

# Luca Benini

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1470115/publications.pdf>

Version: 2024-02-01

1,046  
papers

30,353  
citations

18436

62  
h-index

17055

122  
g-index

1060  
all docs

1060  
docs citations

1060  
times ranked

14108  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy-Efficient, Precise UWB-Based 3-D Localization of Sensor Nodes With a Nano-UAV. IEEE Internet of Things Journal, 2023, 10, 5760-5777.	5.5	9
2	A Low-Power Transprecision Floating-Point Cluster for Efficient Near-Sensor Data Analytics. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 1038-1053.	4.0	9
3	Fully Onboard AI-Powered Human-Drone Pose Estimation on Ultralow-Power Autonomous Flying Nano-UAVs. IEEE Internet of Things Journal, 2022, 9, 1913-1929.	5.5	25
4	CUTIE: Beyond PetaOp/s/W Ternary DNN Inference Acceleration With Better-Than-Binary Energy Efficiency. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 1020-1033.	1.9	9
5	Vau Da Muntanialas: Energy-Efficient Multi-Die Scalable Acceleration of RNN Inference. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 244-257.	3.5	3
6	Trimming Feature Extraction and Inference for MCU-Based Edge NILM: A Systematic Approach. IEEE Transactions on Industrial Informatics, 2022, 18, 943-952.	7.2	25
7	Vega: A Ten-Core SoC for IoT Endnodes With DNN Acceleration and Cognitive Wake-Up From MRAM-Based State-Retentive Sleep Mode. IEEE Journal of Solid-State Circuits, 2022, 57, 127-139.	3.5	42
8	Fly, Wake-up, Find: UAV-based Energy-efficient Localization for Distributed Sensor Nodes. Sustainable Computing: Informatics and Systems, 2022, 34, 100666.	1.6	3
9	Sub-mW Keyword Spotting on an MCU: Analog Binary Feature Extraction and Binary Neural Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 2002-2012.	3.5	7
10	Leveraging Tactile Sensors for Low Latency Embedded Smart Hands for Prosthetic and Robotic Applications. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-14.	2.4	4
11	Exploring Scalable, Distributed Real-Time Anomaly Detection for Bridge Health Monitoring. IEEE Internet of Things Journal, 2022, 9, 17660-17674.	5.5	10
12	Dataflow Driven Partitioning of Machine Learning Applications for Optimal Energy Use in Batteryless Systems. Transactions on Embedded Computing Systems, 2022, 21, 1-29.	2.1	2
13	Embedding Temporal Convolutional Networks for Energy-efficient PPG-based Heart Rate Monitoring. ACM Transactions on Computing for Healthcare, 2022, 3, 1-25.	3.3	9
14	Traffic Load Estimation from Structural Health Monitoring sensors using supervised learning. Sustainable Computing: Informatics and Systems, 2022, 35, 100704.	1.6	0
15	An open platform for efficient drone-to-sensor wireless ranging and data harvesting. Sustainable Computing: Informatics and Systems, 2022, 35, 100734.	1.6	1
16	RVfplib: A Fast and Compact Open-Source Floating-Point Emulation Library for Tiny RISC-V Processors. Lecture Notes in Computer Science, 2022, , 16-32.	1.0	2
17	Multi-level anomaly prediction in Tier-0 datacenter. , 2022, , .		1
18	A Heterogeneous In-Memory Computing Cluster for Flexible End-to-End Inference of Real-World Deep Neural Networks. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2022, 12, 422-435.	2.7	18

#	ARTICLE	IF	CITATIONS
19	A RDMA Interface for Ultra-Fast Ultrasound Data-Streaming over an Optical Link. , 2022, , .		0
20	Bioformers: Embedding Transformers for Ultra-Low Power sEMG-based Gesture Recognition. , 2022, , .		10
21	Ternarized TCN for $\mu$ ext-{Inference} Gesture Recognition from DVS Event Frames. , 2022, , .		0
22	RedMULE: A Compact FP16 Matrix-Multiplication Accelerator for Adaptive Deep Learning on RISC-V-Based Ultra-Low-Power SoCs. , 2022, , .		6
23	SNE: an Energy-Proportional Digital Accelerator for Sparse Event-Based Convolutions. , 2022, , .		7
24	Aerosense: Long-Range Bluetooth Wireless Sensor Node for Aerodynamic Monitoring on Wind Turbine Blades. Journal of Physics: Conference Series, 2022, 2265, 022074.	0.3	1
25	64-kB 65-nm GC-eDRAM With Half-Select Support and Parallel Refresh Technique. IEEE Solid-State Circuits Letters, 2022, 5, 170-173.	1.3	2
26	HEROv2: Full-Stack Open-Source Research Platform for Heterogeneous Computing. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 4368-4382.	4.0	4
27	Towards a Multi-Pixel Time-of-Flight Indoor Navigation System for Nano-Drone Applications. , 2022, , .		9
28	HPC Cooling: A Flexible Modeling Tool for Effective Design and Management. IEEE Transactions on Sustainable Computing, 2021, 6, 441-455.	2.2	8
29	Snitch: A Tiny Pseudo Dual-Issue Processor for Area and Energy Efficient Execution of Floating-Point Intensive Workloads. IEEE Transactions on Computers, 2021, 70, 1845-1860.	2.4	20
30	HePREM: A Predictable Execution Model for GPU-based Heterogeneous SoCs. IEEE Transactions on Computers, 2021, 70, 17-29.	2.4	9
31	Stream Semantic Registers: A Lightweight RISC-V ISA Extension Achieving Full Compute Utilization in Single-Issue Cores. IEEE Transactions on Computers, 2021, 70, 212-227.	2.4	16
32	A 0.5GHz 0.35mW LDO-Powered Constant-Slope Phase Interpolator With 0.22% INL. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 156-160.	2.2	1
33	Efficient image dataset classification difficulty estimation for predicting deep-learning accuracy. Visual Computer, 2021, 37, 1593-1610.	2.5	15
34	COUNTDOWN: A Run-Time Library for Performance-Neutral Energy Saving in MPI Applications. IEEE Transactions on Computers, 2021, 70, 682-695.	2.4	5
35	Smart Power Unitâ€™mW-to-nW Power Management and Control for Self-Sustainable IoT Devices. IEEE Transactions on Power Electronics, 2021, 36, 5700-5710.	5.4	29
36	An SRAM-Based Multibit In-Memory Matrix-Vector Multiplier With a Precision That Scales Linearly in Area, Time, and Power. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 372-385.	2.1	11

#	ARTICLE	IF	CITATIONS
37	A wearable biosensing system with in-sensor adaptive machine learning for hand gesture recognition. Nature Electronics, 2021, 4, 54-63.	13.1	317
38	RTK-LoRa: High-Precision, Long-Range, and Energy-Efficient Localization for Mobile IoT Devices. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	16
39	Energy-Efficient Hardware-Accelerated Synchronization for Shared-L1-Memory Multiprocessor Clusters. IEEE Transactions on Parallel and Distributed Systems, 2021, 32, 633-648.	4.0	12
40	Embedded Streaming Principal Components Analysis for Network Load Reduction in Structural Health Monitoring. IEEE Internet of Things Journal, 2021, 8, 4433-4447.	5.5	20
41	Improving Memory Utilization in Convolutional Neural Network Accelerators. IEEE Embedded Systems Letters, 2021, 13, 77-80.	1.3	5
42	An Ensemble of Hyperdimensional Classifiers: Hardware-Friendly Short-Latency Seizure Detection With Automatic iEEG Electrode Selection. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 935-946.	3.9	27
43	Energy-Efficient PRBS Impedance Spectroscopy on a Digital Versatile Platform. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	7
44	Efficient Transform Algorithms for Parallel Ultra-Low-Power IoT End Nodes. IEEE Embedded Systems Letters, 2021, 13, 210-213.	1.3	1
45	DiG: enabling out-of-band scalable high-resolution monitoring for data-center analytics, automation and control (extended). Cluster Computing, 2021, 24, 2723-2734.	3.5	6
46	Streamlining the OpenMP Programming Model on Ultra-Low-Power Multi-core MCUs. Lecture Notes in Computer Science, 2021, , 167-182.	1.0	3
47	RF-Powered Low-Energy Sensor Nodes for Predictive Maintenance in Electromagnetically Harsh Industrial Environments. Sensors, 2021, 21, 386.	2.1	19
48	An Open-Source Platform for High-Performance Non-Coherent On-Chip Communication. IEEE Transactions on Computers, 2021, , 1-1.	2.4	11
49	A Fully Integrated 5-mW, 0.8-Gbps Energy-Efficient Chip-to-Chip Data Link for Ultralow-Power IoT End-Nodes in 65-nm CMOS. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, , 1-12.	2.1	1
50	Thermal Characterization of a Tier0 Datacenter Room in Normal and Thermal Emergency Conditions. Lecture Notes in Computer Science, 2021, , 1-16.	1.0	1
51	4.4 A 1.3TOPS/W @ 32GOPS Fully Integrated 10-Core SoC for IoT End-Nodes with 1.7 <sup>1/4</sup> W Cognitive Wake-Up From MRAM-Based State-Retentive Sleep Mode. , 2021, , .		13
52	RISC-V for Real-time MCUs - Software Optimization and Microarchitectural Gap Analysis. , 2021, , .		5
53	Robustifying the Deployment of tinyML Models for Autonomous Mini-Vehicles. Sensors, 2021, 21, 1339.	2.1	27
54	F <sup>1/4</sup> nfiber-Drone: A Modular Open-Platform 18-grams Autonomous Nano-Drone. , 2021, , .		5

#	ARTICLE	IF	CITATIONS
55	Indirection Stream Semantic Register Architecture for Efficient Sparse-Dense Linear Algebra. , 2021, , .		4
56	Microarchitectural Timing Channels and their Prevention on an Open-Source 64-bit RISC-V Core. , 2021, , .		8
57	Prediction of Thermal Hazards in a Real Datacenter Room Using Temporal Convolutional Networks. , 2021, , .		3
58	FlyDVS: An Event-Driven Wireless Ultra-Low Power Visual Sensor Node. , 2021, , .		4
59	Analyzing Memory Interference of FPGA Accelerators on Multicore Hosts in Heterogeneous Reconfigurable SoCs. , 2021, , .		2
60	Manticore: A 4096-Core RISC-V Chiplet Architecture for Ultraefficient Floating-Point Computing. IEEE Micro, 2021, 41, 36-42.	1.8	25
61	Arnold: An eFPGA-Augmented RISC-V SoC for Flexible and Low-Power IoT End Nodes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 677-690.	2.1	19
62	FPnew: An Open-Source Multiformat Floating-Point Unit Architecture for Energy-Proportional Transprecision Computing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 774-787.	2.1	46
63	Robust high-dimensional memory-augmented neural networks. Nature Communications, 2021, 12, 2468.	5.8	50
64	Robust and Energy-Efficient PPG-Based Heart-Rate Monitoring. , 2021, , .		12
65	Tiny-FPU: Low-Cost Floating-Point Support for Small RISC-V MCU Cores. , 2021, , .		2
66	ChewBaccaNN: A Flexible 223 TOPS/W BNN Accelerator. , 2021, , .		10
67	Low-Power License Plate Detection and Recognition on a RISC-V Multi-Core MCU-Based Vision System. , 2021, , .		5
68	Towards Always-on Event-based Cameras for Long-lasting Battery-operated Smart Sensor Nodes. , 2021, , .		2
69	Robustifying the Deployment of tinyML Models for Autonomous Mini-Vehicles. , 2021, , .		4
70	H-Watch: An Open, Connected Platform for AI-Enhanced COVID19 Infection Symptoms Monitoring and Contact Tracing. , 2021, , .		7
71	Model-based vs. Data-driven Approaches for Anomaly Detection in Structural Health Monitoring: a Case Study. , 2021, , .		10
72	Mixed-Precision Quantization and Parallel Implementation of Multispectral Riemannian Classification for Brain-Machine Interfaces. , 2021, , .		5

#	ARTICLE	IF	CITATIONS
73	Energy Efficient In-Memory Hyperdimensional Encoding for Spatio-Temporal Signal Processing. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1725-1729.	2.2	6
74	WindNode: A Long-Lasting And Long-Range Bluetooth Wireless Sensor Node for Pressure and Acoustic Monitoring on Wind Turbines. , 2021, , .		5
75	Automated Tuning of End-to-end Neural Flight Controllers for Autonomous Nano-drones. , 2021, , .		1
76	ECG-TCN: Wearable Cardiac Arrhythmia Detection with a Temporal Convolutional Network. , 2021, , .		22
77	Battery-Less Face Recognition at the Extreme Edge. , 2021, , .		3
78	End-to-end 100-TOPS/W Inference With Analog In-Memory Computing: Are We There Yet?. , 2021, , .		4
79	A RISC-V in-network accelerator for flexible high-performance low-power packet processing. , 2021, , .		12
80	Efficient Pipelined Execution of CNNs Based on In-Memory Computing and Graph Homomorphism Verification. IEEE Transactions on Computers, 2021, 70, 922-935.	2.4	9
81	To Buffer, or Not to Buffer? A Case Study on FFT Accelerators for Ultra-Low-Power Multicore Clusters. , 2021, , .		5
82	XpulpNN: Enabling Energy Efficient and Flexible Inference of Quantized Neural Networks on RISC-V Based IoT End Nodes. IEEE Transactions on Emerging Topics in Computing, 2021, 9, 1489-1505.	3.2	15
83	TinyRadarNN: Combining Spatial and Temporal Convolutional Neural Networks for Embedded Gesture Recognition With Short Range Radars. IEEE Internet of Things Journal, 2021, 8, 10336-10346.	5.5	34
84	Structural Health Monitoring System With Narrowband IoT and MEMS Sensors. IEEE Sensors Journal, 2021, 21, 16371-16380.	2.4	46
85	The Predictable Execution Model in Practice. Transactions on Embedded Computing Systems, 2021, 20, 1-25.	2.1	1
86	TCN Mapping Optimization for Ultra-Low Power Time-Series Edge Inference. , 2021, , .		4
87	A Microcontroller is All You Need: Enabling Transformer Execution on Low-Power IoT Endnodes. , 2021, , .		11
88	Enabling Design Methodologies and Future Trends for Edge AI: Specialization and Codesign. IEEE Design and Test, 2021, 38, 7-26.	1.1	24
89	sEMG-based Regression of Hand Kinematics with Temporal Convolutional Networks on a Low-Power Edge Microcontroller. , 2021, , .		8
90	Low-Latency Detection of Epileptic Seizures from iEEG with Temporal Convolutional Networks on a Low-Power Parallel MCU. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
91	SmartHand: Towards Embedded Smart Hands for Prosthetic and Robotic Applications. , 2021, , .		3
92	Tackling Time-Variability in sEMG-based Gesture Recognition with On-Device Incremental Learning and Temporal Convolutional Networks. , 2021, , .		5
93	Near-channel classifier: symbiotic communication and classification in high-dimensional space. Brain Informatics, 2021, 8, 16.	1.8	9
94	The relevance of rock shape over massâ€™ implications for rockfall hazard assessments. Nature Communications, 2021, 12, 5546.	5.8	24
95	RNN-Based Radio Resource Management on Multicore RISC-V Accelerator Architectures. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 1624-1637.	2.1	7
96	A 5 <i>Î¼</i>W Standard Cell Memory-Based Configurable Hyperdimensional Computing Accelerator for Always-on Smart Sensing. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 4116-4128.	3.5	12
97	Predicting Hard Disk Failures in Data Centers Using Temporal Convolutional Neural Networks. Lecture Notes in Computer Science, 2021, , 277-289.	1.0	4
98	Energy-Positive Activity Recognition - From Kinetic Energy Harvesting to Smart Self-Sustainable Wearable Devices. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 926-937.	2.7	20
99	Automated Design Space Exploration for Optimized Deployment of DNN on Arm Cortex-A CPUs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 2293-2305.	1.9	8
100	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.	2.7	30
101	A 1.15 TOPS/W, 16-Cores Parallel Ultra-Low Power Cluster with 2b-to-32b Fully Flexible Bit-Precision and Vector Lockstep Execution Mode. , 2021, , .		6
102	A 10-core SoC with 20 Fine-Grain Power Domains for Energy-Proportional Data-Parallel Processing over a Wide Voltage and Temperature Range. , 2021, , .		1
103	Pruning In Time (PIT): A Lightweight Network Architecture Optimizer for Temporal Convolutional Networks. , 2021, , .		9
104	Improving Autonomous Nano-Drones Performance via Automated End-to-End Optimization and Deployment of DNNs. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 548-562.	2.7	12
105	Adaptive Random Forests for Energy-Efficient Inference on Microcontrollers. , 2021, , .		6
106	Sub-100 \$mu\$W Multispectral Riemannian Classification for EEG-Based Brainâ€™Machine Interfaces. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1149-1160.	2.7	2
107	Q-PPG: Energy-Efficient PPG-Based Heart Rate Monitoring on Wearable Devices. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 1196-1209.	2.7	20
108	Hardware-In-The Loop Emulation for Agile Co-Design of Parallel Ultra-Low Power IoT Processors. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
109	Towards Long-term Non-invasive Monitoring for Epilepsy via Wearable EEG Devices. , 2021, , .		15
110	GVSoc: A Highly Configurable, Fast and Accurate Full-Platform Simulator for RISC-V based IoT Processors. , 2021, , .		17
111	Banshee: A Fast LLVM-Based RISC-V Binary Translator. , 2021, , .		4
112	UStEMG: an Ultrasound Transparent Tattoo-based sEMG System for Unobtrusive Parallel Acquisitions of Muscle Electro-mechanics. , 2021, 2021, 7077-7082.		3
113	FlexFloat: A Software Library for Transprecision Computing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 145-156.	1.9	20
114	A Bluetooth-Low-Energy Sensor Node for Acoustic Monitoring of Small Birds. IEEE Sensors Journal, 2020, 20, 425-433.	2.4	13
115	Hyperdimensional Computing With Local Binary Patterns: One-Shot Learning of Seizure Onset and Identification of Ictogenic Brain Regions Using Short-Time iEEG Recordings. IEEE Transactions on Biomedical Engineering, 2020, 67, 601-613.	2.5	45
116	CBinfer: Exploiting Frame-to-Frame Locality for Faster Convolutional Network Inference on Video Streams. IEEE Transactions on Circuits and Systems for Video Technology, 2020, 30, 1451-1465.	5.6	18
117	Thermal Model Identification of Computing Nodes in High-Performance Computing Systems. IEEE Transactions on Industrial Electronics, 2020, 67, 7778-7788.	5.2	6
118	Robust Identification of Thermal Models for In-Production High-Performance-Computing Clusters With Machine Learning-Based Data Selection. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 2042-2054.	1.9	3
119	A2Event: A Micro-Watt Programmable Frequency-Time Detector for Always-On Energy-Neutral Sensing. Sustainable Computing: Informatics and Systems, 2020, 25, 100368.	1.6	5
120	Robust Real-Time Embedded EMG Recognition Framework Using Temporal Convolutional Networks on a Multicore IoT Processor. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 244-256.	2.7	81
121	Ara: A 1-GHz+ Scalable and Energy-Efficient RISC-V Vector Processor With Multiprecision Floating-Point Support in 22-nm FD-SOI. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 530-543.	2.1	48
122	PULP-NN: accelerating quantized neural networks on parallel ultra-low-power RISC-V processors. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190155.	1.6	78
123	Modular Design and Optimization of Biomedical Applications for Ultralow Power Heterogeneous Platforms. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3821-3832.	1.9	6
124	An Energy-Efficient Low-Voltage Swing Transceiver for mW-Range IoT End-Nodes. , 2020, , .		2
125	Memory-Latency-Accuracy Trade-Offs for Continual Learning on a RISC-V Extreme-Edge Node. , 2020, , .		9
126	Optimizing Temporal Convolutional Network Inference on FPGA-Based Accelerators. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2020, 10, 348-361.	2.7	21



