Vivienne Sze

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9610041/publications.pdf

Version: 2024-02-01

30 papers	6,729 citations	516710 16 h-index	752698 20 g-index
30 all docs	30 docs citations	30 times ranked	5179 citing authors

#	Article	IF	Citations
1	App-Based Saccade Latency and Directional Error Determination Across the Adult Age Spectrum. IEEE Transactions on Biomedical Engineering, 2022, 69, 1029-1039.	4.2	4
2	Freely scalable and reconfigurable optical hardware for deep learning. Scientific Reports, 2021, 11, 3144.	3.3	32
3	Architecture-Level Energy Estimation for Heterogeneous Computing Systems. , 2021, , .		2
4	Sparseloop: An Analytical, Energy-Focused Design Space Exploration Methodology for Sparse Tensor Accelerators. , 2021, , .		11
5	Measuring Saccade Latency Using Smartphone Cameras. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 885-897.	6.3	20
6	Low Power Depth Estimation of Rigid Objects for Time-of-Flight Imaging. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 1524-1534.	8.3	9
7	How to Evaluate Deep Neural Network Processors: TOPS/W (Alone) Considered Harmful. IEEE Solid-State Circuits Magazine, 2020, 12, 28-41.	0.4	40
8	FSMI: Fast computation of Shannon mutual information for information-theoretic mapping. International Journal of Robotics Research, 2020, 39, 1155-1177.	8.5	19
9	Efficient Processing of Deep Neural Networks. Synthesis Lectures on Computer Architecture, 2020, 15, 1-341.	1.3	72
10	Eyeriss v2: A Flexible Accelerator for Emerging Deep Neural Networks on Mobile Devices. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2019, 9, 292-308.	3.6	609
11	Navion: A 2-mW Fully Integrated Real-Time Visual-Inertial Odometry Accelerator for Autonomous Navigation of Nano Drones. IEEE Journal of Solid-State Circuits, 2019, 54, 1106-1119.	5.4	72
12	Enabling Saccade Latency Measurements with Consumer-Grade Cameras. , 2018, , .		4
13	Depth Estimation of Non-Rigid Objects for Time-Of-Flight Imaging. , 2018, , .		4
14	A Fully Integrated Energy-Efficient H.265/HEVC Decoder With eDRAM for Wearable Devices. IEEE Journal of Solid-State Circuits, 2018, 53, 2368-2377.	5.4	4
15	Efficient Processing of Deep Neural Networks: A Tutorial and Survey. Proceedings of the IEEE, 2017, 105, 2295-2329.	21.3	2,217
16	Eyeriss: An Energy-Efficient Reconfigurable Accelerator for Deep Convolutional Neural Networks. IEEE Journal of Solid-State Circuits, 2017, 52, 127-138.	5.4	1,877
17	Designing Hardware for Machine Learning: The Important Role Played by Circuit Designers. IEEE Solid-State Circuits Magazine, 2017, 9, 46-54.	0.4	42
18	Designing Energy-Efficient Convolutional Neural Networks Using Energy-Aware Pruning. , 2017, , .		374

#	Article	IF	Citations
19	Towards closing the energy gap between HOG and CNN features for embedded vision. , 2017, , .		35
20	Low power depth estimation for time-of-flight imaging. , 2017, , .		6
21	A fully-integrated energy-efficient H.265/HEVC decoder with eDRAM for wearable devices. , 2017, , .		6
22	An Energy-Efficient Hardware Implementation of HOG-Based Object Detection at 1080HD 60 fps with Multi-Scale Support. Journal of Signal Processing Systems, 2016, 84, 325-337.	2.1	39
23	Eyeriss. Computer Architecture News, 2016, 44, 367-379.	2.5	833
24	Rotate intra block copy for still image coding. , 2015, , .		15
25	A Deeply Pipelined CABAC Decoder for HEVC Supporting Level 6.2 High-Tier Applications. IEEE Transactions on Circuits and Systems for Video Technology, 2015, 25, 856-868.	8.3	34
26	Energy and area-efficient hardware implementation of HEVC inverse transform and dequantization. , 2014, , .		16
27	A 249-Mpixel/s HEVC Video-Decoder Chip for 4K Ultra-HD Applications. IEEE Journal of Solid-State Circuits, 2014, 49, 61-72.	5.4	59
28	High Throughput CABAC Entropy Coding in HEVC. IEEE Transactions on Circuits and Systems for Video Technology, 2012, 22, 1778-1791.	8.3	160
29	Low-Power Impulse UWB Architectures and Circuits. Proceedings of the IEEE, 2009, 97, 332-352.	21.3	70
30	A 0.7-V 1.8-mW H.264/AVC 720p Video Decoder. IEEE Journal of Solid-State Circuits, 2009, 44, 2943-2956.	5.4	44