Alessandro Capotondi

List of Publications by Year
in descending order

24 papers	369 citations

1478505

6 h-index

1588992

8 g-index

24 all docs	24 docs citations	24 times ranked	305 citing authors

#	Article	IF	Citations
1	PULP: A parallel ultra low power platform for next generation IoT applications. , 2015, , .		85
2	CMix-NN: Mixed Low-Precision CNN Library for Memory-Constrained Edge Devices. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 871-875.	3.0	61
3	NEURA <scp>ghe</scp>. ACM Transactions on Reconfigurable Technology and Systems, 2018, 11, 1-24.	2.5	50
4	A TinyML Platform for On-Device Continual Learning With Quantized Latent Replays. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 789-802.	3.6	30
5	A Systematic Assessment of Embedded Neural Networks for Object Detection. , 2020, , .		26
6	Improving the programmability of STHORM-based heterogeneous systems with offload-enabled OpenMP. , 2013, , .		19
7	Work-in-Progress: Quantized NNs as the Definitive Solution for Inference on Low-Power ARM MCUs?. , 2018, , .		16
8	Simplifying Many-Core-Based Heterogeneous SoC Programming With Offload Directives. IEEE Transactions on Industrial Informatics, 2015, 11, 957-967.	11.3	15
9	HERO. , 2018, , .		12
10	The Quest for Energy-Efficient I$ Design in Ultra-Low-Power Clustered Many-Cores. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 99-112.	2.4	11
11	Runtime Support for Multiple Offload-Based Programming Models on Clustered Manycore Accelerators. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 330-342.	4.6	6
12	Exploring NEURAghe: A Customizable Template for APSoC-Based CNN Inference at the Edge. IEEE Embedded Systems Letters, 2020, 12, 62-65.	1.9	5
13	A RISC-V-based FPGA Overlay to Simplify Embedded Accelerator Deployment. , 2021, , .		5
14	Enabling zero-copy OpenMP offloading on the PULP many-core accelerator. , 2017, , .		4
15	Unmanned Vehicles in Smart Farming: a Survey and a Glance at Future Horizons. , 2021, , .		4
16	Robustifying the Deployment of tinyML Models for Autonomous Mini-Vehicles. , 2021, , .		4
17	Understanding and Mitigating Memory Interference in FPGA-based HeSoCs. , 2022, , .		4
18	Controlling NUMA effects in embedded manycore applications with lightweight nested parallelism support. Parallel Computing, 2016, 59, 24-42.	2.1	3

#	Article	IF	Citations
19	Mixed-data-model heterogeneous compilation and OpenMP offloading. , 2020, , .		3
20	Augmenting manycore programmable accelerators with photonic interconnect technology for the high-end embedded computing domain. , 2014, , .		2
21	On the effectiveness of OpenMP teams for cluster-based many-core accelerators. , 2016, , .		2
22	Runtime Support for Multiple Offload-Based Programming Models on Embedded Manycore Accelerators. , 2015, , .		1
23	An FPGA Overlay for Efficient Real-Time Localization in 1/10th Scale Autonomous Vehicles. , 2022, , .		1
24	Enabling Scalable and Fine-Grained Nested Parallelism on Embedded Many-cores. , 2015, , .		0