Rodney Douglas

List of Publications by Year
in descending order

23 papers	2,169 citations	759233 12 h-index	839539 18 g-index
33 all docs	33 docs citations	33 times ranked	1954 citing authors

#	Article	IF	Citations
1	Neuromorphic Cognition. , 2022, , 2313-2322.		0
2	Conditioning by subthreshold synaptic input changes the intrinsic firing pattern of CA3 hippocampal neurons. Journal of Neurophysiology, 2020, 123, 90-106.	1.8	12
3	Spike-Based Probabilistic Inference in Analog Graphical Models Using Interspike-Interval Coding. Neural Computation, 2013, 25, 2303-2354.	2.2	9
4	Systematic Construction of Finite State Automata Using VLSI Spiking Neurons. Lecture Notes in Computer Science, 2012, , 382-383.	1.3	2
5	A Systematic Method for Configuring VLSI Networks of Spiking Neurons. Neural Computation, 2011, 23, 2457-2497.	2.2	57
6	An Instruction Language for Self-Construction in the Context of Neural Networks. Frontiers in Computational Neuroscience, 2011, 5, 57.	2.1	11
7	Constructive Cortical Computation. Procedia Computer Science, 2011, 7, 18-19.	2.0	0
8	State-dependent sensory processing in networks of VLSI spiking neurons. , 2010, , .		11
9	Live demonstration: State-dependent sensory processing in networks of VLSI spiking neurons. , 2010, , .		1
10	A framework for modeling the growth and development of neurons and networks. Frontiers in Computational Neuroscience, 2009, 3, 25.	2.1	105
11	CAVIAR: A 45k Neuron, 5M Synapse, 12G Connects/s AER Hardware Sensoryâ€“Processingâ€“ Learningâ€“Actuating System for High-Speed Visual Object Recognition and Tracking. IEEE Transactions on Neural Networks, 2009, 20, 1417-1438.	4.2	285
12	Belief Propagation in Networks of Spiking Neurons. Neural Computation, 2009, 21, 2502-2523.	2.2	42
13	Computation with Spikes in a Winner-Take-All Network. Neural Computation, 2009, 21, 2437-2465.	2.2	88
14	Quantification of a Spike-Based Winner-Take-All VLSI Network. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 3160-3169.	5.4	28
15	Quantifying Input and Output Spike Statistics of a Winner-Take-All Network in a Vision System. , 2007, , .		14
16	A VLSI Array of Low-Power Spiking Neurons and Bistable Synapses With Spike-Timing Dependent Plasticity. IEEE Transactions on Neural Networks, 2006, 17, 211-221.	4.2	779
17	Temporal Coding in a Silicon Network of Integrate-and-Fire Neurons. IEEE Transactions on Neural Networks, 2004, 15, 1305-1314.	4.2	75
18	Orientation-selective aVLSI spiking neurons. Neural Networks, 2001, 14, 629-643.	5.9	97

#	Article	IF	Citations
19	Adaptive Neural Coding Dependent on the Time-Varying Statistics of the Somatic Input Current. Neural Computation, 1999, 11, 1893-1913.	2.2	22
20	Neuroinformatics as Explanatory Neuroscience. NeuroImage, 1996, 4, S25-S28.	4.2	3
21	A silicon neuron. Nature, 1991, 354, 515-518.	27.8	408
22	The crossed nigrostriatal projection decussates in the ventral tegmental decussation. Brain Research, 1987, 418, 111-121.	2.2	33
23	Hemispheric disconnection and rotational behaviour. Behavioural Brain Research, 1985, 17, 257-263.	2.2	3