#	ARTICLE	IF	CITATIONS
127	Always-On 674¼ W@4GOP/s Error Resilient Binary Neural Networks With Aggressive SRAM Voltage Scaling on a 22-nm IoT End-Node. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3905-3918.	3.5	23
128	Energy-Efficient Two-level Instruction Cache Design for an Ultra-Low-Power Multi-core Cluster. , 2020, , .		3
129	An Accurate EEGNet-based Motor-Imagery Brainâ€“Computer Interface for Low-Power Edge Computing. , 2020, , .		54
130	A Feature Reduction Strategy For Enabling Lightweight Non-Intrusive Load Monitoring On Edge Devices. , 2020, , .		5
131	A Mixed-Precision RISC-V Processor for Extreme-Edge DNN Inference. , 2020, , .		22
132	Enhancing Structural Health Monitoring with Vehicle Identification and Tracking. , 2020, , .		9
133	Countdown Slack: A Run-Time Library to Reduce Energy Footprint in Large-Scale MPI Applications. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 2696-2709.	4.0	5
134	Extending the RISC-V ISA for Efficient RNN-based 5G Radio Resource Management. , 2020, , .		3
135	Live Demonstration: Exploiting Body-Biasing for Static Corner Trimming and Maximum Energy Efficiency Operation in 22nm FDX Technology. , 2020, , .		0
136	Using Low-Power, Low-Cost IoT Processors in Clinical Biosignal Research: an In-depth Feasibility Check. , 2020, 2020, 4008-4011.		2
137	A Flexible, Low-Power Platform for UAV-Based Data Collection From Remote Sensors. IEEE Access, 2020, 8, 164775-164785.	2.6	16
138	TRANSPIRE: An energy-efficient TRANSprecision floating-point Programmable archItectuRE. , 2020, , .		11
139	Ultra-low energy pest detection for smart agriculture. , 2020, , .		10
140	RTK-LoRa: High-Precision, Long-Range and Energy-Efficient Localization for Mobile IoT devices. , 2020, , .		3
141	Binarization Methods for Motor-Imagery Brainâ€“Computer Interface Classification. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2020, 10, 567-577.	2.7	6
142	In-memory hyperdimensional computing. Nature Electronics, 2020, 3, 327-337.	13.1	145
143	Neuro-PULP: A Paradigm Shift Towards Fully Programmable Platforms for Neural Interfaces. , 2020, , .		0
144	FANN-on-MCU: An Open-Source Toolkit for Energy-Efficient Neural Network Inference at the Edge of the Internet of Things. IEEE Internet of Things Journal, 2020, 7, 4403-4417.	5.5	101

#	ARTICLE	IF	CITATIONS
145	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.	2.2	61
146	Idleness-Aware Dynamic Power Mode Selection on the i.MX 7ULP IoT Edge Processor. Journal of Low Power Electronics and Applications, 2020, 10, 19.	1.3	3
147	XpulpNN: Accelerating Quantized Neural Networks on RISC-V Processors Through ISA Extensions. , 2020, , .		28
148	InfiniWolf: Energy Efficient Smart Bracelet for Edge Computing with Dual Source Energy Harvesting. , 2020, , .		9
149	BrightNet: A Deep CNN for OLED-Based Point of Care Immunofluorescent Diagnostic Systems. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6766-6775.	2.4	7
150	Performance-aware predictive-model-based on-chip body-bias regulation strategy for an ULP multi-core cluster in 28Ånm UTBB FD-SOI. The Integration VLSI Journal, 2020, 72, 194-207.	1.3	2
151	<i>pAElla</i>: Edge AI-Based Real-Time Malware Detection in Data Centers. IEEE Internet of Things Journal, 2020, 7, 9589-9599.	5.5	17
152	NB-IoT Versus LoRaWAN: An Experimental Evaluation for Industrial Applications. IEEE Transactions on Industrial Informatics, 2020, 16, 7802-7811.	7.2	52
153	EEG-TCNet: An Accurate Temporal Convolutional Network for Embedded Motor-Imagery Brain-Brain Machine Interfaces. , 2020, , .		71
154	Integrating event-based dynamic vision sensors with sparse hyperdimensional computing. , 2020, , .		13
155	Sound event detection with binary neural networks on tightly power-constrained IoT devices. , 2020, , .		21
156	Mixed-data-model heterogeneous compilation and OpenMP offloading. , 2020, , .		3
157	Design of an open-source bridge between non-coherent burst-based and coherent cache-line-based memory systems. , 2020, , .		4
158	Combining learning and optimization for transprecision computing. , 2020, , .		3
159	A Synergistic Approach to Predictable Compilation and Scheduling on Commodity Multi-Cores. , 2020, , .		3
160	Q-EEGNet: an Energy-Efficient 8-bit Quantized Parallel EEGNet Implementation for Edge Motor-Imagery Brain-Machine Interfaces. , 2020, , .		19
161	The Memory Challenge in Ultra-Low Power Deep Learning. The Frontiers Collection, 2020, , 323-349.	0.1	3
162	Leveraging Automated Mixed-Low-Precision Quantization for Tiny Edge Microcontrollers. Communications in Computer and Information Science, 2020, , 296-308.	0.4	15

#	ARTICLE	IF	CITATIONS
163	A Cost-Effective Embedded Platform for Scalable Multichannel Biopotential Acquisition. EAI/Springer Innovations in Communication and Computing, 2020, , 353-364.	0.9	0
164	A Wearable Device for Brain-Machine Interaction with Augmented Reality Head-Mounted Display. EAI/Springer Innovations in Communication and Computing, 2020, , 339-351.	0.9	1
165	BYOC. , 2020, , .		21
166	An Open-Source Scalable Thermal and Power Controller for HPC Processors. , 2020, , .		3
167	Towards a compact, high-speed optical linkbased 3D optoacoustic imager. , 2020, , .		4
168	A Low Power and Smart Power Unit for Kinetic Self-Sustainable Wearable Devices. , 2020, , .		1
169	Energy-Efficient Adaptive Machine Learning on IoT End-Nodes With Class-Dependent Confidence. , 2020, , .		2
170	An Energy-Efficient Integrated Programmable Array Accelerator and Compilation Flow for Near-Sensor Ultralow Power Processing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1095-1108.	1.9	11
171	A Broadband Multi-Mode Compressive Sensing Current Sensor SoC in 0.16 $\mu\text{m}$ CMOS. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 105-118.	3.5	10
172	A Minimally Invasive Low-Power Platform for Real-Time Brain Computer Interaction Based on Canonical Correlation Analysis. IEEE Internet of Things Journal, 2019, 6, 967-977.	5.5	12
173	NETWIS: A Scalable and Robust Body Sensor Network For Biomedical Application. , 2019, , .		0
174	The Cost of Application-Class Processing: Energy and Performance Analysis of a Linux-Ready 1.7-GHz 64-Bit RISC-V Core in 22-nm FDSOI Technology. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 2629-2640.	2.1	177
175	A semisupervised autoencoder-based approach for anomaly detection in high performance computing systems. Engineering Applications of Artificial Intelligence, 2019, 85, 634-644.	4.3	70
176	A 64-mW DNN-Based Visual Navigation Engine for Autonomous Nano-Drones. IEEE Internet of Things Journal, 2019, 6, 8357-8371.	5.5	98
177	Hyperdimensional Computing-based Multimodality Emotion Recognition with Physiological Signals. , 2019, , .		38
178	LoRa vs. LoRa: In-Field Evaluation and Comparison For Long-Lifetime Sensor Nodes. , 2019, , .		11
179	Ultra Low-Power Drowsiness Detection System with BioWolf. , 2019, , .		5
180	Extended Bit-Plane Compression for Convolutional Neural Network Accelerators. , 2019, , .		7

#	ARTICLE	IF	CITATIONS
181	Towards a Wearable Interface for Food Quality Grading Through ERP Analysis. , 2019, , .		1
182	A RISC-V Based Open Hardware Platform for Always-On Wearable Smart Sensing. , 2019, , .		12
183	FANNCortexM: An Open Source Toolkit for Deployment of Multi-layer Neural Networks on ARM Cortex-M Family Microcontrollers : Performance Analysis with Stress Detection. , 2019, , .		7
184	An Energy-Efficient IoT node for HMI applications based on an ultra-low power Multicore Processor. , 2019, , .		12
185	SmarTEG: An Autonomous Wireless Sensor Node for High Accuracy Accelerometer-Based Monitoring. Sensors, 2019, 19, 2747.	2.1	21
186	Self-Sustainable Smart Ring for Long-Term Monitoring of Blood Oxygenation. IEEE Access, 2019, 7, 115400-115408.	2.6	26
187	Learning to infer: RL-based search for DNN primitive selection on Heterogeneous Embedded Systems. , 2019, , .		5
188	NTX: An Energy-efficient Streaming Accelerator for Floating-point Generalized Reduction Workloads in 22 nm FD-SOI. , 2019, , .		5
189	Embedding principal component analysis for data reduction in structural health monitoring on low-cost IoT gateways. , 2019, , .		9
190	A LoRaWAN Wireless Sensor Network for Data Center Temperature Monitoring. Lecture Notes in Electrical Engineering, 2019, , 169-177.	0.3	4
191	Hardware Optimizations of Dense Binary Hyperdimensional Computing: Rematerialization of Hypervectors, Binarized Bundling, and Combinational Associative Memory. ACM Journal on Emerging Technologies in Computing Systems, 2019, 15, 1-25.	1.8	38
192	Ultrasound as a Tool to Study Muscleâ€™Tendon Functions during Locomotion: A Systematic Review of Applications. Sensors, 2019, 19, 4316.	2.1	19
193	Online Anomaly Detection in HPC Systems. , 2019, , .		23
194	An Open Source and Open Hardware Deep Learning-Powered Visual Navigation Engine for Autonomous Nano-UAVs. , 2019, , .		27
195	A multi-protocol system for configurable data streaming on IoT healthcare devices. , 2019, , .		6
196	ÂBioWolf: A Sub-10-mW 8-Channel Advanced Brainâ€™Computer Interface Platform With a Nine-Core Processor and BLE Connectivity. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 893-906.	2.7	32
197	EmbedUWB: Low Power Embedded High-Precision and Low Latency UWB Localization. , 2019, , .		15
198	Paving the Way Toward Energy-Aware and Automated Datacentre. , 2019, , .		15

#	ARTICLE	IF	CITATIONS
199	Anomaly Detection Using Autoencoders in High Performance Computing Systems. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 9428-9433.	3.6	105
200	Laelaps: An Energy-Efficient Seizure Detection Algorithm from Long-term Human iEEG Recordings without False Alarms. , 2019, , .		39
201	Taming Data Caches for Predictable Execution on GPU-based SoCs. , 2019, , .		7
202	Self-Sustaining Acoustic Sensor With Programmable Pattern Recognition for Underwater Monitoring. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2346-2355.	2.4	31
203	Online Learning and Classification of EMG-Based Gestures on a Parallel Ultra-Low Power Platform Using Hyperdimensional Computing. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 516-528.	2.7	53
204	The ANTAREX domain specific language for high performance computing. Microprocessors and Microsystems, 2019, 68, 58-73.	1.8	9
205	Design and Evaluation of SmallFloat SIMD extensions to the RISC-V ISA. , 2019, , .		18
206	Applications of Computation-In-Memory Architectures based on Memristive Devices. , 2019, , .		24
207	Prediction of Time-to-Solution in Material Science Simulations Using Deep Learning. , 2019, , .		0
208	Hyperdrive: A Multi-Chip Systolically Scalable Binary-Weight CNN Inference Engine. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2019, 9, 309-322.	2.7	15
209	Optimization and deployment of CNNs at the edge. , 2019, , .		10
210	Mr.Wolf: An Energy-Precision Scalable Parallel Ultra Low Power SoC for IoT Edge Processing. IEEE Journal of Solid-State Circuits, 2019, 54, 1970-1981.	3.5	87
211	FPGA Implementation of a Kalman-Based Motion Estimator for Levitated Nanoparticles. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 2374-2386.	2.4	13
212	Energy and power awareness in hardware schedulers for energy harvesting IoT SoCs. The Integration VLSI Journal, 2019, 67, 33-43.	1.3	12
213	Supporting the Scale-Up of High Performance Application to Pre-Exascale Systems: The ANTAREX Approach. , 2019, , .		1
214	LightProbe: A Digital Ultrasound Probe for Software-Defined Ultrafast Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 747-760.	1.7	17
215	Slotted ALOHA on LoRaWAN-Design, Analysis, and Deployment. Sensors, 2019, 19, 838.	2.1	122
216	PULP-NN: A Computing Library for Quantized Neural Network inference at the edge on RISC-V Based Parallel Ultra Low Power Clusters. , 2019, , .		20

#	ARTICLE	IF	CITATIONS
217	EdgeEye: A Long-Range Energy-Efficient Vision Node For Long-Term Edge Computing. , 2019, , .		8
218	The Floating Point Trinity: A Multi-modal Approach to Extreme Energy-Efficiency and Performance. , 2019, , .		6
219	STB-SASB: Combining Synthetic Aperture Sequential Beamforming with Synthetic Transmit Beams for Wireless Ultrasound Probes. , 2019, , .		1
220	On-line Testing for Autonomous Systems driven by RISC-V Processor Design Verification. , 2019, , .		9
221	DORY: Lightweight memory hierarchy management for deep NN inference on IoT endnodes. , 2019, , .		7
222	Pushing On-chip Memories Beyond Reliability Boundaries in Micropower Machine Learning Applications. , 2019, , .		4
223	Low Power Embedded Gesture Recognition Using Novel Short-Range Radar Sensors. , 2019, , .		8
224	A PULP-based Parallel Power Controller for Future Exascale Systems. , 2019, , .		8
225	EBPC: Extended Bit-Plane Compression for Deep Neural Network Inference and Training Accelerators. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2019, 9, 723-734.	2.7	20
226	Network-accelerated non-contiguous memory transfers. , 2019, , .		13
227	An interoperable tool-chain for energy monitoring applications. , 2019, , .		1
228	Analysis of Contraction Effort Level in EMG-Based Gesture Recognition Using Hyperdimensional Computing. , 2019, , .		7
229	A 0.80pJ/flop, 1.24Tflop/sW 8-to-64 bit Transprecision Floating-Point Unit for a 64 bit RISC-V Processor in 22nm FD-SOI. , 2019, , .		3
230	Exploring Shared Virtual Memory for FPGA Accelerators with a Configurable IOMMU. IEEE Transactions on Computers, 2019, 68, 510-525.	2.4	7
231	Pricing schemes for energy-efficient HPC systems: Design and exploration. International Journal of High Performance Computing Applications, 2019, 33, 716-734.	2.4	12
232	Combining PREM compilation and static scheduling for high-performance and predictable MPSoC execution. Parallel Computing, 2019, 85, 27-44.	1.3	6
233	A Scalable Near-Memory Architecture for Training Deep Neural Networks on Large In-Memory Datasets. IEEE Transactions on Computers, 2019, 68, 484-497.	2.4	45
234	Efficient Biosignal Processing Using Hyperdimensional Computing: Network Templates for Combined Learning and Classification of ExG Signals. Proceedings of the IEEE, 2019, 107, 123-143.	16.4	82

