

Sio-HoÃ¯ Ieng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2409096/publications.pdf>

Version: 2024-02-01

48
papers

1,743
citations

304368

22
h-index

276539

41
g-index

49
all docs

49
docs citations

49
times ranked

1260
citing authors

#	ARTICLE	IF	CITATIONS
1	Event-Based Visual Flow. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 407-417.	7.2	248
2	Asynchronous frameless event-based optical flow. Neural Networks, 2012, 27, 32-37.	3.3	160
3	Multiplex Cell and Lineage Tracking with Combinatorial Labels. Neuron, 2014, 81, 505-520.	3.8	142
4	Asynchronous Event-Based Binocular Stereo Matching. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 347-353.	7.2	126
5	Asynchronous Event-Based Multikernel Algorithm for High-Speed Visual Features Tracking. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 1710-1720.	7.2	113
6	Cortical astrocytes develop in a plastic manner at both clonal and cellular levels. Nature Communications, 2019, 10, 4884.	5.8	87
7	Asynchronous event-based corner detection and matching. Neural Networks, 2015, 66, 91-106.	3.3	79
8	Asynchronous event-based high speed vision for microparticle tracking. Journal of Microscopy, 2012, 245, 236-244.	0.8	76
9	Plenoptic cameras in real-time robotics. International Journal of Robotics Research, 2013, 32, 206-217.	5.8	55
10	Visual Tracking Using Neuromorphic Asynchronous Event-Based Cameras. Neural Computation, 2015, 27, 925-953.	1.3	50
11	Event-based 3D reconstruction from neuromorphic retinas. Neural Networks, 2013, 45, 27-38.	3.3	47
12	Artificial retina: the multichannel processing of the mammalian retina achieved with a neuromorphic asynchronous light acquisition device. Journal of Neural Engineering, 2012, 9, 066004.	1.8	46
13	A spiking neural network model of 3D perception for event-based neuromorphic stereo vision systems. Scientific Reports, 2017, 7, 40703.	1.6	45
14	Toward an Autonomous Sailing Boat. IEEE Journal of Oceanic Engineering, 2015, 40, 397-407.	2.1	44
15	Asynchronous Event-Based Hebbian Epipolar Geometry. IEEE Transactions on Neural Networks, 2011, 22, 1723-1734.	4.8	42
16	An Asynchronous Neuromorphic Event-Driven Visual Part-Based Shape Tracking. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 3045-3059.	7.2	42
17	Spatiotemporal features for asynchronous event-based data. Frontiers in Neuroscience, 2015, 9, 46.	1.4	34
18	Event-Driven Stereo Visual Tracking Algorithm to Solve Object Occlusion. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4223-4237.	7.2	34

#	ARTICLE	IF	CITATIONS
19	Asynchronous visual event-based time-to-contact. <i>Frontiers in Neuroscience</i> , 2014, 8, 9.	1.4	31
20	A Spiking Neural Network Model of Depth from Defocus for Event-based Neuromorphic Vision. <i>Scientific Reports</i> , 2019, 9, 3744.	1.6	27
21	Asynchronous Neuromorphic Event-Driven Image Filtering. <i>Proceedings of the IEEE</i> , 2014, 102, 1485-1499.	16.4	24
22	Event-Based Gesture Recognition With Dynamic Background Suppression Using Smartphone Computational Capabilities. <i>Frontiers in Neuroscience</i> , 2020, 14, 275.	1.4	24
23	Neuromorphic Event-Based Generalized Time-Based Stereovision. <i>Frontiers in Neuroscience</i> , 2018, 12, 442.	1.4	19
24	Real-time high speed motion prediction using fast aperture-robust event-driven visual flow. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2021, 44, 1-1.	9.7	19
25	Event-Based Face Detection and Tracking Using the Dynamics of Eye Blinks. <i>Frontiers in Neuroscience</i> , 2020, 14, 587.	1.4	18
26	Neuromorphic Event-Based 3D Pose Estimation. <i>Frontiers in Neuroscience</i> , 2015, 9, 522.	1.4	17
27	Asynchronous Event-Based Fourier Analysis. <i>IEEE Transactions on Image Processing</i> , 2017, 26, 2192-2202.	6.0	12
28	Event-Based Line Fitting and Segment Detection Using a Neuromorphic Visual Sensor. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2019, 30, 1218-1230.	7.2	12
29	Event-Based Color Segmentation With a High Dynamic Range Sensor. <i>Frontiers in Neuroscience</i> , 2018, 12, 135.	1.4	9
30	A Fisher-Rao Metric for Paracatadioptric Images of Lines. <i>International Journal of Computer Vision</i> , 2012, 99, 147-165.	10.9	8
31	Event-Based Tone Mapping for Asynchronous Time-Based Image Sensor. <i>Frontiers in Neuroscience</i> , 2016, 10, 391.	1.4	7
32	Effects of Cooling on the SNR and Contrast Detection of a Low-Light Event-Based Camera. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2018, 12, 1467-1474.	2.7	7
33	Event-based features for robotic vision. , 2013, , .		5
34	An Event-Based Solution to the Perspective-n-Point Problem. <i>Frontiers in Neuroscience</i> , 2016, 10, 208.	1.4	5
35	Event-Based 3D Motion Flow Estimation Using 4D Spatio Temporal Subspaces Properties. <i>Frontiers in Neuroscience</i> , 2016, 10, 596.	1.4	5
36	Asynchronous Event-Based Motion Processing: From Visual Events to Probabilistic Sensory Representation. <i>Neural Computation</i> , 2019, 31, 1114-1138.	1.3	5

#	ARTICLE	IF	CITATIONS
37	A homeostatic gain control mechanism to improve event-driven object recognition. , 2021, , .		4
38	Shapes to synchronize camera networks. , 2008, , .		2
39	Complexity Analysis of Iterative Basis Transformations Applied to Event-Based Signals. Frontiers in Neuroscience, 2018, 12, 373.	1.4	2
40	A Theory for Sparse Event-Based Closed Loop Control. Frontiers in Neuroscience, 2019, 13, 827.	1.4	2
41	Sepia, Tarsier, and Chameleon: A Modular C++ Framework for Event-Based Computer Vision. Frontiers in Neuroscience, 2019, 13, 1338.	1.4	2
42	Using structures to synchronize cameras of robots swarms. , 2008, , .		1
43	Auto-organized visual perception using distributed camera network. Robotics and Autonomous Systems, 2009, 57, 1075-1082.	3.0	1
44	Optical flow estimation using the Fisherâ€Rao metric. Neuromorphic Computing and Engineering, 2021, 1, 024004.	2.8	1
45	Geometric construction of the caustic curves for catadioptric sensors. , 0, , .		0
46	Designing non constant resolution vision sensors via photosites rearrangement. , 2008, , .		0
47	Live demonstration: Neuromorphic event-based multi-kernel algorithm for high speed visual features tracking. , 2014, , .		0
48	OBSTACLE DETECTION USING INTEGRATION OF OMNI-DIRECTIONAL CAMERA AND INERTIAL SENSOR. , 2011, , .		0