

# David Atienza Alonso

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

279 papers	3,721 citations	28 h-index	47 g-index
316 ext. papers	4,655 ext. citations	2.6 avg, IF	5.68 L-index

#	Paper	IF	Citations
279	Compressed sensing for real-time energy-efficient ECG compression on wireless body sensor nodes. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2011</b> , 58, 2456-66	5	476
278	3D-ICE: Fast compact transient thermal modeling for 3D ICs with inter-tier liquid cooling <b>2010</b> ,		158
277	Dynamic thermal management in 3D multicore architectures <b>2009</b> ,		87
276	Network-on-Chip design and synthesis outlook. <i>The Integration VLSI Journal</i> , <b>2008</b> , 41, 340-359	1.4	69
275	Temperature-aware processor frequency assignment for MPSoCs using convex optimization <b>2007</b> ,		66
274	Development and evaluation of multilead wavelet-based ECG delineation algorithms for embedded wireless sensor nodes. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2011</b> , 15, 854-63		60
273	Designing application-specific networks on chips with floorplan information. <i>IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers</i> , <b>2006</b> ,		59
272	3D-ICE: A Compact Thermal Model for Early-Stage Design of Liquid-Cooled ICs. <i>IEEE Transactions on Computers</i> , <b>2014</b> , 63, 2576-2589	2.5	58
271	Online Obstructive Sleep Apnea Detection on Medical Wearable Sensors. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> , 12, 762-773	5.1	57
270	A complete network-on-chip emulation framework		56
269	Prediction and management in energy harvested wireless sensor nodes <b>2009</b> ,		48
268	Energy-efficient variable-flow liquid cooling in 3D stacked architectures <b>2010</b> ,		44
267	Multicore thermal management with model predictive control <b>2009</b> ,		44
266	An integrated hardware/software approach for run-time scratchpad management <b>2004</b> ,		44
265	Design and Exploration of Low-Power Analog to Information Conversion Based on Compressed Sensing. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , <b>2012</b> , 2, 493-501	5.2	43
264	. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2011</b> , 30, 1883-1896	2.5	41
263	. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2009</b> , 28, 1870-1882	2.5	40

262	. <i>IEEE Micro</i> , <b>2007</b> , 27, 75-85	1.8	39
261	Modeling and dynamic management of 3D multicore systems with liquid cooling <b>2009</b> ,		38
260	The COUGHVID crowdsourcing dataset, a corpus for the study of large-scale cough analysis algorithms. <i>Scientific Data</i> , <b>2021</b> , 8, 156	8.2	38
259	. <i>IEEE Robotics and Automation Letters</i> , <b>2018</b> , 3, 2362-2369	4.2	36
258	A Modular Low-Complexity ECG Delineation Algorithm for Real-Time Embedded Systems. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2018</b> , 22, 429-441	7.2	35
257	NoC Design and Implementation in 65nm Technology <b>2007</b> ,		35
256	Processor Speed Control With Thermal Constraints. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2009</b> , 56, 1994-2008	3.9	34
255	Real-Time Event-Driven Classification Technique for Early Detection and Prevention of Myocardial Infarction on Wearable Systems. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2018</b> ,	5.1	33
254	A real-time compressed sensing-based personal electrocardiogram monitoring system <b>2011</b> ,		33
253	Correlation-aware virtual machine allocation for energy-efficient datacenters <b>2013</b> ,		30
252	Temperature control of high-performance multi-core platforms using convex optimization <b>2008</b> ,		30
251	e-Glass: A Wearable System for Real-Time Detection of Epileptic Seizures <b>2018</b> ,		28
250	Synthesis of Predictable Networks-on-Chip-Based Interconnect Architectures for Chip Multiprocessors. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2007</b> , 15, 869-880	2.6	28
249	Automated real-time atrial fibrillation detection on a wearable wireless sensor platform. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 2472-5	0.9	27
248	Systematic dynamic memory management design methodology for reduced memory footprint. <i>ACM Transactions on Design Automation of Electronic Systems</i> , <b>2006</b> , 11, 465-489	1.5	27
247	EigenMaps <b>2012</b> ,		25
246	A Method for Routing Packets Across Multiple Paths in NoCs with In-Order Delivery and Fault-Tolerance Gaurantees. <i>VLSI Design</i> , <b>2007</b> , 2007, 1-11		25
245	Designing Application-Specific Networks on Chips with Floorplan Information. <i>IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers</i> , <b>2006</b> ,		25

