

Federico Corradi

List of Publications by Year in descending order

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Version: 2024-02-01

37
papers

1,545
citations

759233

12
h-index

996975

15
g-index

38
all docs

38
docs citations

38
times ranked

1378
citing authors

#	ARTICLE	IF	CITATIONS
1	A reconfigurable on-line learning spiking neuromorphic processor comprising 256 neurons and 128K synapses. <i>Frontiers in Neuroscience</i> , 2015, 9, 141.	2.8	496
2	NullHop: A Flexible Convolutional Neural Network Accelerator Based on Sparse Representations of Feature Maps. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2019, 30, 644-656.	11.3	183
3	A Neuromorphic Event-Based Neural Recording System for Smart Brain-Machine-Interfaces. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2015, 9, 699-709.	4.0	89
4	Neuromorphic architectures for spiking deep neural networks. , 2015, , .		85
5	Accurate and efficient time-domain classification with adaptive spiking recurrent neural networks. <i>Nature Machine Intelligence</i> , 2021, 3, 905-913.	16.0	74
6	Steering a predator robot using a mixed frame/event-driven convolutional neural network. , 2016, , .		73
7	A Sensitive Dynamic and Active Pixel Vision Sensor for Color or Neural Imaging Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018, 12, 123-136.	4.0	59
8	1/4Brain: An Event-Driven and Fully Synthesizable Architecture for Spiking Neural Networks. <i>Frontiers in Neuroscience</i> , 2021, 15, 664208.	2.8	51
9	Effective and Efficient Computation with Multiple-timescale Spiking Recurrent Neural Networks. , 2020, , .		41
10	Live demonstration: Convolutional neural network driven by dynamic vision sensor playing RoShamBo. , 2017, , .		38
11	DHP19: Dynamic Vision Sensor 3D Human Pose Dataset. , 2019, , .		36
12	ECG-based Heartbeat Classification in Neuromorphic Hardware. , 2019, , .		34
13	Power-Accuracy Trade-Offs for Heartbeat Classification on Neural Networks Hardware. <i>Journal of Low Power Electronics</i> , 2018, 14, 508-519.	0.6	31
14	A 132 by 104 10 ^{1/4} m-Pixel 250 ^{1/4} W 1kefps Dynamic Vision Sensor with Pixel-Parallel Noise and Spatial Redundancy Suppression. , 2019, , .		23
15	Mapping arbitrary mathematical functions and dynamical systems to neuromorphic VLSI circuits for spike-based neural computation. , 2014, , .		22
16	Real time unsupervised learning of visual stimuli in neuromorphic VLSI systems. <i>Scientific Reports</i> , 2015, 5, 14730.	3.3	22
17	Wearable Monitoring and Interpretable Machine Learning Can Objectively Track Progression in Patients during Cardiac Rehabilitation. <i>Sensors</i> , 2020, 20, 3601.	3.8	22
18	Radar-Based Hand Gesture Recognition Using Spiking Neural Networks. <i>Electronics (Switzerland)</i> , 2021, 10, 1405.	3.1	20

#	ARTICLE	IF	CITATIONS
19	A spiking implementation of the lamprey's Central Pattern Generator in neuromorphic VLSI. , 2014, , .		17
20	A Dynamic Reconfigurable Architecture for Hybrid Spiking and Convolutional FPGA-Based Neural Network Designs. Journal of Low Power Electronics and Applications, 2021, 11, 32.	2.0	12
21	Key technologies for safe and autonomous drones. Microprocessors and Microsystems, 2021, 87, 104348.	2.8	12
22	Towards a Neuromorphic Vestibular System. IEEE Transactions on Biomedical Circuits and Systems, 2014, 8, 669-680.	4.0	11
23	Decision making and perceptual bistability in spike-based neuromorphic VLSI systems. , 2015, , .		11
24	A hybrid analog/digital Spike-Timing Dependent Plasticity learning circuit for neuromorphic VLSI multi-neuron architectures. , 2014, , .		10
25	Gyro: A Digital Spiking Neural Network Architecture for Multi-Sensory Data Analytics. , 2021, , .		10
26	Improving the Accuracy of Spiking Neural Networks for Radar Gesture Recognition Through Preprocessing. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 2869-2881.	11.3	10
27	A 28.2 μ C Neuromorphic Sensing System Featuring SNN-based Near-sensor Computation and Event-Driven Body-Channel Communication for Insertable Cardiac Monitoring. , 2021, , .		9
28	Key Enabling Technologies for Drones. , 2020, , .		8
29	Nonvolatile Memories in Spiking Neural Network Architectures: Current and Emerging Trends. Electronics (Switzerland), 2022, 11, 1610.	3.1	8
30	Design of Many-Core Big Little μ Brains for Energy-Efficient Embedded Neuromorphic Computing. , 2022, , .		6
31	Toward neuromorphic intelligent brain-machine interfaces: An event-based neural recording and processing system. , 2014, , .		5
32	Real Time Electrocardiogram Annotation with a Long Short Term Memory Neural Network. , 2019, , .		5
33	Implementation of a neuromorphic vestibular sensor with analog VLSI neurons. , 2013, , .		3
34	Automated synthesis of asynchronous event-based interfaces for neuromorphic systems. , 2013, , .		3
35	Evolved neuromorphic radar-based altitude controller for an autonomous open-source blimp. , 2022, , .		2
36	Radar Perception for Autonomous Unmanned Aerial Vehicles: a Survey. , 2022, , .		1

#	ARTICLE	IF	CITATIONS
37	Learning to recognize visual stimuli in neuromorphic VLSI. , 2012, , .		0