Manuel DomÃ-nguez Morales

List of Publications by Year
in descending order

49 papers	975 citations	567144 15 h-index	477173 29 g-index
53 all docs	53 docs citations	53 times ranked	983 citing authors

#	Article	IF	Citations
1	Deep Learning System for COVID-19 Diagnosis Aid Using X-ray Pulmonary Images. Applied Sciences (Switzerland), 2020, 10, 4640.	1.3	125
2	Deep Neural Networks for the Recognition and Classification of Heart Murmurs Using Neuromorphic Auditory Sensors. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 24-34.	2.7	115
3	Augmented and Virtual Reality Evolution and Future Tendency. Applied Sciences (Switzerland), 2020, 10, 322.	1.3	81
4	A Neuro-Inspired Spike-Based PID Motor Controller for Multi-Motor Robots with Low Cost FPGAs. Sensors, 2012, 12, 3831-3856.	2.1	70
5	A Binaural Neuromorphic Auditory Sensor for FPGA: A Spike Signal Processing Approach. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 804-818.	7.2	63
6	Wearable Fall Detector Using Recurrent Neural Networks. Sensors, 2019, 19, 4885.	2.1	57
7	Dual Machine-Learning System to Aid Glaucoma Diagnosis Using Disc and Cup Feature Extraction. IEEE Access, 2020, 8, 127519-127529.	2.6	52
8	Wireless Sensor Network for Wildlife Tracking and Behavior Classification of Animals in DoÃ±ana. IEEE Communications Letters, 2016, 20, 2534-2537.	2.5	51
9	Embedded neural network for real-time animal behavior classification. Neurocomputing, 2018, 272, 17-26.	3.5	40
10	Smart Footwear Insole for Recognition of Foot Pronation and Supination Using Neural Networks. Applied Sciences (Switzerland), 2019, 9, 3970.	1.3	25
11	A study on the use of Edge TPUs for eye fundus image segmentation. Engineering Applications of Artificial Intelligence, 2021, 104, 104384.	4.3	23
12	Analysis of source code metrics from ns-2 and ns-3 network simulators. Simulation Modelling Practice and Theory, 2011, 19, 1330-1346.	2.2	20
13	Bio-Inspired Stereo Vision Calibration for Dynamic Vision Sensors. IEEE Access, 2019, 7, 138415-138425.	2.6	20
14	Architecture, design and source code comparison of ns-2 and ns-3 network simulators. , 2010, , .		17
15	AnkFallâ€"Falls, Falling Risks and Daily-Life Activities Dataset with an Ankle-Placed Accelerometer and Training Using Recurrent Neural Networks. Sensors, 2021, 21, 1889.	2.1	16
16	Multilayer Spiking Neural Network for Audio Samples Classification Using SpiNNaker. Lecture Notes in Computer Science, 2016, , 45-53.	1.0	16
17	Workerâ€™s physical fatigue classification using neural networks. Expert Systems With Applications, 2022, 198, 116784.	4.4	16
18	A Deep-Learning Based Posture Detection System for Preventing Telework-Related Musculoskeletal Disorders. Sensors, 2021, 21, 5236.	2.1	15

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19	Low-Power Embedded System for Gait Classification Using Neural Networks. Journal of Low Power Electronics and Applications, 2020, 10, 14.	1.3	13
20	Stereo Matching in Address-Event-Representation (AER) Bio-Inspired Binocular Systems in a Field-Programmable Gate Array (FPGA). Electronics (Switzerland), 2019, 8, 410.	1.8	11
21	NAVIS: Neuromorphic Auditory VISualizer Tool. Neurocomputing, 2017, 237, 418-422.	3.5	10
22	IoT garment for remote elderly care network. Biomedical Signal Processing and Control, 2021, 69, 102848.	3.5	10
23	Affective State Assistant for Helping Users with Cognition Disabilities Using Neural Networks. Electronics (Switzerland), 2020, 9, 1843.	1.8	9
24	An Approach to Distance Estimation with Stereo Vision Using Address-Event-Representation. Lecture Notes in Computer Science, 2011, , 190-198.	1.0	8
25	Performance evaluation over HW/SW co-design SoC memory transfers for a CNN accelerator. , 2018, , .		7
26	Designing a Wearable Device for Step Analyzing. , 2019, , .		7
27	Musical notes classification with neuromorphic auditory system using FPGA and a convolutional spiking network. , 2015, , .		6
28	Does Two-Class Training Extract Real Features? A COVID-19 Case Study. Applied Sciences (Switzerland), 2021, 11, 1424.	1.3	6
29	On the Designing of Spikes Band-Pass Filters for FPGA. Lecture Notes in Computer Science, 2011, , 389-396.	1.0	6
30	Live demonstration: On the distance estimation of moving targets with a Stereo-Vision AER system. , 2012, , .		5
31	Live demonstration: Real-time motor rotation frequency detection by spike-based visual and auditory AER sensory integration for FPGA. , 2015, , .		4
32	Sound Recognition System Using Spiking and MLP Neural Networks. Lecture Notes in Computer Science, 2016, , 363-371.	1.0	4
33	Efficient Memory Organization for DNN Hardware Accelerator Implementation on PSoC. Electronics (Switzerland), 2021, 10, 94.	1.8	4
34	Simulating Building Blocks for Spikes Signals Processing. Lecture Notes in Computer Science, 2011, , 548-556.	1.0	4
35	On the feature extraction process in machine learning. An experimental study about guided versus non-guided process in falling detection systems. Engineering Applications of Artificial Intelligence, 2022, 114, 105170.	4.3	4
36	Real-time motor rotation frequency detection with event-based visual and spike-based auditory AER sensory integration for FPGA. , 2015, , .		3

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37	ED-Scorbot: A robotic test-bed framework for FPGA-based neuromorphic systems. , 2016, , .		3
38	Semi-wildlife gait patterns classification using statistical methods and Artificial Neural Networks. , 2017, , .		2
39	Event-based Row-by-Row Multi-convolution engine for Dynamic-Vision Feature Extraction on FPGA. , 2018, , .		2
40	pyNAVIS: An open-source cross-platform software for spike-based neuromorphic audio information processing. Neurocomputing, 2021, 449, 172-175.	3.5	2
41	On the AER Stereo-Vision Processing: A Spike Approach to Epipolar Matching. Lecture Notes in Computer Science, 2013, , 267-275.	1.0	2
42	Live demonstration â€" Multilayer spiking neural network for audio samples classification using SpiNNaker. , 2017, , .		1
43	Neuronal Specialization for Fine-Grained Distance Estimation Using a Real-Time Bio-Inspired Stereo Vision System. Electronics (Switzerland), 2019, 8, 1502.	1.8	1
44	SVITE: A Spike-Based VITE Neuro-Inspired Robot Controller. Lecture Notes in Computer Science, 2013, , 276-283.	1.0	1
45	Sampling Frequency Evaluation on Recurrent Neural Networks Architectures for IoT Real-time Fall Detection Devices. , 2019, , .		1
46	Implementing a Distance Estimator for a Wildlife Tracking System Based on 802.15.4. Electronics (Switzerland), 2019, 8, 1438.	1.8	0
47	AER Spiking Neuron Computation on GPUs: The Frame-to-AER Generation. Lecture Notes in Computer Science, 2011, , 199-208.	1.0	0
48	Accuracy Improvement of Neural Networks Through Self-Organizing-Maps over Training Datasets. Lecture Notes in Computer Science, 2017, , 520-531.	1.0	0
49	A Microcontroller Based System for Controlling Patient Respiratory Guidelines. Lecture Notes in Computer Science, 2017, , 631-641.	1.0	0