244	HW-SW emulation framework for temperature-aware design in MPSoCs. <i>ACM Transactions on Design Automation of Electronic Systems</i> , <b>2007</b> , 12, 1-26	1.5	24
243	A wearable device for physical and emotional health monitoring <b>2015</b> ,		23
242	. <i>IEEE Transactions on Multimedia</i> , <b>2013</b> , 15, 268-278	6.6	22
241	Multi-core architecture design for ultra-low-power wearable health monitoring systems <b>2012</b> ,		22
240	A control theory approach for thermal balancing of MPSoC <b>2009</b> ,		22
239	Temperature Control of High-Performance Multi-core Platforms Using Convex Optimization <b>2008</b> ,		22
238	TheSPoT: Thermal Stress-Aware Power and Temperature Management for Multiprocessor Systems-on-Chip. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2018</b> , 37, 1532-1545	2.5	21
237	Neural Network-Based Thermal Simulation of Integrated Circuits on GPUs. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2012</b> , 31, 23-36	2.5	21
236	Approximate compressed sensing <b>2014</b> ,		21
235	A fast HW/SW FPGA-based thermal emulation framework for multi-processor system-on-chip <b>2006</b> ,		21
234	Evaluation and design exploration of solar harvested-energy prediction algorithm <b>2010</b> ,		20
233	Resource-Aware Distributed Epilepsy Monitoring Using Self-Awareness From Edge to Cloud. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2019</b> , 13, 1338-1350	5.1	20
232	Integrating Heuristic and Machine-Learning Methods for Efficient Virtual Machine Allocation in Data Centers. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2018</b> , 37, 1667-1680	2.5	20
231	A high-level synthesis flow for the implementation of iterative stencil loop algorithms on FPGA devices <b>2013</b> ,		19
230	Design of compact imperfection-immune CNFET layouts for standard-cell-based logic synthesis <b>2009</b> ,		19
229	Online convex optimization-based algorithm for thermal management of MPSoCs <b>2010</b> ,		18
228	Memory-access-aware data structure transformations for embedded software with dynamic data accesses. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2004</b> , 12, 269-280	2.6	18
227	GreenCool: An Energy-Efficient Liquid Cooling Design Technique for 3-D MPSoCs Via Channel Width Modulation. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2013</b> , 32, 524-537	2.5	17

226	Real-time classification technique for early detection and prevention of myocardial infarction on wearable devices <b>2017</b> ,		17
225	Adaptive Task Migration Policies for Thermal Control in MPSoCs <b>2010</b> ,		17
224	Thermal balancing policy for streaming computing on multiprocessor architectures <b>2008</b> ,		17
223	Power/Performance Exploration of Single-core and Multi-core Processor Approaches for Biomedical Signal Processing. <i>Lecture Notes in Computer Science</i> , <b>2011</b> , 102-111	0.9	17
222	Self-Aware Wearable Systems in Epileptic Seizure Detection <b>2018</b> ,		17
221	HEAL-WEAR: An Ultra-Low Power Heterogeneous System for Bio-Signal Analysis. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2017</b> , 64, 2448-2461	3.9	16
220	Minimization of the reconfiguration latency for the mapping of applications on FPGA-based systems <b>2009</b> ,		16
219	Programmable logic circuits based on ambipolar CNFET <b>2008</b> ,		16
218	Neural Analysis of HTTP Traffic for Web Attack Detection. <i>Advances in Intelligent Systems and Computing</i> , <b>2015</b> , 201-212	0.4	15
217	HOLLOWS: A Power-aware Task Scheduler for Energy Harvesting Sensor Nodes. <i>Journal of Intelligent Material Systems and Structures</i> , <b>2010</b> , 21, 1317-1335	2.3	15
216	Towards thermally-aware design of 3D MPSoCs with inter-tier cooling <b>2011</b> ,		15
215	Wavelet-Based ECG Delineation on a Wearable Embedded Sensor Platform <b>2009</b> ,		15
214	Prospects for logic-on-a-wire. <i>Microelectronic Engineering</i> , <b>2008</b> , 85, 1406-1409	2.5	15
213	. <i>IEEE Circuits and Systems Magazine</i> , <b>2007</b> , 7, 42-51	3.2	15
212	Designing Message-Dependent Deadlock Free Networks on Chips for Application-Specific Systems on Chips <b>2006</b> ,		15
211	Through Silicon Via-Based Grid for Thermal Control in 3D Chips. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , <b>2009</b> , 90-98	0.2	14
210	Free cooling-aware dynamic power management for green datacenters <b>2012</b> ,		14
209	A Self-Aware Epilepsy Monitoring System for Real-Time Epileptic Seizure Detection. <i>Mobile Networks and Applications</i> , <b>2019</b> , 1	2.9	13