#	ARTICLE	IF	CITATIONS
235	Extending the Lifetime of Nano-Blimps via Dynamic Motor Control. Journal of Signal Processing Systems, 2019, 91, 339-361.	1.4	11
236	StreamDrive: a Dynamic Dataflow Framework for Clustered Embedded Architectures. Journal of Signal Processing Systems, 2019, 91, 275-301.	1.4	2
237	Towards Versatile Fast Training for Wearable Interfaces in Prosthetics. Biosystems and Biorobotics, 2019, , 157-161.	0.2	0
238	Frequency Assignment in High Performance Computing Systems. Lecture Notes in Computer Science, 2019, , 151-164.	1.0	0
239	Hardware-Accelerated Energy-Efficient Synchronization and Communication for Ultra-Low-Power Tightly Coupled Clusters. , 2019, , .		4
240	Experimental Evaluation on NB-IoT and LoRaWAN for Industrial and IoT Applications. , 2019, , .		7
241	An sEMG-Based Human-Robot Interface for Robotic Hands Using Machine Learning and Synergies. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1149-1158.	1.4	73
242	Quantifying the Impact of Variability and Heterogeneity on the Energy Efficiency for a Next-Generation Ultra-Green Supercomputer. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 1575-1588.	4.0	12
243	Design and Evaluation of a Low-Power Sensor Device for Induced Rockfall Experiments. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 767-779.	2.4	23
244	Combining microbial fuel cell and ultra-low power event-driven audio detector for zero-power sensing in underwater monitoring. , 2018, , .		8
245	A Multi-Sensor and Parallel Processing SoC for Miniaturized Medical Instrumentation. IEEE Journal of Solid-State Circuits, 2018, 53, 2076-2087.	3.5	64
246	Hardware Transactional Memory Exploration in Coherence-Free Many-Core Architectures. International Journal of Parallel Programming, 2018, 46, 1304-1328.	1.1	1
247	A 0.45-0.7 V 1-6 Gb/s 0.29-0.58 pJ/b Source-Synchronous Transceiver Using Near-Threshold Operation. IEEE Journal of Solid-State Circuits, 2018, 53, 884-895.	3.5	12
248	Towards Edge-Aware Spatio-Temporal Filtering in Real-Time. IEEE Transactions on Image Processing, 2018, 27, 265-280.	6.0	8
249	Leakage Bounds for Gaussian Side Channels. Lecture Notes in Computer Science, 2018, , 88-104.	1.0	1
250	Long-short range communication network leveraging LoRa, and wake-up receiver. Microprocessors and Microsystems, 2018, 56, 184-192.	1.8	38
251	Smart Wearable Wristband for EMG based Gesture Recognition Powered by Solar Energy Harvester. , 2018, , .		29
252	A 2.2- $\mu$ W Cognitive Always-On Wake-Up Circuit for Event-Driven Duty-Cycling of IoT Sensor Nodes. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2018, 8, 543-554.	2.7	27

#	ARTICLE	IF	CITATIONS
253	Energy proportionality in near-threshold computing servers and cloud data centers: Consolidating or Not?. , 2018, , .		8
254	High speed ASIC implementations of leakage-resilient cryptography. , 2018, , .		1
255	Combining PREM compilation and ILP scheduling for high-performance and predictable MPSoC execution. , 2018, , .		7
256	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.	2.5	11
257	Runtime Support for Multiple Offload-Based Programming Models on Clustered Manycore Accelerators. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 330-342.	3.2	6
258	Optimizing memory bandwidth exploitation for OpenVX applications on embedded many-core accelerators. Journal of Real-Time Image Processing, 2018, 15, 73-92.	2.2	11
259	Energy-Aware Bio-Signal Compressed Sensing Reconstruction on the WBSN-Gateway. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 370-381.	3.2	23
260	A Heterogeneous Multicore System on Chip for Energy Efficient Brain Inspired Computing. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1094-1098.	2.2	15
261	YodaNN: An Architecture for Ultralow Power Binary-Weight CNN Acceleration. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 48-60.	1.9	153
262	Precise, Energy-Efficient Data Acquisition Architecture for Monitoring Radioactivity Using Self-Sustainable Wireless Sensor Nodes. IEEE Sensors Journal, 2018, 18, 459-469.	2.4	15
263	Efficient, Long-Term Logging of Rich Data Sensors Using Transient Sensor Nodes. Transactions on Embedded Computing Systems, 2018, 17, 1-23.	2.1	13
264	Neurostream: Scalable and Energy Efficient Deep Learning with Smart Memory Cubes. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 420-434.	4.0	61
265	Image enhancement variational methods for enabling strong cost reduction in OLED-based point-of-care immunofluorescent diagnostic systems. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2932.	1.0	8
266	A sensor fusion approach for drowsiness detection in wearable ultra-low-power systems. Information Fusion, 2018, 43, 66-76.	11.7	56
267	Architecture-aware design and implementation of CNN algorithms for embedded inference: the ALOHA project. , 2018, , .		1
268	PULP-HD: Accelerating Brain-Inspired High-Dimensional Computing on a Parallel Ultra-Low Power Platform. , 2018, , .		6
269	Independent Body-Biasing of P-N Transistors in an 28nm UTBB FD-SOI ULP Near-Threshold Multi-Core Cluster. , 2018, , .		6
270	Quentin: an Ultra-Low-Power PULPissimo SoC in 22nm FDX. , 2018, , .		44



#	ARTICLE	IF	CITATIONS
271	Pible. , 2018, , .		20
272	Embedded Classification of Local Field Potentials Recorded from Rat Barrel Cortex with Implanted Multi-Electrode Array. , 2018, , .		7
273	Slotted ALOHA Overlay on LoRaWAN - A Distributed Synchronization Approach. , 2018, , .		41
274	Pible: battery-free mote for perpetual indoor BLE applications. , 2018, , .		10
275	Live Demonstration: Body-Bias Based Performance Monitoring and Compensation for a Near-Threshold Multi-Core Cluster in 28nm FD-SOI Technology. , 2018, , .		0
276	An Open-Source Verification Framework for Open-Source Cores: A RISC-V Case Study. , 2018, , .		6
277	A Scalable Framework for Online Power Modelling of High-Performance Computing Nodes in Production. , 2018, , .		3
278	Work-in-Progress: Quantized NNs as the Definitive Solution for Inference on Low-Power ARM MCUs?. , 2018, , .		16
279	Scalable and Efficient Virtual Memory Sharing in Heterogeneous SoCs with TLB Prefetching and MMU-Aware DMA Engine. , 2018, , .		9
280	Nanowatt Wake-Up Radios: Discrete-Components and Integrated Architectures. , 2018, , .		6
281	Evaluation of NTP/PTP fine-grain synchronization performance in HPC clusters. , 2018, , .		8
282	Autotuning and adaptivity in energy efficient HPC systems. , 2018, , .		9
283	A Self-Sustaining Micro-Watt Programmable Smart Audio Sensor for Always-On Sensing. , 2018, , .		2
284	HERO. , 2018, , .		12
285	COUNTDOWN. , 2018, , .		10
286	ALOHA. , 2018, , .		8
287	Poster Abstract: Combining LoRa and RTK to Achieve a High Precision Self-Sustaining Geo-Localization System. , 2018, , .		11
288	On-Demand LoRa: Asynchronous TDMA for Energy Efficient and Low Latency Communication in IoT. Sensors, 2018, 18, 3718.	2.1	75

#	ARTICLE	IF	CITATIONS
289	An accurate low-cost Crackmeter with LoRaWAN communication and energy harvesting capability. , 2018, , .		9
290	KRATOS: An Open Source Hardware-Software Platform for Rapid Research in LPWANs. , 2018, , .		2
291	One-shot Learning for iEEG Seizure Detection Using End-to-end Binary Operations: Local Binary Patterns with Hyperdimensional Computing. , 2018, , .		55
292	On-Demand TDMA for Energy Efficient Data Collection with LoRa and Wake-up Receiver. , 2018, , .		24
293	NEURA <scp>ghe</scp>. ACM Transactions on Reconfigurable Technology and Systems, 2018, 11, 1-24.	1.9	50
294	Fast and Accurate Multiclass Inference for MI-BCIs Using Large Multiscale Temporal and Spectral Features. , 2018, , .		32
295	Rat Cortical Layers Classification extracting Evoked Local Field Potential Images with Implanted Multi-Electrode Sensor. , 2018, , .		3
296	Always-ON visual node with a hardware-software event-based binarized neural network inference engine. , 2018, , .		8
297	Mr. Wolf: A 1 GFLOP/s Energy-Proportional Parallel Ultra Low Power SoC for IOT Edge Processing. , 2018, , .		31
298	ANTAREX: A DSL-Based Approach to Adaptively Optimizing and Enforcing Extra-Functional Properties in High Performance Computing. , 2018, , .		5
299	Torpor: A Power-Aware HW Scheduler for Energy Harvesting IoT SoCs. , 2018, , .		9
300	On the Cost of Freedom From Interference in Heterogeneous SoCs. , 2018, , .		1
301	PULP-HD. , 2018, , .		32
302	Average Modelling of State-of-the-Art Ultra-low Power Energy Harvesting Converter IC. , 2018, , .		1
303	Micro Kinetic Energy Harvesting for Autonomous Wearable Devices. , 2018, , .		28
304	Scheduling-based power capping in high performance computing systems. Sustainable Computing: Informatics and Systems, 2018, 19, 1-13.	1.6	16
305	A Transprecision Floating-Point Architecture for Energy-Efficient Embedded Computing. , 2018, , .		27
306	Design Automation for Binarized Neural Networks: A Quantum Leap Opportunity?. , 2018, , .		14

#	ARTICLE	IF	CITATIONS
307	Modal Analysis of Structures with Low-cost Embedded Systems. , 2018, , .		16
308	QUENN. , 2018, , .		8
309	XNORBIN: A 95 TOP/s/W hardware accelerator for binary convolutional neural networks. , 2018, , .		27
310	Leveraging Energy Harvesting and Wake-Up Receivers for Long-Term Wireless Sensor Networks. Sensors, 2018, 18, 1578.	2.1	24
311	Chipmunk: A systolically scalable 0.9 mm <sup>2</sup> , 3.08Gop/s/mW @ 1.2 mW accelerator for near-sensor recurrent neural network inference. , 2018, , .		32
312	XNOR Neural Engine: A Hardware Accelerator IP for 21.6-f/op Binary Neural Network Inference. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 2940-2951.	1.9	87
313	An accurate system for optimal state estimation of a levitated nanoparticle. , 2018, , .		1
314	Sub-mW multi-Gbps chip-to-chip communication Links for Ultra-Low Power IoT end-nodes. , 2018, , .		5
315	An EMG Gesture Recognition System with Flexible High-Density Sensors and Brain-Inspired High-Dimensional Classifier. , 2018, , .		65
316	Hyperdrive: A Systolically Scalable Binary-Weight CNN Inference Engine for mW IoT End-Nodes. , 2018, , .		15
317	BinaryEye: A 20 kfps Streaming Camera System on FPGA with Real-Time On-Device Image Recognition Using Binary Neural Networks. , 2018, , .		16
318	GAP-8: A RISC-V SoC for AI at the Edge of the IoT. , 2018, , .		134
319	Thermal image-based CNN's for ultra-low power people recognition. , 2018, , .		22
320	An 826 MOPS, 210uW/MHz Unum ALU in 65 nm. , 2018, , .		13
321	A transprecision floating-point platform for ultra-low power computing. , 2018, , .		65
322	HePREM: Enabling predictable GPU execution on heterogeneous SoC. , 2018, , .		17
323	Hydra: An Accelerator for Real-Time Edge-Aware Permeability Filtering in 65nm CMOS. , 2018, , .		0
324	An Energy Efficient E-Skin Embedded System for Real-Time Tactile Data Decoding. Journal of Low Power Electronics, 2018, 14, 101-109.	0.6	2

#	ARTICLE	IF	CITATIONS
325	A Contactless, Energy-Neutral Power Meter for Smart City Applications. Lecture Notes in Electrical Engineering, 2018, , 177-182.	0.3	0
326	16 Gb/s Microring-to-Microring Photonic Link in 45 nm Monolithic Zero-Change CMOS. , 2018, , .		2
327	Logic-Base Interconnect Design for Near Memory Computing in the Smart Memory Cube. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 210-223.	2.1	23
328	Lightweight Virtual Memory Support for Zero-Copy Sharing of Pointer-Rich Data Structures in Heterogeneous Embedded SoCs. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 1947-1959.	4.0	6
329	Sensormind: Virtual Sensing and Complex Event Detection for Internet of Things. Lecture Notes in Electrical Engineering, 2017, , 75-83.	0.3	4
330	Ultra-Low-Power Digital Architectures for the Internet of Things. , 2017, , 69-93.		11
331	Efficient mapping of CDFG onto coarse-grained reconfigurable array architectures. , 2017, , .		11
332	Multi-core data analytics SoC with a flexible 1.76 Gbit/s AES-XTS cryptographic accelerator in 65 nm CMOS. , 2017, , .		3
333	Near-Threshold RISC-V Core With DSP Extensions for Scalable IoT Endpoint Devices. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 2700-2713.	2.1	291
334	Wearable, energy-opportunistic vision sensing for walking speed estimation. , 2017, , .		9
335	StoneNode: A low-power sensor device for induced rockfall experiments. , 2017, , .		10
336	From Variability Tolerance to Approximate Computing in Parallel Integrated Architectures and Accelerators. , 2017, , .		3
337	An IoT Endpoint System-on-Chip for Secure and Energy-Efficient Near-Sensor Analytics. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2481-2494.	3.5	95
338	A scan-chain based state retention methodology for IoT processors operating on intermittent energy. , 2017, , .		4
339	WULoRa: An energy efficient IoT end-node for energy harvesting and heterogeneous communication. , 2017, , .		41
340	An Extended Shared Logarithmic Unit for Nonlinear Function Kernel Acceleration in a 65-nm CMOS Multicore Cluster. IEEE Journal of Solid-State Circuits, 2017, 52, 98-112.	3.5	10
341	An Ultra-Low Power Address-Event Sensor Interface for Energy-Proportional Time-to-Information Extraction. , 2017, , .		5
342	GPUguard: Towards supporting a predictable execution model for heterogeneous SoC. , 2017, , .		22

#	ARTICLE	IF	CITATIONS
343	Continuous learning of HPC infrastructure models using big data analytics and in-memory processing tools. , 2017, , .		31
344	Stream Drive. , 2017, , .		2
345	A Hybrid Instruction Prefetching Mechanism for Ultra Low-Power Multicore Clusters. IEEE Embedded Systems Letters, 2017, 9, 125-128.	1.3	3
346	Networks on Chips: 15 Years Later. Computer, 2017, 50, 10-11.	1.2	14
347	Smart Energy-Efficient Clock Synthesizer for Duty-Cycled Sensor SoCs in 65 nm/28nm CMOS. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2322-2333.	3.5	13
348	Increasing the energy efficiency of microcontroller platforms with low-design margin co-processors. Microprocessors and Microsystems, 2017, 53, 213-228.	1.8	0
349	Efficient Sample Delay Calculation for 2-D and 3-D Ultrasound Imaging. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 815-831.	2.7	23
350	Ultra low-power visual odometry for nano-scale unmanned aerial vehicles. , 2017, , .		10
351	A Generic Framework for Modeling MAC Protocols in Wireless Sensor Networks. IEEE/ACM Transactions on Networking, 2017, 25, 1489-1500.	2.6	24
352	Multiscale Thermal Management of Computing Systems - The MULTITHERMAN approach. IFAC-PapersOnLine, 2017, 50, 6709-6716.	0.5	5
353	A 142MOPS/mW integrated programmable array accelerator for smart visual processing. , 2017, , .		10
354	A wearable EEG-based drowsiness detection system with blink duration and alpha waves analysis. , 2017, , .		20
355	Self-Sustainability in Nano Unmanned Aerial Vehicles. , 2017, , .		8
356	Energy Analysis of Decoders for Rakeness-Based Compressed Sensing of ECG Signals. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 1278-1289.	2.7	27
357	Target following on nano-scale Unmanned Aerial Vehicles. , 2017, , .		15
358	A Sub-mW IoT-Endnode for Always-On Visual Monitoring and Smart Triggering. IEEE Internet of Things Journal, 2017, 4, 1284-1295.	5.5	24
359	Low-cost and distributed health monitoring system for critical buildings. , 2017, , .		21
360	Towards a Novel HMI Paradigm Based on Mixed EEG and Indoor Localization Platforms. , 2017, , .		4

