, 2015, 16, .	1.9	0

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19	Equation-oriented specification of neural models for simulations. Frontiers in Neuroinformatics, 2014, 8, 6.	2.5	133
20	High-Dimensional Cluster Analysis with the Masked EM Algorithm. Neural Computation, 2014, 26, 2379-2394.	2.2	271
21	SpineML and Brian 2.0 interfaces for using GPU enhanced Neuronal Networks (GeNN). BMC Neuroscience, 2014, 15, .	1.9	7
22	Brian 2: neural simulations on a variety of computational hardware. BMC Neuroscience, 2014, 15, P199.	1.9	16
23	Brian 2 - the second coming: spiking neural network simulation in Python with code generation. BMC Neuroscience, 2013, 14, .	1.9	20
24	Playdoh: A lightweight Python library for distributed computing and optimisation. Journal of Computational Science, 2013, 4, 352-359.	2.9	11
25	Brian simulator. Scholarpedia Journal, 2013, 8, 10883.	0.3	13
26	Decoding neural responses to temporal cues for sound localization. ELife, 2013, 2, e01312.	6.0	44
27	Simulating spiking neural networks on GPU. Network: Computation in Neural Systems, 2012, 23, 167-182.	3.6	51
28	Vectorized Algorithms for Spiking Neural Network Simulation. Neural Computation, 2011, 23, 1503-1535.	2.2	36
29	Brian Hears: Online Auditory Processing Using Vectorization Over Channels. Frontiers in Neuroinformatics, 2011, 5, 9.	2.5	21
30	Fitting Neuron Models to Spike Trains. Frontiers in Neuroscience, 2011, 5, 9.	2.8	62
31	Late Emergence of the Vibrissa Direction Selectivity Map in the Rat Barrel Cortex. Journal of Neuroscience, 2011, 31, 10689-10700.	3.6	59
32	Code Generation: A Strategy for Neural Network Simulators. Neuroinformatics, 2010, 8, 183-196.	2.8	38
33	Automatic fitting of spiking neuron models to electrophysiological recordings. Frontiers in Neuroinformatics, 2010, 4, 2.	2.5	55
34	Spike-Timing-Based Computation in Sound Localization. PLoS Computational Biology, 2010, 6, e1000993.	3.2	16
35	Quasiregular mappings of polynomial type in â„Â². Conformal Geometry and Dynamics, 2010, 14, 322-336.	0.5	2
36	The Brian simulator. Frontiers in Neuroscience, 2009, 3, 192-197.	2.8	397

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37	Brian: a simulator for spiking neural networks in Python. BMC Neuroscience, 2008, 9, .	1.9	20
38	Brian: a simulator for spiking neural networks in Python. Frontiers in Neuroinformatics, 2008, 2, 5.	2.5	423
39	Spirals in the boundary of slices of quasi-Fuchsian space. Conformal Geometry and Dynamics, 2006, 10, 136-159.	0.5	1