Niceto Rafael Luque Sola

List of Publications by Year
in descending order

32	890	394286	501076
papers	citations	19 h-index	28 g-index

36	36	36	699
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational epidemiology study of homeostatic compensation during sensorimotor aging. Neural Networks, 2022, 146, 316-333.	3.3	3
2	On Robot Compliance: A Cerebellar Control Approach. IEEE Transactions on Cybernetics, 2021, 51, 2476-2489.	6.2	23
3	A cerebellar-based solution to the nondeterministic time delay problem in robotic control. Science Robotics, 2021, 6, eabf2756.	9.9	22
4	VOR Adaptation on a Humanoid iCub Robot Using a Spiking Cerebellar Model. IEEE Transactions on Cybernetics, 2020, 50, 4744-4757.	6.2	24
5	Spike burst-pause dynamics of Purkinje cells regulate sensorimotor adaptation. PLoS Computational Biology, 2019, 15, e1006298.	1.5	20
6	Exploring Vestibulo-Ocular Adaptation in a Closed-Loop Neuro-Robotic Experiment Using STDP. A Simulation Study. , 2018, , .		1
7	A Metric for Evaluating Neural Input Representation in Supervised Learning Networks. Frontiers in Neuroscience, 2018, 12, 913.	1.4	5
8	Event- and Time-Driven Techniques Using Parallel CPU-GPU Co-processing for Spiking Neural Networks. Frontiers in Neuroinformatics, 2017, 11, 7.	1.3	23
9	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. BMC Neuroscience, 2017, 18, .	0.8	7
10	Modeling the Cerebellar Microcircuit: New Strategies for a Long-Standing Issue. Frontiers in Cellular Neuroscience, 2016, 10, 176.	1.8	72
11	Distributed Cerebellar Motor Learning: A Spike-Timing-Dependent Plasticity Model. Frontiers in Computational Neuroscience, 2016, 10, 17.	1.2	37
12	Oscillation-Driven Spike-Timing Dependent Plasticity Allows Multiple Overlapping Pattern Recognition in Inhibitory Interneuron Networks. International Journal of Neural Systems, 2016, 26, 1650020.	3.2	36
13	Spiking Neural Network With Distributed Plasticity Reproduces Cerebellar Learning in Eye Blink Conditioning Paradigms. IEEE Transactions on Biomedical Engineering, 2016, 63, 210-219.	2.5	47
14	Distributed Circuit Plasticity: New Clues for the Cerebellar Mechanisms of Learning. Cerebellum, 2016, 15, 139-151.	1.4	74
15	A Spiking Neural Simulator Integrating Event-Driven and Time-Driven Computation Schemes Using Parallel CPU-GPU Co-Processing: A Case Study. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 1567-1574.	7.2	46
16	Fast convergence of learning requires plasticity between inferior olive and deep cerebellar nuclei in a manipulation task: a closed-loop robotic simulation. Frontiers in Computational Neuroscience, 2014, 8, 97.	1.2	39
17	Adaptive Robotic Control Driven by a Versatile Spiking Cerebellar Network. PLoS ONE, 2014, 9, e112265.	1.1	70
18	Integrated neural and robotic simulations. Simulation of cerebellar neurobiological substrate for an object-oriented dynamic model abstraction process. Robotics and Autonomous Systems, 2014, 62, 1702-1716.	3.0	13

#	Article	IF	Citations
19	ADAPTIVE AND PREDICTIVE CONTROL OF A SIMULATED ROBOT ARM. International Journal of Neural Systems, 2013, 23, 1350010.	3.2	31
20	CPU-GPU hybrid platform for efficient spiking neural-network simulation. BMC Neuroscience, 2013, 14, .	0.8	1
21	Distributed cerebellar plasticity implements adaptable gain control in a manipulation task: a closed-loop robotic simulation. Frontiers in Neural Circuits, 2013, 7, 159.	1.4	64
22	Coupling internal cerebellar models enhances online adaptation and supports offline consolidation in sensorimotor tasks. Frontiers in Computational Neuroscience, 2013, 7, 95.	1.2	10
23	Bio-inspired adaptive feedback error learning architecture for motor control. Biological Cybernetics, 2012, 106, 507-522.	0.6	28
24	FROM SENSORS TO SPIKES: EVOLVING RECEPTIVE FIELDS TO ENHANCE SENSORIMOTOR INFORMATION IN A ROBOT-ARM. International Journal of Neural Systems, 2012, 22, 1250013.	3.2	24
25	An integrated motor control loop of a human-like robotic arm: Feedforward, feedback and cerebellum-based learning. , 2012, , .		8
26	Cerebellar Input Configuration Toward Object Model Abstraction in Manipulation Tasks. IEEE Transactions on Neural Networks, 2011, 22, 1321-1328.	4.8	34
27	Cerebellarlike Corrective Model Inference Engine for Manipulation Tasks. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 1299-1312.	5.5	38
28	Event and Time Driven Hybrid Simulation of Spiking Neural Networks. Lecture Notes in Computer Science, 2011, , 554-561.	1.0	9
29	Context Separability Mediated by the Granular Layer in a Spiking Cerebellum Model for Robot Control. Lecture Notes in Computer Science, 2011, , 537-546.	1.0	0
30	ADAPTIVE CEREBELLAR SPIKING MODEL EMBEDDED IN THE CONTROL LOOP: CONTEXT SWITCHING AND ROBUSTNESS AGAINST NOISE. International Journal of Neural Systems, 2011, 21, 385-401.	3.2	70
31	Cerebellar spiking engine: Towards objet model abstraction in manipulation. , 2010, , .		1
32	Internal Models in the Cerebellum: A Coupling Scheme for Online and Offline Learning in Procedural Tasks. Lecture Notes in Computer Science, 2010, , 435-446.	1.0	2