#	ARTICLE	IF	CITATIONS
361	Deep structured features for semantic segmentation. , 2017, , .		10
362	GPU-Accelerated Real-Time Path Planning and the Predictable Execution Model. Procedia Computer Science, 2017, 108, 2428-2432.	1.2	6
363	DeepEmote: Towards multi-layer neural networks in a low power wearable multi-sensors bracelet. , 2017, , .		40
364	A sub-10mW real-time implementation for EMG hand gesture recognition based on a multi-core biomedical SoC. , 2017, , .		21
365	CAS-CNN: A deep convolutional neural network for image compression artifact suppression. , 2017, , .		139
366	A machine learning approach for automated wide-range frequency tagging analysis in embedded neuromonitoring systems. Methods, 2017, 129, 96-107.	1.9	8
367	Design of an Energy Aware Petaflops Class High Performance Cluster Based on Power Architecture. , 2017, , .		15
368	Origami: A 803-GOp/s/W Convolutional Network Accelerator. IEEE Transactions on Circuits and Systems for Video Technology, 2017, 27, 2461-2475.	5.6	108
369	Zeroing for HW-efficient compressed sensing architectures targeting data compression in wireless sensor networks. Microprocessors and Microsystems, 2017, 48, 69-79.	1.8	16
370	Human body heat for powering wearable devices: From thermal energy to application. Energy Conversion and Management, 2017, 131, 44-54.	4.4	189
371	WARM: Workload-Aware Reliability Management in Linux/Android. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1557-1570.	1.9	24
372	Energy-Efficient Context Aware Power Management with Asynchronous Protocol for Body Sensor Network. Mobile Networks and Applications, 2017, 22, 814-824.	2.2	19
373	A Synchronization-Based Hybrid-Memory Multi-Core Architecture for Energy-Efficient Biomedical Signal Processing. IEEE Transactions on Computers, 2017, 66, 575-585.	2.4	12
374	On the Accuracy of Near-Optimal GPU-Based Path Planning for UAVs. , 2017, , .		0
375	CBinfer. , 2017, , .		32
376	1/4DMA: An autonomous I/O subsystem for IoT end-nodes. , 2017, , .		7
377	Slow and steady wins the race? A comparison of ultra-low-power RISC-V cores for Internet-of-Things applications. , 2017, , .		93
378	Efficient Virtual Memory Sharing via On-Accelerator Page Table Walking in Heterogeneous Embedded SoCs. Transactions on Embedded Computing Systems, 2017, 16, 1-19.	2.1	9

#	ARTICLE	IF	CITATIONS
379	Paving the Way Towards a Highly Energy-Efficient and Highly Integrated Compute Node for the Exascale Revolution: The ExaNoDe Approach. , 2017, , .		18
380	The ANTAREX tool flow for monitoring and autotuning energy efficient HPC systems. , 2017, , .		10
381	LightProbe: A 64-channel programmable ultrasound transducer head with an integrated front-end and a 26.4 Gb/s optical link. , 2017, , .		9
382	Towards a Mobile Health Platform with Parallel Processing and Multi-sensor Capabilities. , 2017, , .		2
383	A 2.1 $\hat{1}$ / <sub>4</sub> W event-driven wake-up circuit based on a level-crossing ADC for pattern recognition in healthcare. , 2017, , .		2
384	Prediction horizon vs. efficiency of optimal dynamic thermal control policies in HPC nodes. , 2017, , .		3
385	Energy Efficient System for Tactile Data Decoding Using an Ultra-Low Power Parallel Platform. , 2017, , .		6
386	Temperature and process-aware performance monitoring and compensation for an ULP multi-core cluster in 28nm UTBB FD-SOI technology. , 2017, , .		5
387	A Self-Aware Architecture for PVT Compensation and Power Nap in Near Threshold Processors. IEEE Design and Test, 2017, 34, 46-53.	1.1	13
388	Impact of temporal subsampling on accuracy and performance in practical video classification. , 2017, , .		3
389	Long-term monitoring of small-sized birds using a miniaturized bluetooth-low-energy sensor node. , 2017, , .		8
390	Kinetic AC/DC Converter for Electromagnetic Energy Harvesting in Autonomous Wearable Devices. IEEE Transactions on Circuits and Systems II: Express Briefs, 2017, 64, 1422-1426.	2.2	22
391	A multi-sensor and parallel processing SoC for wearable and implantable telemetry systems. , 2017, , .		11
392	Notice of Removal: LightProbe: A fully-digital 64-channel ultrasound probe with high-bandwidth optical interface. , 2017, , .		0
393	A Prosthetic Hand Body Area Controller Based on Efficient Pattern Recognition Control Strategies. Sensors, 2017, 17, 869.	2.1	49
394	A wide tuning-range ADFLL for mW-SoCs with dithering-enhanced accuracy in 65 nm CMOS. , 2017, , .		5
395	Energy-Efficient Near-Threshold Parallel Computing: The PULPv2 Cluster. IEEE Micro, 2017, 37, 20-31.	1.8	58
396	UltraLight: An ultrafast imaging platform based on a digital 64-channel ultrasound probe. , 2017, , .		6

#	ARTICLE	IF	CITATIONS
397	Benefits in Relaxing the Power Capping Constraint. , 2017, , .		7
398	A Dual Processor Energy-Efficient Platform with Multi-core Accelerator for Smart Sensing. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 29-40.	0.2	1
399	Optimal Tiling Strategy for Memory Bandwidth Reduction for CNNs. Lecture Notes in Computer Science, 2017, , 89-100.	1.0	4
400	Work-Unit Tolerance. , 2017, , 91-115.		0
401	Sequence-Level Tolerance. , 2017, , 21-46.		0
402	Spatial and Temporal Memoization. , 2017, , 181-190.		0
403	A Smart LED Light Control System for Environmentally Friendly Buildings. Lecture Notes in Electrical Engineering, 2017, , 181-189.	0.3	1
404	The ANTAREX approach to autotuning and adaptivity for energy efficient HPC systems. , 2016, , .		22
405	Sampling modulation: An energy efficient novel feature extraction for biosignal processing. , 2016, , .		0
406	Analytical and Experimental Evaluation of Wake-Up Receivers Based Protocols. , 2016, , .		13
407	A high-efficiency runtime reconfigurable IP for CNN acceleration on a mid-range all-programmable SoC. , 2016, , .		18
408	Scalable EEG seizure detection on an ultra low power multi-core architecture. , 2016, , .		9
409	Always-on motion detection with application-level error control on a near-threshold approximate computing platform. , 2016, , .		5
410	193 MOPS/mW @ 162 MOPS, 0.32V to 1.15V voltage range multi-core accelerator for energy efficient parallel and sequential digital processing. , 2016, , .		18
411	Enabling OpenVX support in mW-scale parallel accelerators. , 2016, , .		5
412	Synergistic HW/SW Approximation Techniques for Ultra-Low-Power Parallel Computing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, , 1-1.	1.9	3
413	PHIDIAS. , 2016, , .		0
414	A contactless three-phase autonomous power meter. , 2016, , .		7



#	ARTICLE	IF	CITATIONS
415	Mobile Ultrasound Imaging on Heterogeneous Multi-Core Platforms. , 2016, , .		5
416	Optimum Excitations for a Dual-Band Microwatt Wake-Up Radio. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 4731-4739.	2.9	22
417	4.6 A 65nm CMOS 6.4-to-29.2pJ/FLOP@0.8V shared logarithmic floating point unit for acceleration of nonlinear function kernels in a tightly coupled processor cluster. , 2016, , .		15
418	Design and Evaluation of a Processing-in-Memory Architecture for the Smart Memory Cube. Lecture Notes in Computer Science, 2016, , 19-31.	1.0	31
419	An Event-Driven Ultra-Low-Power Smart Visual Sensor. IEEE Sensors Journal, 2016, 16, 5344-5353.	2.4	37
420	Associative Memristive Memory for Approximate Computing in GPUs. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2016, 6, 222-234.	2.7	22
421	A dual-band wake-up radio for ultra-low power Wireless Sensor Networks. , 2016, , .		9
422	Hibernus++: A Self-Calibrating and Adaptive System for Transiently-Powered Embedded Devices. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1968-1980.	1.9	156
423	Poster Abstract: Wake-Up Receivers for Energy Efficient and Low Latency Communication. , 2016, , .		3
424	Poster Abstract: An Ultra-Low Power Wake up Radio with Addressing and Retransmission Capabilities for Advanced Energy Efficient MAC Protocols. , 2016, , .		4
425	Non-invasive voltage measurement in a three-phase autonomous meter. Microsystem Technologies, 2016, 22, 1915-1926.	1.2	7
426	Low-Power Gas Sensing using Carbon Nanotubes in Wearable Devices. IEEE Sensors Journal, 2016, , 1-1.	2.4	14
427	Accuracy and Performance Trade-Offs of Logarithmic Number Units in Multi-Core Clusters. , 2016, , .		3
428	Energy-efficient design of an always-on smart visual trigger. , 2016, , .		2
429	Curbing the roofline. , 2016, , .		12
430	Low-cost micro-thermal response test system for characterizing very shallow geothermal energy. , 2016, , .		9
431	Kinetic energy harvesting: Toward autonomous wearable sensing for Internet of Things. , 2016, , .		29
432	Accelerated Visual Context Classification on a Low-Power Smartwatch. IEEE Transactions on Human-Machine Systems, 2016, , 1-12.	2.5	27

#	ARTICLE	IF	CITATIONS
433	YodaNN: An Ultra-Low Power Convolutional Neural Network Accelerator Based on Binary Weights. , 2016, , .		142
434	Experimental analysis of power optimized waveforms for enhancing wake-up radio sensitivity. , 2016, , .		2
435	Evaluation of synchronization protocols for fine-grain HPC sensor data time-stamping and collection. , 2016, , .		10
436	A heterogeneous multi-core system-on-chip for energy efficient brain inspired vision. , 2016, , .		7
437	Ultra-Low Power Context Recognition Fusing Sensor Data from an Energy-Neutral Smart Watch. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 331-343.	0.2	3
438	VirtualSoC. Transactions on Embedded Computing Systems, 2016, 16, 1-27.	2.1	4
439	Hyperdimensional biosignal processing: A case study for EMG-based hand gesture recognition. , 2016, , .		103
440	A 2 MS/s 10A Hall current sensor SoC with digital compressive sensing encoder in 0.16 Åµm BCD. , 2016, , .		2
441	Context Change Detection for an Ultra-Low Power Low-Resolution Ego-Vision Imager. Lecture Notes in Computer Science, 2016, , 589-602.	1.0	3
442	A Low Latency and Energy Efficient Communication Architecture for Heterogeneous Long-Short Range Communication. , 2016, , .		12
443	Computationally efficient target classification in multispectral image data with Deep Neural Networks. Proceedings of SPIE, 2016, , .	0.8	2
444	Autonomous smartwatch with flexible sensors for accurate and continuous mapping of skin temperature. , 2016, , .		10
445	Cooling-aware node-level task allocation for next-generation green HPC systems. , 2016, , .		8
446	Thermal model identification of supercomputing nodes in production environment. , 2016, , .		5
447	VarDroid. , 2016, , .		1
448	He-P2012: Performance and Energy Exploration of Architecturally Heterogeneous Many-Cores. Journal of Signal Processing Systems, 2016, 85, 325-340.	1.4	3
449	An energy-efficient parallel algorithm for real-time near-optimal UAV path planning. , 2016, , .		11
450	Integrated Energy-Aware Management of Supercomputer Hybrid Cooling Systems. IEEE Transactions on Industrial Informatics, 2016, 12, 1299-1311.	7.2	22

#	ARTICLE	IF	CITATIONS
451	Predictive Modeling for Job Power Consumption in HPC Systems. Lecture Notes in Computer Science, 2016, , 181-199.	1.0	31
452	Poster Abstract: KinetiSee - A Perpetual Wearable Camera Acquisition System with a Kinetic Harvester. , 2016, , .		7
453	Controlling NUMA effects in embedded manycore applications with lightweight nested parallelism support. Parallel Computing, 2016, 59, 24-42.	1.3	3
454	InfiniTime: Multi-sensor wearable bracelet with human body harvesting. Sustainable Computing: Informatics and Systems, 2016, 11, 38-49.	1.6	57
455	Poster Abstract: MagoNode++ - A Wake-Up-Radio-Enabled Wireless Sensor Mote for Energy-Neutral Applications. , 2016, , .		7
456	Power, Area, and Performance Optimization of Standard Cell Memory Arrays Through Controlled Placement. ACM Transactions on Design Automation of Electronic Systems, 2016, 21, 1-25.	1.9	42
457	Hybrid ASIC/FPGA System for Fully Automatic Stereo-to-Multiview Conversion Using IDW. IEEE Transactions on Circuits and Systems for Video Technology, 2016, 26, 2093-2108.	5.6	8
458	Power Line Interference Removal for High-Quality Continuous Biosignal Monitoring With Low-Power Wearable Devices. IEEE Sensors Journal, 2016, 16, 3887-3895.	2.4	53
459	CIRCA-GPUs: Increasing Instruction Reuse Through Inexact Computing in GP-GPUs. IEEE Design and Test, 2016, 33, 85-92.	1.1	6
460	Variability Mitigation in Nanometer CMOS Integrated Systems: A Survey of Techniques From Circuits to Software. Proceedings of the IEEE, 2016, 104, 1410-1448.	16.4	32
461	Ekho: A 30.3W, 10k-Channel Fully Digital Integrated 3-D Beamformer for Medical Ultrasound Imaging Achieving 298M Focal Points per Second. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 1936-1949.	2.1	14
462	Graceful Performance Modulation for Power-Neutral Transient Computing Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 738-749.	1.9	55
463	A Constraint Programming Scheduler for Heterogeneous High-Performance Computing Machines. IEEE Transactions on Parallel and Distributed Systems, 2016, 27, 2781-2794.	4.0	19
464	Design, Implementation, and Performance Evaluation of a Flexible Low-Latency Nanowatt Wake-Up Radio Receiver. IEEE Transactions on Industrial Informatics, 2016, 12, 633-644.	7.2	118
465	PULP: A Ultra-Low Power Parallel Accelerator for Energy-Efficient and Flexible Embedded Vision. Journal of Signal Processing Systems, 2016, 84, 339-354.	1.4	58
466	A 60 GOPS/W, $\hat{\sim}$ 1.8 V to 0.9 V body bias ULP cluster in 28 nm UTBB FD-SOI technology. Solid-State Electronics, 2016, 117, 170-184.	0.8	50
467	Thermal Analysis and Interpolation Techniques for a Logic + WideIO Stacked DRAM Test Chip. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 623-636.	1.9	12
468	Dynamic Energy Burst Scaling for Transiently Powered Systems. , 2016, , .		31

#	ARTICLE	IF	CITATIONS
469	Enabling the Heterogeneous Accelerator Model on Ultra-Low Power Microcontroller Platforms. , 2016, , .		13
470	AutoTuning and Adaptivity appRoach for Energy Efficient eXascale HPC Systems: The ANTAREX Approach. , 2016, , .		9
471	High-Efficiency Logarithmic Number Unit Design based on an Improved Cotransformation Scheme. , 2016, , .		6
472	DARDIS: Distributed And Randomized DIspatching and Scheduling. Lecture Notes in Computer Science, 2016, , 493-507.	1.0	0
473	Experimental evaluation of a sEMG-based human-robot interface for human-like grasping tasks. , 2015, , .		19
474	High Performance AXI-4.0 Based Interconnect for Extensible Smart Memory Cubes. , 2015, , .		12
475	A Ultra-Low-Energy Convolution Engine for Fast Brain-Inspired Vision in Multicore Clusters. , 2015, , .		34
476	PULP: A parallel ultra low power platform for next generation IoT applications. , 2015, , .		85
477	An Ultra-Low Power Dual-mode ECG Monitor for Healthcare and Wellness. , 2015, , .		18
478	Approximate Associative Memristive Memory for Energy-Efficient GPUs. , 2015, , .		46
479	Automatic multiview synthesis â€” Towards a mobile system on a chip. , 2015, , .		0
480	Automatic multiview synthesis â€” Prototype demo. , 2015, , .		0
481	Energy-Aware Cooling for Hot-Water Cooled Supercomputers. , 2015, , .		11
482	GPU Acceleration for Simulating Massively Parallel Many-Core Platforms. IEEE Transactions on Parallel and Distributed Systems, 2015, 26, 1336-1349.	4.0	12
483	An Energy Neutral Wearable Camera with EPD Display. , 2015, , .		3
484	Runtime Support for Multiple Offload-Based Programming Models on Embedded Manycore Accelerators. , 2015, , .		1
485	Cost-Effective Design of Mesh-of-Tree Interconnect for Multicore Clusters With 3-D Stacked L2 Scratchpad Memory. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 1828-1841.	2.1	4
486	Exploring architectural heterogeneity in intelligent vision systems. , 2015, , .		21

