Paolo Del Giudice

List of Publications by Year
in descending order

42	1,628	394421 19	330143 37
papers	citations	h-index	g-index

44	44	44	1632
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Population dynamics of interacting spiking neurons. Physical Review E, 2002, 66, 051917.	2.1	223
2	A vlsi recurrent network of integrate-and-fire neurons connected by plastic synapses with long-term memory. IEEE Transactions on Neural Networks, 2003, 14, 1297-1307.	4.2	164
3	Efficient Event-Driven Simulation of Large Networks of Spiking Neurons and Dynamical Synapses. Neural Computation, 2000, 12, 2305-2329.	2.2	144
4	The associative brain at work: Evidence from paired associative stimulation studies in humans. Clinical Neurophysiology, 2017, 128, 2140-2164.	1.5	120
5	A Multichip Pulse-Based Neuromorphic Infrastructure and Its Application to a Model of Orientation Selectivity. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 981-993.	0.1	108
6	Heterogeneous Attractor Cell Assemblies for Motor Planning in Premotor Cortex. Journal of Neuroscience, 2013, 33, 11155-11168.	3.6	83
7	Diverse Population-Bursting Modes of Adapting Spiking Neurons. Physical Review Letters, 2007, 98, 148101.	7.8	77
8	Bistable Perception Modeled as Competing Stochastic Integrations at Two Levels. PLoS Computational Biology, 2009, 5, e1000430.	3.2	75
9	A Fluctuation-Driven Mechanism for Slow Decision Processes in Reverberant Networks. PLoS ONE, 2008, 3, e2534.	2.5	68
10	Slow Waves in Cortical Slices: How Spontaneous Activity is Shaped by Laminar Structure. Cerebral Cortex, 2019, 29, 319-335.	2.9	68
11	Modelling the formation of working memory with networks of integrate-and-fire neurons connected by plastic synapses. Journal of Physiology (Paris), 2003, 97, 659-681.	2.1	64
12	Finite-size dynamics of inhibitory and excitatory interacting spiking neurons. Physical Review E, 2004, 70, 052903.	2.1	64
13	Robust Working Memory in an Asynchronously Spiking Neural Network Realized with Neuromorphic VLSI. Frontiers in Neuroscience, 2012, 5, 149.	2.8	43
14	Dissociated multi-unit activity and local field potentials: A theory inspired analysis of a motor decision task. NeuroImage, 2010, 52, 812-823.	4.2	34
15	Network Events on Multiple Space and Time Scales in Cultured Neural Networks and in a Stochastic Rate Model. PLoS Computational Biology, 2015, 11, e1004547.	3.2	29
16	Pentamer vocabularies characterizing introns and intron-like intergenic tracts from Caenorhabditis elegans and Drosophila melanogaster. Gene, 2003, 304, 183-192.	2.2	26
17	Classification of Correlated Patterns with a Configurable Analog VLSI Neural Network of Spiking Neurons and Self-Regulating Plastic Synapses. Neural Computation, 2009, 21, 3106-3129.	2.2	23
18	Real time unsupervised learning of visual stimuli in neuromorphic VLSI systems. Scientific Reports, 2015, 5, 14730.	3.3	22

#	Article	IF	Citations
19	Learning to Attend: Modeling the Shaping of Selectivity in Infero-temporal Cortex in a Categorization Task. Biological Cybernetics, 2006, 94, 351-365.	1.3	21
20	A neuro-inspired model-based closed-loop neuroprosthesis for the substitution of a cerebellar learning function in anesthetized rats. Scientific Reports, 2015, 5, 8451.	3.3	20
21	Frequency-dependent response properties of adapting spiking neurons. Mathematical Biosciences, 2007, 207, 336-351.	1.9	19
22	Inferring Synaptic Structure in Presence of Neural Interaction Time Scales. PLoS ONE, 2015, 10, e0118412.	2.5	19
23	A VLSI Field-Programmable Mixed-Signal Array to Perform Neural Signal Processing and Neural Modeling in a Prosthetic System. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 455-467.	4.9	18
24	iTBS-Induced LTP-Like Plasticity Parallels Oscillatory Activity Changes in the Primary Sensory and Motor Areas of Macaque Monkeys. PLoS ONE, 2014, 9, e112504.	2.5	18
25	Maximization of mutual information in a linear noisy network: a detailed study. Network: Computation in Neural Systems, 1995, 6, 449-468.	3.6	11
26	Spontaneous activity emerging from an inferred network model captures complex spatio-temporal dynamics of spike data. Scientific Reports, 2018, 8, 17056.	3.3	10
27	Maximization of mutual information in a linear noisy network: a detailed study. Network: Computation in Neural Systems, 1995, 6, 449-468.	3.6	10
28	Learning selective top-down control enhances performance in a visual categorization task. Journal of Neurophysiology, 2012, 108, 3124-3137.	1.8	9
29	A new dynamic tactile display for reconfigurable braille: implementation and tests. Frontiers in Neuroengineering, 2014, 7, 6.	4.8	9
30	IMRT optimization: Variability of solutions and its radiobiological impact. Medical Physics, 2004, 31, 1052-1060.	3.0	7
31	Scaling of a Large-Scale Simulation of Synchronous Slow-Wave and Asynchronous Awake-Like Activity of a Cortical Model With Long-Range Interconnections. Frontiers in Systems Neuroscience, 2019, 13, 33.	2.5	7
32	Reward-biased probabilistic decision-making: Mean-field predictions and spiking simulations. Neurocomputing, 2006, 69, 1175-1178.	5.9	5
33	Self-sustained activity in attractor networks using neuromorphic VLSI. , 2010, , .		3
34	NEURAL NETWORKS AS OPTIMAL INFORMATION PROCESSORS. International Journal of Modern Physics C, 1994, 05, 855-862.	1.7	2
35	Mean Field Approach for Configuring Population Dynamics on a Biohybrid Neuromorphic System. Journal of Signal Processing Systems, 2020, 92, 1303-1321.	2.1	2
36	CAN NEURAL NETWORKS BE USED AS MODELS FOR NEUROPSYCHOLOGICAL DYSFUNCTIONS?. International Journal of Neural Systems, 1992, 03, 163-168.	5.2	1

#	Article	IF	Citations
37	Mean-Field Population Dynamics of Spiking Neurons with Random Synaptic Delays. Lecture Notes in Computer Science, 2002, , 111-116.	1.3	1
38	Learning attractors in an asynchronous, stochastic electronic neural network. Network: Computation in Neural Systems, 1998, 9, 183-205.	3.6	1
39	NEURAL NETWORKS FOR PHYSICS ANALYSIS IN DELPHI. International Journal of Neural Systems, 1992, 03, 255-265.	5.2	0
40	A network of reverberating neuronal populations encodes motor decision in macaque premotor cortex. BMC Neuroscience, 2009, 10, .	1.9	0
41	Density-based clustering: A â€˜landscape viewâ€™ of multi-channel neural data for inference and dynamic complexity analysis. PLoS ONE, 2017, 12, e0174918.	2.5	0
42	Computational Strategy in the Premotor Cortex of the Monkey: A Neural Network Model. NATO ASI Series Series B: Physics, 1991, , 269-278.	0.2	0