208	Hierarchical Thermal Management Policy for High-Performance 3D Systems With Liquid Cooling. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , <b>2011</b> , 1, 88-101	5.2	13
207	Structured sparsity models for compressively sensed electrocardiogram signals: A comparative study <b>2011</b> ,		13
206	Efficient system-level prototyping of power-aware dynamic memory managers for embedded systems. <i>The Integration VLSI Journal</i> , <b>2006</b> , 39, 113-130	1.4	13
205	Multi-Modal Acute Stress Recognition Using Off-the-Shelf Wearable Devices. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2019</b> , 2019, 2196-2201	0.9	13
204	A Self-Learning Methodology for Epileptic Seizure Detection with Minimally-Supervised Edge Labeling <b>2019</b> ,		12
203	Attaining Single-Chip, High-Performance Computing through 3D Systems with Active Cooling. <i>IEEE Micro</i> , <b>2011</b> , 31, 63-75	1.8	12
202	<b>2010</b> ,		12
201	Fast thermal simulation of 2D/3D integrated circuits exploiting neural networks and GPUs <b>2011</b> ,		12
200	A Hybrid Mapping-Scheduling Technique for Dynamically Reconfigurable Hardware <b>2011</b> ,		12
199	BLADE: An in-Cache Computing Architecture for Edge Devices. <i>IEEE Transactions on Computers</i> , <b>2020</b> , 69, 1349-1363	2.5	11
198	Power-efficient joint compressed sensing of multi-lead ECG signals <b>2014</b> ,		11
197	Online Energy-Efficient Task-Graph Scheduling for Multicore Platforms. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2014</b> , 33, 1194-1207	2.5	11
196	A methodology for embedded classification of heartbeats using random projections <b>2013</b> ,		11
195	Emulation-based transient thermal modeling of 2D/3D systems-on-chip with active cooling. <i>Microelectronics Journal</i> , <b>2011</b> , 42, 564-571	1.8	11
194	<b>2008</b> ,		11
193	Multi-processor operating system emulation framework with thermal feedback for systems-on-chip <b>2007</b> ,		11
192	A Complete Multi-Processor System-on-Chip FPGA-Based Emulation Framework <b>2006</b> ,		11
191	Big-Data Streaming Applications Scheduling Based on Staged Multi-Armed Bandits. <i>IEEE Transactions on Computers</i> , <b>2016</b> , 1-1	2.5	11

190	Personalized Real-Time Federated Learning for Epileptic Seizure Detection. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2021</b> , PP,	7.2	11
189	Machine Learning-Based Quality-Aware Power and Thermal Management of Multistream HEVC Encoding on Multicore Servers. <i>IEEE Transactions on Parallel and Distributed Systems</i> , <b>2018</b> , 29, 2268-2281	3.7	10
188	Exploring manycore architectures for next-generation HPC systems through the MANGO approach. <i>Microprocessors and Microsystems</i> , <b>2018</b> , 61, 154-170	2.4	10
187	. <i>IEEE Transactions on Parallel and Distributed Systems</i> , <b>2015</b> , 26, 1336-1349	3.7	10
186	A Mapping-Scheduling Algorithm for Hardware Acceleration on Reconfigurable Platforms. <i>ACM Transactions on Reconfigurable Technology and Systems</i> , <b>2014</b> , 7, 1-27	2.7	10
185	Embedded real-time ECG delineation methods: A comparative evaluation <b>2012</b> ,		10
184	STEAM: A fast compact thermal model for two-phase cooling of integrated circuits <b>2013</b> ,		10
183	A Mapping Flow for Dynamically Reconfigurable Multi-Core System-on-Chip Design. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2011</b> , 30, 1211-1224	2.5	10
182	GPGPU-Accelerated Parallel and Fast Simulation of Thousand-Core Platforms <b>2011</b> ,		10
181	Optimization methodology of dynamic data structures based on genetic algorithms for multimedia embedded systems. <i>Journal of Systems and Software</i> , <b>2009</b> , 82, 590-602	3.3	10
180	Energy-efficient dynamic memory allocators at the middleware level of embedded systems <b>2006</b> ,		10
179	MAGNETIC: Multi-Agent Machine Learning-Based Approach for Energy Efficient Dynamic Consolidation in Data Centers. <i>IEEE Transactions on Services Computing</i> , <b>2019</b> , 1-1	4.8	9
178	Noninvasive detection of focal seizures in ambulatory patients. <i>Epilepsia</i> , <b>2020</b> , 61 Suppl 1, S47-S54	6.4	9
177	PowerCool: Simulation of Cooling and Powering of 3D MPSoCs with Integrated Flow Cell Arrays. <i>IEEE Transactions on Computers</i> , <b>2018</b> , 67, 73-85	2.5	9
176	MANGO: Exploring Manycore Architectures for Next-GeneratiOn HPC Systems <b>2017</b> ,		9
175	Neural network based on-chip thermal simulator <b>2010</b> ,		9
174	Thermal-aware system-level modeling and management for Multi-Processor Systems-on-Chip <b>2011</b> ,		9
173	Low-power processor architecture exploration for online biomedical signal analysis. <i>IET Circuits, Devices and Systems</i> , <b>2012</b> , 6, 279	1.1	9