#	ARTICLE	IF	CITATIONS
487	Gesture Recognition using Wearable Vision Sensors to Enhance Visitors' Museum Experiences. IEEE Sensors Journal, 2015, , 1-1.	2.4	23
488	Long-Term ECG monitoring with zeroing Compressed Sensing approach. , 2015, , .		2
489	ANTAREX – AutoTuning and Adaptivity appRoach for Energy Efficient eXascale HPC Systems. , 2015, , .		2
490	Enabling Scalable and Fine-Grained Nested Parallelism on Embedded Many-cores. , 2015, , .		0
491	Synergistic Architecture and Programming Model Support for Approximate Micropower Computing. , 2015, , .		3
492	ADRENALINE: An OpenVX Environment to Optimize Embedded Vision Applications on Many-core Accelerators. , 2015, , .		16
493	A &#x2212;1.8V to 0.9V body bias, 60 GOPS/W 4-core cluster in low-power 28nm UTBB FD-SOI technology. , 2015, , .		13
494	Energy-Aware Bio-signal Compressed Sensing Reconstruction: FOCUSS on the WBSN-Gateway. , 2015, , .		11
495	Digitally controlled feedback for DC offset cancellation in a wearable multichannel EMG platform. , 2015, 2015, 3189-92.		5
496	A 2.4 GHz-868 MHz dual-band wake-up radio for wireless sensor network and IoT. , 2015, , .		12
497	Beyond duty cycling: Wake-up radio with selective awakenings for long-lived wireless sensing systems. , 2015, , .		103
498	Tailoring instruction-set extensions for an ultra-low power tightly-coupled cluster of OpenRISC cores. , 2015, , .		23
499	Lightweight virtual memory support for many-core accelerators in heterogeneous embedded SoCs. , 2015, , .		8
500	Towards Internet of Things for event-driven low-power gas sensing using carbon nanotubes. , 2015, , .		9
501	Context Aware Power Management Enhanced by Radio Wake Up in Body Area Networks. , 2015, , .		2
502	A Low Cost, Highly Scalable Wireless Sensor Network Solution to Achieve Smart LED Light Control for Green Buildings. IEEE Sensors Journal, 2015, 15, 2963-2973.	2.4	145
503	Temperature variation aware multi-scale delay, power and thermal analysis at RT and gate level. The Integration VLSI Journal, 2015, 49, 35-48.	1.3	0
504	An Evaluation of Memory Sharing Performance for Heterogeneous Embedded SoCs with Many-Core Accelerators. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
505	Guaranteed Computational Respringing via Model-Predictive Control. Transactions on Embedded Computing Systems, 2015, 14, 1-26.	2.1	3
506	Sub-Sampling Framework Comparison for Low-Power Data Gathering: A Comparative Analysis. Sensors, 2015, 15, 5058-5080.	2.1	20
507	Accelerating real-time embedded scene labeling with convolutional networks. , 2015, , .		78
508	Simplifying Many-Core-Based Heterogeneous SoC Programming With Offload Directives. IEEE Transactions on Industrial Informatics, 2015, 11, 957-967.	7.2	15
509	A Low-Power Architecture for Punctured Compressed Sensing and Estimation in Wireless Sensor-Nodes. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 1296-1305.	3.5	20
510	Controlled placement of standard cell memory arrays for high density and low power in 28nm FD-SOI. , 2015, , .		16
511	3.8 A 0.45-to-0.7V 1-to-6Gb/S 0.29-to-0.58pJ/b source-synchronous transceiver using automatic phase calibration in 65nm CMOS. , 2015, , .		17
512	Hibernus: Sustaining Computation During Intermittent Supply for Energy-Harvesting Systems. IEEE Embedded Systems Letters, 2015, 7, 15-18.	1.3	191
513	A Versatile Embedded Platform for EMG Acquisition and Gesture Recognition. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 620-630.	2.7	173
514	Architecture Support for Tightly-Coupled Multi-Core Clusters with Shared-Memory HW Accelerators. IEEE Transactions on Computers, 2015, 64, 2132-2144.	2.4	12
515	Ultra-low power sensor for autonomous non-invasive voltage measurement in IoT solutions for energy efficiency. , 2015, , .		3
516	A Reconfigurable 5-to-14 bit SAR ADC for Battery-Powered Medical Instrumentation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2685-2694.	3.5	50
517	Energy-Efficiency Analysis of Analog and Digital Compressive Sensing in Wireless Sensors. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 2718-2729.	3.5	30
518	Exploring multi-banked shared-L1 program cache on ultra-low power, tightly coupled processor clusters. , 2015, , .		9
519	Non-intrusive Zigbee power meter for load monitoring in smart buildings. , 2015, , .		16
520	Playing with Fire. , 2015, , .		5
521	Origami. , 2015, , .		121
522	Task scheduling strategies to mitigate hardware variability in embedded shared memory clusters. , 2015, , .		10

#	ARTICLE	IF	CITATIONS
523	A framework for optimizing OpenVX applications performance on embedded manycore accelerators. , 2015, , .		2
524	Hybrid EMG classifier based on HMM and SVM for hand gesture recognition in prosthetics. , 2015, , .		45
525	Aging-Aware Compilation for GP-GPUs. Transactions on Architecture and Code Optimization, 2015, 12, 1-20.	1.6	8
526	Self-powered wireless sensor nodes for monitoring radioactivity in contaminated areas using unmanned aerial vehicles. , 2015, , .		12
527	Power Capping in High Performance Computing Systems. Lecture Notes in Computer Science, 2015, , 524-540.	1.0	21
528	A Modular Shared L2 Memory Design for 3-D Integration. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 1485-1498.	2.1	5
529	Adaptive Rectifier Driven by Power Intake Predictors for Wind Energy Harvesting Sensor Networks. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 471-482.	3.7	57
530	DRAM or no-DRAM? Exploring Linear Solver Architectures for Image Domain Warping in 28 nm CMOS. , 2015, , .		14
531	A Complete Real-Time Feature Extraction and Matching System Based on Semantic Kernels Binarized. IFIP Advances in Information and Communication Technology, 2015, , 144-167.	0.5	2
532	Multiple Biopotentials Acquisition System for Wearable Applications. , 2015, , .		10
533	Extending Body Sensor Nodesâ€™ Lifetime Using a Wearable Wake-up Radio. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2015, , 108-117.	0.2	1
534	3D CV Descriptor on Parallel Heterogeneous Platforms. Transactions on Embedded Computing Systems, 2015, 14, 1-25.	2.1	5
535	An Approximate Computing Technique for Reducing the Complexity of a Direct-Solver for Sparse Linear Systems in Real-Time Video Processing. , 2014, , .		8
536	Energy-efficient vision on the PULP platform for ultra-low power parallel computing. , 2014, , .		16
537	Rakeness-based compressed sensing on ultra-low power multi-core biomedical processors. , 2014, , .		8
538	He-P2012. , 2014, , .		10
539	An ultra low power high sensitivity wake-up radio receiver with addressing capability. , 2014, , .		43
540	Efficient parallel beamforming for 3D ultrasound imaging. , 2014, , .		11

#	ARTICLE	IF	CITATIONS
541	Supporting localized OpenVX kernel execution for efficient computer vision application development on STHORM many-core platform. , 2014, , .		1
542	Assessing the area/power/performance tradeoffs for an integrated fully-digital, large-scale 3D-ultrasound beamformer. , 2014, , .		6
543	0, 1, 2, many &#x2014; A classroom occupancy monitoring system for smart public buildings. , 2014, , .		10
544	Ultra-low-latency lightweight DMA for tightly coupled multi-core clusters. , 2014, , .		29
545	Quantifying the impact of variability on the energy efficiency for a next-generation ultra-green supercomputer. , 2014, , .		18
546	Sleep power minimisation using adaptive dutyâ€œcycling of DCâ€œDC converters in stateâ€œretentive systems. IET Circuits, Devices and Systems, 2014, 8, 478-486.	0.9	1
547	An On-line Reliability Emulation Framework. , 2014, , .		4
548	Towards EMC control interface for smart garments. , 2014, , .		15
549	Approximate compressed sensing. , 2014, , .		26
550	Energy-Efficient GPGPU Architectures via Collaborative Compilation and Memristive Memory-Based Computing. , 2014, , .		10
551	An architecture for low-power compressed sensing and estimation in wireless sensor nodes. , 2014, , .		1
552	Unveiling Eurora - Thermal and power characterization of the most energy-efficient supercomputer in the world. , 2014, , .		10
553	Gesture Recognition in Ego-centric Videos Using Dense Trajectories and Hand Segmentation. , 2014, , .		65
554	Clamp-and-Forget: A self-sustainable non-invasive wireless sensor node for smart metering applications. Microelectronics Journal, 2014, 45, 1671-1678.	1.1	35
555	Energy optimization in 3D MPSoCs with Wide-I/O DRAM using temperature variation aware bank-wise refresh. , 2014, , .		1
556	A Virtualization Framework for IOMMU-less Many-Core Accelerators. , 2014, , .		1
557	EMG-based hand gesture recognition with flexible analog front end. , 2014, , .		35
558	Customizing an open source processor to fit in an ultra-low power cluster with a shared L1 memory. , 2014, , .		18



#	ARTICLE	IF	CITATIONS
559	Optimized active and power-down mode refresh control in 3D-DRAMs. , 2014, , .		15
560	An ultra-low power resilient multi-core architecture with static and dynamic tolerance to ambient temperature-induced variability. Microprocessors and Microsystems, 2014, 38, 776-787.	1.8	2
561	Dynamic variability management in mobile multicore processors under lifetime constraints. , 2014, , .		12
562	InfiniTime: A multi-sensor energy neutral wearable bracelet. , 2014, , .		15
563	A HLS-Based Toolflow to Design Next-Generation Heterogeneous Many-Core Platforms with Shared Memory. , 2014, , .		3
564	Compressive Sensing Optimization for Signal Ensembles in WSNs. IEEE Transactions on Industrial Informatics, 2014, 10, 382-392.	7.2	76
565	Extended Wireless Monitoring Through Intelligent Hybrid Energy Supply. IEEE Transactions on Industrial Electronics, 2014, 61, 1871-1881.	5.2	81
566	Ensuring Survivability of Resource-Intensive Sensor Networks Through Ultra-Low Power Overlays. IEEE Transactions on Industrial Informatics, 2014, 10, 946-956.	7.2	68
567	CROSS cyclic resource-constrained scheduling solver. Artificial Intelligence, 2014, 206, 25-52.	3.9	9
568	Optimum: Thermal-aware task allocation for heterogeneous many-core devices. , 2014, , .		15
569	A Linux-governor based Dynamic Reliability Manager for android mobile devices. , 2014, , .		8
570	He-P2012: Architectural heterogeneity exploration on a scalable many-core platform. , 2014, , .		5
571	A high-sensitivity fully passive wake-up radio front-end for wireless sensor nodes. , 2014, , .		16
572	A multi banked - Multi ported - Non blocking shared L2 cache for MPSoC platforms. , 2014, , .		2
573	Speculative synchronization for coherence-free embedded NUMA architectures. , 2014, , .		3
574	Application-Adaptive Guardbanding to Mitigate Static and Dynamic Variability. IEEE Transactions on Computers, 2014, 63, 2160-2173.	2.4	37
575	Exploring DMA-assisted prefetching strategies for software caches on multicore clusters. , 2014, , .		0
576	Brain-Inspired Classroom Occupancy Monitoring on a Low-Power Mobile Platform. , 2014, , .		26

#	ARTICLE	IF	CITATIONS
577	Design and implementation of a multi sensors self sustainable wearable device. , 2014, , .		2
578	An Effective Gray-Box Identification Procedure for Multicore Thermal Modeling. IEEE Transactions on Computers, 2014, 63, 1097-1110.	2.4	38
579	SIRIOUS: A tightly coupled elliptic-curve cryptography co-processor for the OpenRISC. , 2014, , .		4
580	Bias-Compensated Least Squares Identification of Distributed Thermal Models for Many-Core Systems-on-Chip. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2663-2676.	3.5	19
581	A portable hybrid hydrogen fuel cell-battery power unit for wireless sensor network. , 2014, , .		5
582	Benefits of Wake-Up Radio in Energy-Efficient Multimodal Surveillance Wireless Sensor Network. IEEE Sensors Journal, 2014, 14, 3210-3220.	2.4	71
583	Context aware power management for motion-sensing body area network nodes. , 2014, , .		3
584	Improving Resilience to Timing Errors by Exposing Variability Effects to Software in Tightly-Coupled Processor Clusters. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2014, 4, 216-229.	2.7	6
585	At-Speed Distributed Functional Testing to Detect Logic and Delay Faults in NoCs. IEEE Transactions on Computers, 2014, 63, 703-717.	2.4	62
586	A multi banked - Multi ported - Non blocking shared L2 cache for MPSoC platforms. , 2014, , .		2
587	A low power wireless node for contact and contactless heart monitoring. Microelectronics Journal, 2014, 45, 1656-1664.	1.1	31
588	A Novel Object-Oriented Software Cache for Scratchpad-Based Multi-Core Clusters. Journal of Signal Processing Systems, 2014, 77, 77-93.	1.4	1
589	A Linux-governor based Dynamic Reliability Manager for android mobile devices. , 2014, , .		3
590	Optimizing memory bandwidth in OpenVX graph execution on embedded many-core accelerators. , 2014, , .		11
591	Message Passing-Aware Power Management on Many-Core Systems. Journal of Low Power Electronics, 2014, 10, 531-549.	0.6	6
592	Context aware power management for motion-sensing body area network nodes. , 2014, , .		3
593	Unveiling Aurora - Thermal and power characterization of the most energy-efficient supercomputer in the world. , 2014, , .		10
594	Temporal memoization for energy-efficient timing error recovery in GPGPUs. , 2014, , .		4

#	ARTICLE	IF	CITATIONS
595	A Multi Harvester with Hydrogen Fuel Cell for Outdoor Applications. Lecture Notes in Electrical Engineering, 2014, , 103-112.	0.3	0
596	Tightly-coupled hardware support to dynamic parallelism acceleration in embedded shared memory clusters. , 2014, , .		0
597	Thermal analysis and model identification techniques for a logic + WIDEIO stacked DRAM test chip. , 2014, , .		0
598	Silicon Validation of GALS Methods and Architectures in a State-of-the-Art CMOS Process. Advances in Systems Analysis, Software Engineering, and High Performance Computing Book Series, 2014, , 420-447.	0.5	0
599	A tightly-coupled hardware controller to improve scalability and programmability of shared-memory heterogeneous clusters. , 2014, , .		1
600	Energy optimization in 3D MPSoCs with Wide-I/O DRAM using temperature variation aware bank-wise refresh. , 2014, , .		6
601	Design of an Ultra-low Power Device for Aircraft Structural Health Monitoring. , 2013, , .		1
602	Context-Adaptive Multimodal Wireless Sensor Network for Energy-Efficient Gas Monitoring. IEEE Sensors Journal, 2013, 13, 328-338.	2.4	164
603	3D logarithmic interconnect: Stacking multiple L1 memory dies over multi-core clusters. , 2013, , .		2
604	A highly efficient, thread-safe software cache implementation for tightly-coupled multicore clusters. , 2013, , .		2
605	Maximum-throughput mapping of SDFGs on multi-core SoC platforms. Journal of Parallel and Distributed Computing, 2013, 73, 1337-1350.	2.7	9
606	An integrated, programming model-driven framework for NoCâ€™QoS support in cluster-based embedded many-cores. Parallel Computing, 2013, 39, 549-566.	1.3	8
607	Improving the efficiency of air-flow energy harvesters combining active and passive rectifiers. , 2013, , .		2
608	Trade-offs of Forecasting Algorithm for Extending WSN Lifetime in a Real-World Deployment. , 2013, , .		1
609	Multimodal Video Analysis on Self-Powered Resource-Limited Wireless Smart Camera. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 223-235.	2.7	42
610	Online thermal control methods for multiprocessor systems. ACM Transactions on Design Automation of Electronic Systems, 2013, 18, 1-26.	1.9	11
611	Robust Scheduling of Task Graphs under Execution Time Uncertainty. IEEE Transactions on Computers, 2013, 62, 98-111.	2.4	33
612	Synchronization methods for Bluetooth based WBANs. , 2013, , .		3

#	ARTICLE	IF	CITATIONS
613	A variability-aware OpenMP environment for efficient execution of accuracy-configurable computation on shared-FPU processor clusters. , 2013, , .		20
614	A variation tolerant architecture for ultra low power multi-processor cluster. , 2013, , .		2
615	Prolonging the lifetime of wireless sensor networks using light-weight forecasting algorithms. , 2013, , .		7
616	Long term, low cost, passive environmental monitoring of heritage buildings for energy efficiency retrofitting. , 2013, , .		14
617	Variation-tolerant OpenMP Tasking on Tightly-coupled Processor Clusters. , 2013, , .		8
618	Synthesis-friendly techniques for tightly-coupled integration of hardware accelerators into shared-memory multi-core clusters. , 2013, , .		11
619	A versatile biomedical wireless sensor node with novel drysurface sensors and energy efficient power management. , 2013, , .		17
620	A Survey of Multi-Source Energy Harvesting Systems. , 2013, , .		53
621	Spatial Memoization: Concurrent Instruction Reuse to Correct Timing Errors in SIMD Architectures. IEEE Transactions on Circuits and Systems II: Express Briefs, 2013, 60, 847-851.	2.2	33
622	Thermal and Energy Management of High-Performance Multicores: Distributed and Self-Calibrating Model-Predictive Controller. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 170-183.	4.0	90
623	Peak shift measurement of localized surface plasmon resonance by a portable electronic system. Sensors and Actuators B: Chemical, 2013, 176, 225-231.	4.0	13
624	Aging-Aware Energy-Efficient Workload Allocation for Mobile Multimedia Platforms. IEEE Transactions on Parallel and Distributed Systems, 2013, 24, 1489-1499.	4.0	22
625	Power saving policies for multipurpose WBAN. , 2013, , .		2
626	Low-power wireless accelerometer-based system for wear detection of bandsaw blades. , 2013, , .		4
627	A power-aware multi harvester power unit with hydrogen fuel cell for embedded systems in outdoor applications. , 2013, , .		8
628	A new non-invasive voltage measurement method for wireless analysis of electrical parameters and power quality. , 2013, , .		24
629	Clamp-and-measure forever: A MOSFET-based circuit for energy harvesting and measurement targeted for power meters. , 2013, , .		12
630	GPU-SHOT: Parallel Optimization for Real-Time 3D Local Description. , 2013, , .		7

#	ARTICLE	IF	CITATIONS
631	Efficient energy management and data recovery in sensor networks using latent variables based tensor factorization. , 2013, , .		7
632	Energy and performance exploration of accelerator coherency port using Xilinx ZYNQ. , 2013, , .		56
633	A high-performance multiported L2 memory IP for scalable three-dimensional integration. , 2013, , .		1
634	Workload and user experience-aware dynamic reliability management in multicore processors. , 2013, , .		38
635	HapticLib. , 2013, , .		0
636	Heterogeneous multi-harvester for wireless sensor networks. , 2013, , .		0
637	Powering wireless sensor nodes with micro fuel cells. , 2013, , .		0
638	A shared-FPU architecture for ultra-low power MPSoCs. , 2013, , .		0
639	Exploration and Optimization of 3-D Integrated DRAM Subsystems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 597-610.	1.9	36
640	Hierarchically Focused Guardbanding: An Adaptive Approach to Mitigate PVT Variations and Aging. , 2013, , .		30
641	A case for three-dimensional stacking of tightly coupled data memories over multi-core clusters using low-latency interconnects. IET Computers and Digital Techniques, 2013, 7, 191-199.	0.9	7
642	On-line thermal emulation: How to speed-up your thermal controller design. , 2013, , .		3
643	SWIFTNET: A data acquisition protocol for fast-reactive monitoring applications. , 2013, , .		1
644	An Ambient Temperature Variation Tolerance Scheme for an Ultra Low Power Shared-L1 Processor Cluster. , 2013, , .		4
645	Computing Accurate Performance Bounds for Best Effort Networks-on-Chip. IEEE Transactions on Computers, 2013, 62, 452-467.	2.4	33
646	An Application-Specific Forecasting Algorithm for Extending WSN Lifetime. , 2013, , .		23
647	Identification of many-core systems-on-chip with input and output noises. , 2013, , .		1
648	SCC Thermal Model Identification via Advanced Bias-Compensated Least-Squares. , 2013, , .		10

#	ARTICLE	IF	CITATIONS
649	Wearable low power dry surface wireless sensor node for healthcare monitoring application. , 2013, , .		42
650	Designing best effort networks-on-chip to meet hard latency constraints. Transactions on Embedded Computing Systems, 2013, 12, 1-23.	2.1	3
651	Aging-aware compiler-directed VLIW assignment for GPGPU architectures. , 2013, , .		20
652	VirtualSoC: A Full-System Simulation Environment for Massively Parallel Heterogeneous System-on-Chip. , 2013, , .		28
653	SIM <i>in</i> <i>k</i> : A thousandâ€core simulator running on generalâ€purpose graphical processing units. Concurrency Computation Practice and Experience, 2013, 25, 1443-1461.	1.4	3
654	Design of a low-power structural monitoring system to locate impacts based on dispersion compensation. Proceedings of SPIE, 2013, , .	0.8	0
655	Improving the programmability of STHORM-based heterogeneous systems with offload-enabled OpenMP. , 2013, , .		19
656	Transparent and energy-efficient speculation on NUMA architectures for embedded MPSoCs. , 2013, , .		1
657	Configurable Low-Latency Interconnect for Multi-core Clusters. IFIP Advances in Information and Communication Technology, 2013, , 107-124.	0.5	3
658	Errors-in-variables identification of thermal models for many-core computing systems. , 2013, , .		2
659	A distributed interleaving scheme for efficient access to WideIO DRAM memory. , 2012, , .		3
660	Analytic comparison of wake-up receivers for WSNs and benefits over the wake-on radio scheme. , 2012, , .		68
661	A Portable Setup for Molecular Detection by Transmission LSPR. Materials Research Society Symposia Proceedings, 2012, 1479, 27-32.	0.1	0
662	Network-Level Power-Performance Trade-Off in Wearable Activity Recognition. Transactions on Embedded Computing Systems, 2012, 11, 1-30.	2.1	30
663	Procedure hopping. , 2012, , .		14
664	A high-throughput and low-latency interconnection network for multi-core Clusters with 3-D stacked L2 tightly-coupled data memory. , 2012, , .		8
665	Analysis of instruction-level vulnerability to dynamic voltage and temperature variations. , 2012, , .		21
666	A multi-banked shared-l1 cache architecture for tightly coupled processor clusters. , 2012, , .		7

#	ARTICLE	IF	CITATIONS
667	Opportunistic hierarchical classification for power optimization in wearable movement monitoring systems. , 2012, , .		4
668	Low-power processor architecture exploration for online biomedical signal analysis. IET Circuits, Devices and Systems, 2012, 6, 279.	0.9	14
669	An energy efficient DRAM subsystem for 3D integrated SoCs. , 2012, , .		7
670	A resilient architecture for low latency communication in shared-L1 processor clusters. , 2012, , .		8
671	A Buffer-Sizing Algorithm for Network-on-Chips with Multiple Voltage-Frequency Islands. Journal of Electrical and Computer Engineering, 2012, 2012, 1-12.	0.6	6
672	3D-LIN: A configurable low-latency interconnect for multi-core clusters with 3D stacked L1 memory. , 2012, , .		1
673	A high-throughput and low-latency interconnection network for multi-core Clusters with 3-D stacked L2 tightly-coupled data memory. , 2012, , .		1
674	Distributed Compressive Sampling for Lifetime Optimization in Dense Wireless Sensor Networks. IEEE Transactions on Industrial Informatics, 2012, 8, 30-40.	7.2	155
675	Reconfigurable natural interaction in smart environments: approach and prototype implementation. Personal and Ubiquitous Computing, 2012, 16, 943-956.	1.9	12
676	A retrospective look at xpipes: The exciting ride from a design experience to a design platform for nanoscale networks-on-chip. , 2012, , .		0
677	OpenMP-based Synergistic Parallelization and HW Acceleration for On-Chip Shared-Memory Clusters. , 2012, , .		10
678	Variation-Tolerant Architecture for Ultra Low Power Shared-L1 Processor Clusters. IEEE Transactions on Circuits and Systems II: Express Briefs, 2012, 59, 927-931.	2.2	13
679	Combined methods to extend the lifetime of power hungry WSN with multimodal sensors and nanopower wakeups. , 2012, , .		8
680	A tightly-coupled multi-core cluster with shared-memory HW accelerators. , 2012, , .		11
681	Fast and lightweight support for nested parallelism on cluster-based embedded many-cores. , 2012, , .		11
682	Full system simulation of many-core heterogeneous SoCs using GPU and QEMU semihosting. , 2012, , .		7
683	Robust Near-Threshold Design With Fine-Grained Performance Tunability. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 1815-1825.	3.5	8
684	3D-LIN: A configurable low-latency interconnect for multi-core clusters with 3D stacked L1 memory. , 2012, , .		3

#	ARTICLE	IF	CITATIONS
685	P2012: Building an ecosystem for a scalable, modular and high-efficiency embedded computing accelerator. , 2012, , .		108
686	A Multi-Harvester architecture with hybrid storage devices and smart capabilities for low power systems. , 2012, , .		39
687	Smart power unit with ultra low power radio trigger capabilities for wireless sensor networks. , 2012, , .		32
688	Don't burn your mobile!. , 2012, , .		13
689	Design of a collective communication infrastructure for barrier synchronization in cluster-based nanoscale MPSoCs. , 2012, , .		3
690	Platform 2012, a many-core computing accelerator for embedded SoCs. , 2012, , .		142
691	Variability-tolerant workload allocation for MPSoC energy minimization under real-time constraints. Transactions on Embedded Computing Systems, 2012, 11, 1-24.	2.1	4
692	Temperature compensated time synchronisation in wireless sensor networks. Electronics Letters, 2012, 48, 1026-1028.	0.5	9
693	Xpipes: A latency insensitive parameterized network-on-chip architecture for multi-processor SoCs. , 2012, , .		57
694	Evaluation of GALS Methods in Scaled CMOS Technology. International Journal of Embedded and Real-Time Communication Systems, 2012, 3, 1-18.	0.3	2
695	Characterization of lithium-ion capacitors for low-power energy neutral wireless sensor networks. , 2012, , .		27
696	Row-based FBB: A design-time optimization for post-silicon tunable circuits. Microelectronics Journal, 2012, 43, 456-465.	1.1	0
697	An OpenMP Compiler for Efficient Use of Distributed Scratchpad Memory in MPSoCs. IEEE Transactions on Computers, 2012, 61, 222-236.	2.4	45
698	Variability-Aware Task Allocation for Energy-Efficient Quality of Service Provisioning in Embedded Streaming Multimedia Applications. IEEE Transactions on Computers, 2012, 61, 939-953.	2.4	28
699	Global Cyclic Cumulative Constraint. Lecture Notes in Computer Science, 2012, , 81-96.	1.0	3
700	Merging RFID, visual and gesture recognition technologies to generate and manage smart environments. , 2011, , .		5
701	An efficient on-line task allocation algorithm for QoS and energy efficiency in multicore multimedia platforms. , 2011, , .		7
702	Bus Access Design for Combined Worst and Average Case Execution Time Optimization of Predictable Real-Time Applications on Multiprocessor Systems-on-Chip. , 2011, , .		5



#	ARTICLE	IF	CITATIONS
703	Static Thermal Model Learning for High-Performance Multicore Servers. , 2011, , .		5
704	GPGPU-Accelerated Parallel and Fast Simulation of Thousand-Core Platforms. , 2011, , .		14
705	A context-aware smart seat. , 2011, , .		12
706	An effective multi-source energy harvester for low power applications. , 2011, , .		63
707	Design, characterization and management of a wireless sensor network for smart gas monitoring. , 2011, , .		40
708	A Method for Integrating Network-on-Chip Topologies with 3D ICs. , 2011, , .		1
709	A fully-synthesizable single-cycle interconnection network for Shared-L1 processor clusters. , 2011, , .		90
710	ReliNoC: A reliable network for priority-based on-chip communication. , 2011, , .		25
711	Moonrake chip - GALS demonstrator in 40 nm CMOS technology. , 2011, , .		0
712	Variability compensation for full-swing against low-swing on-chip communication. IET Computers and Digital Techniques, 2011, 5, 355.	0.9	0
713	Fast Computation of Discharge Current Upper Bounds for Clustered Power Gating. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 146-151.	2.1	4
714	Fine-Grained Power and Body-Bias Control for Near-Threshold Deep Sub-Micron CMOS Circuits. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2011, 1, 131-140.	2.7	19
715	Design Issues and Considerations for Low-Cost 3-D TSV IC Technology. IEEE Journal of Solid-State Circuits, 2011, 46, 293-307.	3.5	236
716	Characterization and Implementation of Fault-Tolerant Vertical Links for 3-D Networks-on-Chip. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 124-134.	1.9	54
717	Guest Editorial: Special Section on the ACM/IEEE Symposium on Networks-on-Chip 2010. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 492-493.	1.9	0
718	Supporting OpenMP on a multi-cluster embedded MPSoC. Microprocessors and Microsystems, 2011, 35, 668-682.	1.8	24
719	Parallel Rendering and Animation of Subdivision Surfaces on the Cell BE Processor. International Journal of Parallel Programming, 2011, 39, 494-521.	1.1	0
720	Optimal resource allocation and scheduling for the CELL BE platform. Annals of Operations Research, 2011, 184, 51-77.	2.6	17

#	ARTICLE	IF	CITATIONS
721	MPOpt-Cell. , 2011, , .		2
722	A distributed and topology-agnostic approach for on-line NoC testing. , 2011, , .		49
723	SoC-TM. , 2011, , .		16
724	Towards persistent structural health monitoring through sustainable wireless sensor networks. , 2011, , .		28
725	Thermal-aware system-level modeling and management for Multi-Processor Systems-on-Chip. , 2011, , .		10
726	Exploring instruction caching strategies for tightly-coupled shared-memory clusters. , 2011, , .		10
727	Energy-aware objects abandon / removal detection. , 2011, , .		3
728	A distributed and self-calibrating model-predictive controller for energy and thermal management of high-performance multicores. , 2011, , .		52
729	A Constraint Based Approach to Cyclic RCPSP. Lecture Notes in Computer Science, 2011, , 130-144.	1.0	3
730	A Simulation Based Buffer Sizing Algorithm for Network on Chips. , 2011, , .		6
731	A DRAM Centric NoC Architecture and Topology Design Approach. , 2011, , .		4
732	Row-Based Power-Gating: A Novel Sleep Transistor Insertion Methodology for Leakage Power Optimization in Nanometer CMOS Circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 469-482.	2.1	21
733	Neuron Constraints to Model Complex Real-World Problems. Lecture Notes in Computer Science, 2011, , 115-129.	1.0	17
734	Power/Performance Exploration of Single-core and Multi-core Processor Approaches for Biomedical Signal Processing. Lecture Notes in Computer Science, 2011, , 102-111.	1.0	25
735	A System Level Approach to Multi-core Thermal Sensors Calibration. Lecture Notes in Computer Science, 2011, , 22-31.	1.0	6
736	Design and Analysis of NoCs for Low-Power 2D and 3D SoCs. , 2011, , 199-222.		0
737	3D Network on Chip Topology Synthesis: Designing Custom Topologies for Chip Stacks. Integrated Circuits and Systems, 2011, , 193-223.	0.2	3
738	Precedence Constraint Posting for Cyclic Scheduling Problems. Lecture Notes in Computer Science, 2011, , 137-153.	1.0	2

#	ARTICLE	IF	CITATIONS
739	A virtual platform environment for exploring power, thermal and reliability management control strategies in high-performance multicores. , 2010, , .		47
740	Networks on Chips. , 2010, , .		46
741	Exploring programming model-driven QoS support for NoC-based platforms. , 2010, , .		6
742	Stochastic allocation and scheduling for conditional task graphs in multi-processor systems-on-chip. Journal of Scheduling, 2010, 13, 315-345.	1.3	30
743	Comparison of energy intake prediction algorithms for systems powered by photovoltaic harvesters. Microelectronics Journal, 2010, 41, 766-777.	1.1	59
744	Capacitance DNA bio-chips improved by new probe immobilization strategies. Microelectronics Journal, 2010, 41, 711-717.	1.1	10
745	Accelerometer-based fall detection using optimized ZigBee data streaming. Microelectronics Journal, 2010, 41, 703-710.	1.1	51
746	Cancer marker detection in human serum with a point-of-care low-cost system. Sensors and Actuators B: Chemical, 2010, 147, 475-480.	4.0	8
747	Vertical stealing. , 2010, , .		3
748	Collecting Datasets from Ambient Intelligence Environments. International Journal of Ambient Computing and Intelligence, 2010, 2, 42-56.	0.8	8
749	3D NoCs &#x2014; Unifying inter & intra chip communication. , 2010, , .		4
750	A method to remove deadlocks in Networks-on-Chips with Wormhole flow control. , 2010, , .		20
751	Design space exploration of a mesochronous link for cost-effective and flexible GALS NOCs. , 2010, , .		14
752	Efficient OpenMP data mapping for multicore platforms with vertically stacked memory. , 2010, , .		4
753	An efficient distributed memory interface for many-core platform with 3D stacked DRAM. , 2010, , .		26
754	Comparative Analysis of NoCs for Two-Dimensional Versus Three-Dimensional SoCs Supporting Multiple Voltage and Frequency Islands. IEEE Transactions on Circuits and Systems II: Express Briefs, 2010, 57, 364-368.	2.2	13
755	Adaptive TDMA bus allocation and elastic scheduling: A unified approach for enhancing robustness in multi-core RT systems. , 2010, , .		7
756	Automatic synthesis of near-threshold circuits with fine-grained performance tunability. , 2010, , .		8

#	ARTICLE	IF	CITATIONS
757	Variability-tolerant run-time workload allocation for MPSoC energy minimization under real-time constraints. , 2010, , .		3
758	Bluetooth indoor localization with multiple neural networks. , 2010, , .		95
759	Tracking Motion Direction and Distance With Pyroelectric IR Sensors. IEEE Sensors Journal, 2010, 10, 1486-1494.	2.4	152
760	A new physical routing approach for robust bundled signaling on NoC links. , 2010, , .		11
761	A kinetic energy harvester with fast start-up for wearable body-monitoring sensors. , 2010, , .		11
762	Performability/Energy Tradeoff in Error-Control Schemes for On-Chip Networks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1-14.	2.1	54
763	Adaptive Power Management for Environmentally Powered Systems. IEEE Transactions on Computers, 2010, 59, 478-491.	2.4	91
764	SunFloor 3D: A Tool for Networks on Chip Topology Synthesis for 3-D Systems on Chips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1987-2000.	1.9	32
765	A high-efficiency wind-flow energy harvester using micro turbine. , 2010, , .		74
766	An energy efficient multimodal Wireless Video Sensor Network with eZ430&#x2013;RF2500 modules. , 2010, , .		23
767	Wearable assistant for load monitoring: recognition of on-body load placement from gait alterations. , 2010, , .		9
768	Compressive sensing optimization over ZigBee networks. , 2010, , .		9
769	GENESI: Green sEnsor NETworks for Structural monitoring. , 2010, , .		11
770	Rapid and efficient application design using a signal processing framework for WSN. , 2010, , .		0
771	Evaluating OpenMP Support Costs on MPSoCs. , 2010, , .		1
772	Methods for Designing Reliable Probe Arrays. , 2010, , .		1
773	Scalable instruction set simulator for thousand-core architectures running on GPGPUs. , 2010, , .		9
774	Design of Networks on Chips for 3D ICs. , 2010, , .		3

#	ARTICLE	IF	CITATIONS
775	Energy aware multimodal embedded video surveillance. , 2010, , .		0
776	Battery-aware power management techniques for wearable haptic nodes. , 2010, , .		1
777	Energy Efficient Cooperative Multimodal Ambient Monitoring. Lecture Notes in Computer Science, 2010, , 56-70.	1.0	2
778	A Refinement Methodology for Clock Gating Optimization at Layout Level in Digital Circuits. Journal of Low Power Electronics, 2010, 6, 44-55.	0.6	1
779	A low-cost point-of-care system for parallel ELISA essays. , 2009, , .		2
780	Variability-tolerant workload allocation for MPSoC energy minimization under real-time constraints. , 2009, , .		9
781	A floorplan-aware interactive tool flow for NoC design and synthesis. , 2009, , .		6
782	Multicore thermal management with model predictive control. , 2009, , .		58
783	Efficient OpenMP support and extensions for MPSoCs with explicitly managed memory hierarchy. , 2009, , .		12
784	SunFloor 3D: A tool for Networks On Chip topology synthesis for 3D systems on chips. , 2009, , .		74
785	Designing Regular Network-on-Chip Topologies under Technology, Architecture and Software Constraints. , 2009, , .		19
786	Robust non-preemptive hard real-time scheduling for clustered multicore platforms. , 2009, , .		6
787	Adaptive idleness distribution for non-uniform aging tolerance in MultiProcessor Systems-on-Chip. , 2009, , .		10
788	Minimization of the reconfiguration latency for the mapping of applications on FPGA-based systems. , 2009, , .		18
789	A method for calculating hard QoS guarantees for Networks-on-Chip. , 2009, , .		20
790	NoC topology synthesis for supporting shutdown of voltage islands in SoCs. , 2009, , .		24
791	Comparing tightly and loosely coupled mesochronous synchronizers in a NoC switch architecture. , 2009, , .		23
792	Label-free cancer markers detection by capacitance biochip. Sensors and Actuators B: Chemical, 2009, 136, 163-172.	4.0	54

#	ARTICLE	IF	CITATIONS
793	Photovoltaic scavenging systems: Modeling and optimization. <i>Microelectronics Journal</i> , 2009, 40, 1337-1344.	1.1	40
794	New insights for using self-assembly materials to improve the detection stability in label-free DNA-chip and immuno-sensors. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3425-3429.	5.3	34
795	Multimodal Abandoned/Removed Object Detection for Low Power Video Surveillance Systems. , 2009, , .		36
796	Load optimization of an inductive power link for remote powering of biomedical implants. , 2009, , .		24
797	Hidden Markov Model based gesture recognition on low-cost, low-power Tangible User Interfaces. <i>Entertainment Computing</i> , 2009, 1, 75-84.	1.8	16
798	Adaptive power control for solar harvesting multimodal wireless smart camera. , 2009, , .		33
799	Design of a Solar-Harvesting Circuit for Batteryless Embedded Systems. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2009, 56, 2519-2528.	3.5	226
800	Algorithms for harvested energy prediction in batteryless wireless sensor networks. , 2009, , .		72
801	Design of a Flexible Reactivation Cell for Safe Power-Mode Transition in Power-Gated Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2009, 56, 1979-1993.	3.5	25
802	Physically clustered forward body biasing for variability compensation in nanometer CMOS design. , 2009, , .		11
803	Optimizing ZigBee for data streaming in body-area bio-feedback applications. , 2009, , .		8
804	Synthesis of networks on chips for 3D systems on chips. , 2009, , .		63
805	New probe immobilizations by lipoate-diethalonamines or ethylene-glycol molecules for capacitance DNA chip. , 2009, , .		7
806	Synthesis of low-overhead configurable source routing tables for network interfaces. , 2009, , .		18
807	Designing and managing sub-milliwatt energy harvesting nodes: Opportunities and challenges. , 2009, , .		10
808	Thermal Balancing Policy for Multiprocessor Stream Computing Platforms. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2009, 28, 1870-1882.	1.9	54
809	Reducing the Abstraction and Optimality Gaps in the Allocation and Scheduling for Variable Voltage/Frequency MPSoC Platforms. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2009, 28, 378-391.	1.9	10
810	A Feedback-Based Approach to DVFS in Data-Flow Applications. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , 2009, 28, 1691-1704.	1.9	41

#	ARTICLE	IF	CITATIONS
811	A wireless system for gait and posture analysis based on pressure insoles and Inertial Measurement Units. , 2009, , .		27
812	Throughput Constraint for Synchronous Data Flow Graphs. Lecture Notes in Computer Science, 2009, , 26-40.	1.0	22
813	Hidden Markov Models Implementation for Tangible Interfaces. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 258-263.	0.2	1
814	OpenMP Support for NBTI-Induced Aging Tolerance in MPSoCs. Lecture Notes in Computer Science, 2009, , 547-562.	1.0	4
815	<i>HVS-DBS</i>. , 2009, , .		21
816	Capturing topology-level implications of link synthesis techniques for nanoscale networks-on-chip. , 2009, , .		8
817	Exploiting Temporal Discharge Current Information to Improve the Efficiency of Clustered Power-Gating. Journal of Low Power Electronics, 2009, 5, 113-121.	0.6	0
818	SoC Communication Architectures. Industrial Information Technology Series, 2009, , 14-1-14-29.	0.2	0
819	Networks-on-Chip. Industrial Information Technology Series, 2009, , 15-1-15-29.	0.2	0
820	Interfacing human and computer with wireless body area sensor networks: the WiMoCA solution. Multimedia Tools and Applications, 2008, 38, 337-363.	2.6	62
821	A Fast and Accurate Technique for Mapping Parallel Applications on Stream-Oriented MPSoC Platforms with Communication Awareness. International Journal of Parallel Programming, 2008, 36, 3-36.	1.1	29
822	Joint co-clustering: Co-clustering of genomic and clinical bioimaging data. Computers and Mathematics With Applications, 2008, 55, 938-949.	1.4	3
823	Network-on-Chip design and synthesis outlook. The Integration VLSI Journal, 2008, 41, 340-359.	1.3	97
824	The State of ESL Design [Roundtable]. IEEE Design and Test of Computers, 2008, 25, 510-519.	1.4	2
825	Analysis of Audio Streaming Capability of Zigbee Networks. , 2008, , 189-204.		34
826	An Efficient Solar Energy Harvester for Wireless Sensor Nodes. , 2008, , .		47
827	Thermal Balancing Policy for Streaming Computing on Multiprocessor Architectures. , 2008, , .		12
828	A solar energy harvesting circuit for low power applications. , 2008, , .		59

#	ARTICLE	IF	CITATIONS
829	Exploring High-Dimensional Topologies for NoC Design Through an Integrated Analysis and Synthesis Framework. , 2008, , .		25
830	Process Variation Tolerant Pipeline Design Through a Placement-Aware Multiple Voltage Island Design Style. , 2008, , .		5
831	A Reactive and Cycle-True IP Emulator for MPSoC Exploration. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 109-122.	1.9	7
832	Modeling and Optimization of a Solar Energy Harvester System for Self-Powered Wireless Sensor Networks. IEEE Transactions on Industrial Electronics, 2008, 55, 2759-2766.	5.2	284
833	Resource Management Policy Handling Multiple Use-Cases in MPSoC Platforms Using Constraint Programming. Lecture Notes in Computer Science, 2008, , 470-484.	1.0	18
834	Exploring architectural solutions for energy optimisations in bus-based system-on-chip. IET Computers and Digital Techniques, 2008, 2, 347.	0.9	2
835	Validation of a wireless portable biofeedback system for balance control: Preliminary results. , 2008, , .		5
836	A Scalable Algorithmic Framework for Row-Based Power-Gating. , 2008, , .		3
837	Temperature Control of High-Performance Multi-core Platforms Using Convex Optimization. , 2008, , .		26
838	Circuits design and nano-structured electrodes for drugs monitoring in personalized therapy. , 2008, , .		4
839	Dynamic Thermal Clock Skew Compensation Using Tunable Delay Buffers. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 639-649.	2.1	39
840	Cellflow: A Parallel Application Development Environment with Run-Time Support for the Cell BE Processor. , 2008, , .		5
841	Analysis of Power Management Strategies for a Large-Scale SoC Platform in 65nm Technology. , 2008, , .		4
842	A Solar-powered Video Sensor Node for Energy Efficient Multimodal Surveillance. , 2008, , .		16
843	Developing Mesochronous Synchronizers to Enable 3D NoCs. , 2008, , .		17
844	Multiple power-gating domain (multi-VGND) architecture for improved leakage power reduction. , 2008, , .		8
845	Pyroelectric InfraRed sensors based distance estimation. , 2008, , .		17
846	A multiprocessor system-on-chip for real-time biomedical monitoring and analysis. ACM Transactions on Design Automation of Electronic Systems, 2008, 13, 1-21.	1.9	9



#	ARTICLE	IF	CITATIONS
847	Optimal sleep transistor synthesis under timing and area constraints. , 2008, , .		8
848	An efficient solar energy harvester for wireless sensor nodes. , 2008, , .		53
849	Temperature control of high-performance multi-core platforms using convex optimization. , 2008, , .		52
850	TOM: enhancement and extension of a tool suite for in silico approaches to multigenic hereditary disorders. <i>Bioinformatics</i> , 2008, 24, 428-429.	1.8	18
851	Evolving tuis with smart objects for multi-context interaction. , 2008, , .		0
852	Real-time high-sensitivity impedance measurement interface for tethered BLM biosensor arrays. , 2008, , .		3
853	How to Live with Uncertainties: Exploiting the Performance Benefits of Self-Timed Logic In Synchronous Design. , 2008, , .		0
854	Reliability-aware design for nanometer-scale devices. , 2008, , .		14
855	On quantifying the figures of merit of power-gating for leakage power minimization in nanometer CMOS circuits. , 2008, , .		4
856	A High-Performance Wireless Sensor Node for Industrial Control Applications. , 2008, , .		9
857	Optimal MTCMOS Reactivation Under Power Supply Noise and Performance Constraints. , 2008, , .		2
858	Serialized Asynchronous Links for NoC. , 2008, , .		5
859	A low-overhead fault tolerance scheme for TSV-based 3D network on chip links. , 2008, , .		131
860	Robust and Low Complexity Rate Control for Solar Powered Sensors. , 2008, , .		19
861	xpipesCompiler: A Tool for Instantiating Application-Specific Networks on Chip. , 2008, , 157-171.		18
862	Multi-stage Benders Decomposition for Optimizing Multicore Architectures. , 2008, , 36-50.		12
863	Activity Recognition from On-Body Sensors: Accuracy-Power Trade-Off by Dynamic Sensor Selection. , 2008, , 17-33.		178
864	A Constraint Programming Approach for Allocation and Scheduling on the CELL Broadband Engine. <i>Lecture Notes in Computer Science</i> , 2008, , 21-35.	1.0	7

#	ARTICLE	IF	CITATIONS
865	MM-Correction: Meta-analysis-Based Multiple Hypotheses Correction in Omic Studies. Communications in Computer and Information Science, 2008, , 242-255.	0.4	1
866	A smart wireless glove for gesture interaction. , 2008, , .		3
867	Validation of a Wireless Portable Biofeedback System for Balance Control: Preliminary Results. , 2008, , .		3
868	Quantitative Comparison of Power Management Algorithms. , 2008, , 207-219.		0
869	Address Bus Encoding Techniques for System-Level Power Optimization. , 2008, , 275-289.		1
870	Dynamic Power Management for Nonstationary Service Requests. , 2008, , 195-206.		0
871	Designing Routing and Message-Dependent Deadlock Free Networks on Chips. , 2008, , 337-355.		2
872	Exploration of Low Power Adders for a SIMD Data Path. , 2007, , .		2
873	Performance analysis and design space exploration for high-end biomedical applications. , 2007, , .		9
874	Communication-aware stochastic allocation and scheduling framework for conditional task graphs in multi-processor systems-on-chip. , 2007, , .		7
875	Power-aware computing systems. International Journal of Embedded Systems, 2007, 3, 3.	0.2	2
876	Exploring temperature-aware design in low-power MPSoCs. International Journal of Embedded Systems, 2007, 3, 43.	0.2	16
877	Multi-processor operating system emulation framework with thermal feedback for systems-on-chip. , 2007, , .		18
878	Design of a family of sleep transistor cells for a clustered power-gating flow in 65nm technology. , 2007, , .		13
879	HW-SW emulation framework for temperature-aware design in MPSoCs. ACM Transactions on Design Automation of Electronic Systems, 2007, 12, 1-26.	1.9	33
880	A lightweight parallel java execution environment for embedded multiprocessor systems-on-chip. , 2007, , .		1
881	Power macromodeling of MPSoC message passing primitives. Transactions on Embedded Computing Systems, 2007, 6, 31.	2.1	8
882	A control theoretic approach to energy-efficient pipelined computation in MPSoCs. Transactions on Embedded Computing Systems, 2007, 6, 27.	2.1	28

#	ARTICLE	IF	CITATIONS
883	Introducing tangerine. , 2007, , .		15
884	Timing-driven row-based power gating. , 2007, , .		34
885	Synthesis of Predictable Networks-on-Chip-Based Interconnect Architectures for Chip Multiprocessors. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2007, 15, 869-880.	2.1	35
886	Feature - NoC emulation: a tool and design flow for MPSoC. IEEE Circuits and Systems Magazine, 2007, 7, 42-51.	2.6	29
887	Distributed video surveillance using hardware-friendly sparse large margin classifiers. , 2007, , .		22
888	Activity recognition from on-body sensors by classifier fusion: sensor scalability and robustness. , 2007, , .		79
889	Dynamic Reconfiguration in Sensor Networks with Regenerative Energy Sources. , 2007, , .		11
890	MP-Queue: an Efficient Communication Library for Embedded Streaming Multimedia Platforms. , 2007, , .		5
891	Efficient Computation of Discharge Current Upper Bounds for Clustered Sleep Transistor Sizing. , 2007, , .		15
892	Adaptive Power Management in Energy Harvesting Systems. , 2007, , .		79
893	Timing-Error-Tolerant Network-on-Chip Design Methodology. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1297-1310.	1.9	21
894	NoC Design and Implementation in 65nm Technology. , 2007, , .		51
895	Bringing NoCs to 65 nm. IEEE Micro, 2007, 27, 75-85.	1.8	47
896	An Application-Specific Design Methodology for On-Chip Crossbar Generation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1283-1296.	1.9	43
897	Energy-Efficient Multiprocessor Systems-on-Chip for Embedded Computing: Exploring Programming Models and Their Architectural Support. IEEE Transactions on Computers, 2007, 56, 606-621.	2.4	25
898	A Layout-Aware Analysis of Networks-on-Chip and Traditional Interconnects for MPSoCs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 421-434.	1.9	47
899	Reducing Interconnect Cost in NoC through Serialized Asynchronous Links. , 2007, , .		4
900	System-Level Design for Nano-Electronics. , 2007, , .		5

#	ARTICLE	IF	CITATIONS
901	Control and datapath decoupling in the design of a NoC switch: area, power and performance implications. , 2007, , .		6
902	Enhancing the spatial resolution of presence detection in a PIR based wireless surveillance network. , 2007, , .		51
903	Designing Reliable Systems with Unreliable Devices Challenges and Opportunities. , 2007, , .		0
904	Improving the Fault Tolerance of Nanometric PLA Designs. , 2007, , .		3
905	Capturing the interaction of the communication, memory and I/O subsystems in memory-centric industrial MPSoC platforms. , 2007, , .		6
906	Electronic Detection of DNA Hybridization: Toward CMOS Microarrays. IEEE Design and Test of Computers, 2007, 24, 38-48.	1.4	14
907	A Fully Electronic Label-Free DNA Sensor Chip. IEEE Sensors Journal, 2007, 7, 577-585.	2.4	92
908	MOCA: A Low-Power, Low-Cost Motion Capture System Based on Integrated Accelerometers. Advances in Multimedia, 2007, 2007, 1-11.	0.2	21
909	A Method for Routing Packets Across Multiple Paths in NoCs with In-Order Delivery and Fault-Tolerance Gaurantees. VLSI Design, 2007, 2007, 1-11.	0.5	37
910	Co-clustering: A Versatile Tool for Data Analysis in Biomedical Informatics. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 493-494.	3.6	13
911	Photovoltaic cell modeling for solar energy powered sensor networks. , 2007, , .		46
912	Real-time scheduling for energy harvesting sensor nodes. Real-Time Systems, 2007, 37, 233-260.	1.1	150
913	A low-power wireless video sensor node for distributed object detection. Journal of Real-Time Image Processing, 2007, 2, 331-342.	2.2	52
914	Hardware/Software Architecture for Real-Time ECG Monitoring and Analysis Leveraging MPSoC Technology. Lecture Notes in Computer Science, 2007, , 239-258.	1.0	2
915	Area and Power Modeling for Networks-on-Chip with Layout Awareness. VLSI Design, 2007, 2007, 1-12.	0.5	22
916	Supporting vertical links for 3D networks-on-chip: toward an automated design and analysis flow. , 2007, , .		55
917	Lightweight barrier-based parallelization support for non-cache-coherent MPSoC platforms. , 2007, , .		10
918	A Traffic Injection Methodology with Support for System-Level Synchronization. , 2007, , 145-161.		0

#	ARTICLE	IF	CITATIONS
919	Exploring temperature-aware design in low-power MPSoCs. , 2006, , .		25
920	Combining Simulation and Formal Methods for System-Level Performance Analysis. , 2006, , .		38
921	3dID: a low-power, low-cost hand motion capture device. , 2006, , .		14
922	Computer-Aided Evaluation of Protein Expression in Pathological Tissue Images. , 2006, , .		7
923	Designing application-specific networks on chips with floorplan information. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	115
924	A Complete Multi-Processor System-on-Chip FPGA-Based Emulation Framework. , 2006, , .		15
925	Microelectrodes on a Silicon Chip for Label-Free Capacitive DNA Sensing. IEEE Sensors Journal, 2006, 6, 1084-1093.	2.4	41
926	Designing Message-Dependent Deadlock Free Networks on Chips for Application-Specific Systems on Chips. , 2006, , .		21
927	Mining Gene Sets for Measuring Similarities. , 2006, , .		0
928	Feature - Circuits and systems for high-throughput biology. IEEE Circuits and Systems Magazine, 2006, 6, 10-20.	2.6	4
929	A Pattern-Mining Method for High-Throughput Lab-on-a-Chip Data Analysis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2006, 25, 358-377.	1.9	3
930	Reducing Conflict Misses by Application-Specific Reconfigurable Indexing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2006, 25, 2626-2637.	1.9	6
931	CMOS DNA Sensor Array With Integrated A/D Conversion Based on Label-Free Capacitance Measurement. IEEE Journal of Solid-State Circuits, 2006, 41, 2956-2964.	3.5	161
932	Designing Application-Specific Networks on Chips with Floorplan Information. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	26
933	Comparison of a Timing-Error Tolerant Scheme with a Traditional Re-transmission Mechanism for Networks on Chips. , 2006, , .		8
934	A PATTERN-MINING METHOD FOR HIGH-THROUGHPUT LAB-ON-A-CHIP DATA ANALYSIS. , 2006, , 357-400.		0
935	A Wireless Body Area Sensor Network for Posture Detection. , 2006, , .		45
936	The Data-Link Layer in NoC Design. , 2006, , 75-145.		1

#	ARTICLE	IF	CITATIONS
937	Wireless sensor networks: Enabling technology for ambient intelligence. <i>Microelectronics Journal</i> , 2006, 37, 1639-1649.	1.1	76
938	Efficient system-level prototyping of power-aware dynamic memory managers for embedded systems. <i>The Integration VLSI Journal</i> , 2006, 39, 113-130.	1.3	16
939	Linux-Based Data Acquisition and Processing on Palmtop Computer. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2006, 55, 2039-2044.	2.4	1
940	TOM: a web-based integrated approach for identification of candidate disease genes. <i>Nucleic Acids Research</i> , 2006, 34, W285-W292.	6.5	55
941	Cache coherence tradeoffs in shared-memory MPSoCs. <i>Transactions on Embedded Computing Systems</i> , 2006, 5, 383-407.	2.1	34
942	A fast HW/SW FPGA-based thermal emulation framework for multi-processor system-on-chip. , 2006, , .		40
943	Application Specific NoC Design. , 2006, , .		78
944	MPSoC ECG biochip. , 2006, , .		9
945	Synchronization-driven dynamic speed scaling for MPSoCs. , 2006, , .		4
946	A multiprocessor system-on-chip for real-time biomedical monitoring and analysis. , 2006, , .		20
947	Dynamic thermal clock skew compensation using tunable delay buffers. , 2006, , .		19
948	A multi-path routing strategy with guaranteed in-order packet delivery and fault-tolerance for networks on chip. , 2006, , .		44
949	Lazy Scheduling for Energy Harvesting Sensor Nodes. , 2006, , 125-134.		55
950	Contrasting a NoC and a Traditional Interconnect Fabric with Layout Awareness. , 2006, , .		61
951	A Cooperative, Accurate Solving Framework for Optimal Allocation, Scheduling and Frequency Selection on Energy-Efficient MPSoCs. , 2006, , .		4
952	OPTIMIZED TECHNIQUE FOR DNA STRUCTURAL PROPERTIES DISCOVERING. <i>International Journal on Artificial Intelligence Tools</i> , 2006, 15, 695-709.	0.7	1
953	Gesture Signature for Ambient Intelligence Applications: A Feasibility Study. <i>Lecture Notes in Computer Science</i> , 2006, , 288-304.	1.0	29
954	Compilation and Simulation Tool Chain for Memory Aware Energy Optimizations. <i>Lecture Notes in Computer Science</i> , 2006, , 279-288.	1.0	4

#	ARTICLE	IF	CITATIONS
955	Network and Transport Layers in Networks on Chip. , 2006, , 147-202.		1
956	Design Methodologies and CAD Tool Flows for NoCs. , 2006, , 323-354.		0
957	Network-on-chip architectures and design methods. , 2006, , 589-624.		2
958	Pervasive Computing for Interactive Virtual Heritage. IEEE MultiMedia, 2005, 12, 46-58.	1.5	17
959	Network-on-chip architectures and design methods. IEE Proceedings: Computers and Digital Techniques, 2005, 152, 261.	1.6	82
960	Enhancing behavioural-level design flows with statistical power estimation capabilities. IEE Proceedings: Computers and Digital Techniques, 2005, 152, 731.	1.6	0
961	Automated DNA Fragments Recognition and Sizing Through AFM Image Processing. IEEE Transactions on Information Technology in Biomedicine, 2005, 9, 508-517.	3.6	22
962	Automatic Intrinsic DNA Curvature Computation From AFM Images. IEEE Transactions on Biomedical Engineering, 2005, 52, 2074-2086.	2.5	8
963	MPARM: Exploring the Multi-Processor SoC Design Space with SystemC. Journal of Signal Processing Systems, 2005, 41, 169-182.	1.0	203
964	Networks on Chips. , 2005, , 49-80.		18
965	Mapping and physical planning of networks-on-chip architectures with quality-of-service guarantees. , 2005, , .		71
966	An integrated multi-modal sensor network for video surveillance. , 2005, , .		41
967	Fault tolerance overhead in network-on-chip flow control schemes. , 2005, , .		55
968	A scalable algorithm for RTL insertion of gated clocks based on ODCs computation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2005, 24, 29-42.	1.9	27
969	An efficient profile-based algorithm for scratchpad memory partitioning. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2005, 24, 1660-1676.	1.9	43
970	Finding Co-Clusters of Genes and Clinical Parameters. , 2005, 2006, 906-12.		4
971	Discovering Coherent Biclusters from Gene Expression Data Using Zero-Suppressed Binary Decision Diagrams. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2005, 2, 339-354.	1.9	50
972	Techniques for Designing Energy-Aware MPSoCs. , 2005, , 21-47.		2

#	ARTICLE	IF	CITATIONS
973	Error control schemes for on-chip communication links: the energy-reliability tradeoff. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2005, 24, 818-831.	1.9	193
974	Analysis of Error Recovery Schemes for Networks on Chips. IEEE Design and Test of Computers, 2005, 22, 434-442.	1.4	278
975	NoC synthesis flow for customized domain specific multiprocessor systems-on-chip. IEEE Transactions on Parallel and Distributed Systems, 2005, 16, 113-129.	4.0	463
976	Fault Tolerance Overhead in Network-on-Chip Flow Control Schemes. , 2005, , .		12
977	Allocation and Scheduling for MPSoCs via Decomposition and No-Good Generation. Lecture Notes in Computer Science, 2005, , 107-121.	1.0	33
978	An integrated hardware/software approach for run-time scratchpad management. , 2004, , .		71
979	Post-layout leakage power minimization based on distributed sleep transistor insertion. , 2004, , .		37
980	Cycle-accurate power analysis for multiprocessor systems-on-a-chip. , 2004, , .		34
981	Integrated task scheduling and data assignment for SDRAMs in dynamic applications. IEEE Design and Test of Computers, 2004, 21, 378-387.	1.4	13
982	Energy-Efficient Network-On-Chip Design. , 2004, , 214-232.		3
983	Low-power system-on-chip architecture for wireless LANs. IEE Proceedings: Computers and Digital Techniques, 2004, 151, 2.	1.6	10
984	DNA detection by integrable electronics. Biosensors and Bioelectronics, 2004, 19, 781-787.	5.3	95
985	Packetization and routing analysis of on-chip multiprocessor networks. Journal of Systems Architecture, 2004, 50, 81-104.	2.5	104
986	Memory energy minimization by data compression: algorithms, architectures and implementation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2004, 12, 255-268.	2.1	9
987	A post-compiler approach to scratchpad mapping of code. , 2004, , .		78
988	Feature - Xpipes : a network-on-chip architecture for gigascale systems-on-chip. IEEE Circuits and Systems Magazine, 2004, 4, 18-31.	2.6	331
989	Specification and analysis of power-managed systems. Proceedings of the IEEE, 2004, 92, 1308-1346.	16.4	18
990	A class of code compression schemes for reducing power consumption in embedded microprocessor systems. IEEE Transactions on Computers, 2004, 53, 467-482.	2.4	21



#	ARTICLE	IF	CITATIONS
991	Performance Analysis of Arbitration Policies for SoC Communication Architectures. Design Automation for Embedded Systems, 2003, 8, 189-210.	0.7	52
992	Systemc cosimulation and emulation of multiprocessor soc designs. Computer, 2003, 36, 53-59.	1.2	97
993	Energy-aware design of embedded memories. Transactions on Embedded Computing Systems, 2003, 2, 5-32.	2.1	47
994	Ambient Intelligence: A Computational Platform Perspective. , 2003, , 31-50.		6
995	Energy Characterization of Embedded Real-Time Operating Systems. , 2003, , 53-73.		14
996	Minimizing memory access energy in embedded systems by selective instruction compression. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2002, 10, 521-531.	2.1	12
997	Parametric timing and power macromodels for high level simulation of low-swing interconnects. , 2002, , .		5
998	Layout-driven memory synthesis for embedded systems-on-chip. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2002, 10, 96-105.	2.1	63
999	Dynamic power management for nonstationary service requests. IEEE Transactions on Computers, 2002, 51, 1345-1361.	2.4	116
1000	Dynamic frequency scaling with buffer insertion for mixed workloads. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2002, 21, 1284-1305.	1.9	43
1001	Networks on chips: a new SoC paradigm. Computer, 2002, 35, 70-78.	1.2	3,027
1002	A Framework for Modeling and Estimating the Energy Dissipation of VLIW-Based Embedded Systems. Design Automation for Embedded Systems, 2002, 7, 183-203.	0.7	9
1003	Software-controlled processor speed setting for low-power streaming multimedia. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2001, 20, 1283-1292.	1.9	14
1004	Discrete-time battery models for system-level low-power design. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2001, 9, 630-640.	2.1	125
1005	Energy-efficient design of battery-powered embedded systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2001, 9, 15-28.	2.1	77
1006	Battery-driven dynamic power management. IEEE Design and Test of Computers, 2001, 18, 53-60.	1.4	80
1007	Dynamic power management of laptop hard disk (poster paper). , 2000, , .		9
1008	A survey of design techniques for system-level dynamic power management. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2000, 8, 299-316.	2.1	964

#	ARTICLE	IF	CITATIONS
1009	Increasing energy efficiency of embedded systems by application-specific memory hierarchy generation. IEEE Design and Test of Computers, 2000, 17, 74-85.	1.4	69
1010	System-level power optimization. ACM Transactions on Design Automation of Electronic Systems, 2000, 5, 115-192.	1.9	315
1011	Architectures and synthesis algorithms for power-efficient bus interfaces. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2000, 19, 969-980.	1.9	83
1012	Selective instruction compression for memory energy reduction in embedded systems. , 1999, , .		79
1013	Dynamic power management for non-stationary service requests. , 1999, , .		75
1014	System-level dynamic power management. , 1999, , .		9
1015	Policy optimization for dynamic power management. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1999, 18, 813-833.	1.9	347
1016	Power optimization of core-based systems by address bus encoding. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1998, 6, 554-562.	2.1	82
1017	Policy optimization for dynamic power management. , 1998, , .		83
1018	Robust RTL power macromodels. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1998, 6, 578-581.	2.1	17
1019	Dynamic Power Management. , 1998, , .		136
1020	Saving power by synthesizing gated clocks for sequential circuits. IEEE Design and Test of Computers, 1994, 11, 32-41.	1.4	140
1021	Asymptotic zero-transition activity encoding for address busses in low-power microprocessor-based systems. , 0, , .		207
1022	Cycle-accurate simulation of energy consumption in embedded systems. , 0, , .		83
1023	Low power error resilient encoding for on-chip data buses. , 0, , .		88
1024	Power aware network interface management for streaming multimedia. , 0, , .		26
1025	Energy-efficient and reliable low-swing signaling for on-chip buses based on redundant coding. , 0, , .		15
1026	Transport protocol optimization for energy efficient wireless embedded systems. , 0, , .		16

#	ARTICLE	IF	CITATIONS
1027	SDRAM-Energy-Aware memory allocation for dynamic multi-media applications on multi-processor platforms. , 0, , .		5
1028	Packetized on-chip interconnect communication analysis for MPSoC. , 0, , .		32
1029	Xpipes: a latency insensitive parameterized network-on-chip architecture for multiprocessor SoCs. , 0, , .		55
1030	A simulation-based power-aware architecture exploration of a multiprocessor system-on-chip design. , 0, , .		1
1031	A scalable ODC-based algorithm for RTL insertion of gated clocks. , 0, , .		7
1032	Block-enabled memory macros: design space exploration and application-specific tuning. , 0, , .		1
1033	Sizing and characterization of leakage-control cells for layout-aware distributed power-gating. , 0, , .		6
1034	Enhanced pClustering and its applications to gene expression data. , 0, , .		7
1035	Techniques for enhancing computation of DNA curvature molecules. , 0, , .		1
1036	Analyzing on-chip communication in a MPSoC environment. , 0, , .		73
1037	Ã—pipesCompiler: a tool for instantiating application specific networks on chip. , 0, , .		87
1038	Reducing cache misses by application-specific re-configurable indexing. , 0, , .		9
1039	Hardware-Software Design of a Smart Sensor for Fully-Electronic DNA Hybridization Detection. , 0, , .		5
1040	Design and Implementation of WiMoCA Node for a Body Area Wireless Sensor Network. , 0, , .		31
1041	Application-specific power-aware workload allocation for voltage scalable MPSoC platforms. , 0, , .		22
1042	Mapping and physical planning of networks-on-chip architectures with quality-of-service guarantees. , 0, , .		21
1043	A Novel Approach for Network on Chip Emulation. , 0, , .		15
1044	Bio-feedback System for Rehabilitation Based on a Wireless Body Area Network. , 0, , .		29

#	ARTICLE	IF	CITATIONS
1045	Real-Time Scheduling with Regenerative Energy. , 0, , .		62
1046	Humanâ€“Robot Cognitive Interaction. , 0, , 87-125.		17