172	Reconfiguration Strategies for Environmentally Powered Devices: Theoretical Analysis and Experimental Validation. <i>Lecture Notes in Computer Science</i> , <b>2007</b> , 341-360	0.9	9
171	Real-Time Cognitive Workload Monitoring Based on Machine Learning Using Physiological Signals in Rescue Missions. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2019</b> , 2019, 3779-3785	0.9	9
170	Reliable power and time-constraints-aware predictive management of heterogeneous exascale systems <b>2018</b> ,		9
169	BLADE <b>2019</b> ,		8
168	A Fast, Reliable and Wide-Voltage-Range In-Memory Computing Architecture <b>2019</b> ,		8
167	Ultra-Low Power Estimation of Heart Rate Under Physical Activity Using a Wearable Photoplethysmographic System <b>2016</b> ,		8
166	Methods for reliable estimation of pulse transit time and blood pressure variations using smartphone sensors. <i>Microprocessors and Microsystems</i> , <b>2016</b> , 46, 84-95	2.4	8
165	MAMUT: Multi-Agent Reinforcement Learning for Efficient Real-Time Multi-User Video Transcoding <b>2019</b> ,		8
164	Online thermal control methods for multiprocessor systems. <i>ACM Transactions on Design Automation of Electronic Systems</i> , <b>2013</b> , 18, 1-26	1.5	8
163	A Synchronization-Based Hybrid-Memory Multi-Core Architecture for Energy-Efficient Biomedical Signal Processing. <i>IEEE Transactions on Computers</i> , <b>2017</b> , 66, 575-585	2.5	8
162	Thermal characterization of next-generation workloads on heterogeneous MPSoCs <b>2017</b> ,		8
161	OCEAN. <i>Transactions on Embedded Computing Systems</i> , <b>2014</b> , 13, 1-26	1.8	8
160	<b>2011</b> ,		8
159	Inducing Thermal-Awareness in Multicore Systems Using Networks-on-Chip <b>2009</b> ,		8
158	A parallel evolutionary algorithm to optimize dynamic memory managers in embedded systems. <i>Parallel Computing</i> , <b>2010</b> , 36, 572-590	1	8
157	. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2008</b> , 27, 2053-2067	2.5	8
156	. <i>Proceedings - IEEE International Conference on Computer Design: VLSI in Computers and Processors</i> , <b>2006</b> ,		8
155	A Reconfigurable Network-on-Chip Architecture for Optimal Multi-Processor SoC Communication. <i>International Federation for Information Processing</i> , <b>2010</b> , 232-250		8



154	Robust Epileptic Seizure Detection on Wearable Systems with Reduced False-Alarm Rate. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2020</b> , 2020, 4248-4251	0.9	8
153	EpilepsyGAN: Synthetic Epileptic Brain Activities With Privacy Preservation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2021</b> , 68, 2435-2446	5	8
152	Physiological characterization of need for assistance in rescue missions with drones <b>2018</b> ,		7
151	Gem5-X: A Gem5-Based System Level Simulation Framework to Optimize Many-Core Platforms <b>2019</b> ,		7
150	Low Power and Scalable Many-Core Architecture for Big-Data Stream Computing <b>2014</b> ,		7
149	Effects of age, sex, and treatment on weight-loss dynamics in overweight people. <i>Applied Physiology, Nutrition and Metabolism</i> , <b>2013</b> , 38, 967-76	3	7
148	An Inexact Ultra-low Power Bio-signal Processing Architecture With Lightweight Error Recovery. <i>Transactions on Embedded Computing Systems</i> , <b>2017</b> , 16, 1-19	1.8	7
147	Near-Optimal Thermal Monitoring Framework for Many-Core Systems-on-Chip. <i>IEEE Transactions on Computers</i> , <b>2015</b> , 64, 3197-3209	2.5	7
146	A Wireless Body Sensor Network for Activity Monitoring with Low Transmission Overhead <b>2014</b> ,		7
145	Ultra-low power design of wearable cardiac monitoring systems <b>2014</b> ,		7
144	Scalable instruction set simulator for thousand-core architectures running on GPGPUs <b>2010</b> ,		7
143	Adaptive Task Migration Policies for Thermal Control in MPSoCs. <i>Lecture Notes in Electrical Engineering</i> , <b>2011</b> , 83-115	0.2	7
142	Template-Based Semi-Automatic Profiling of Multimedia Applications <b>2006</b> ,		7
141	Fault-tolerant multi-level logic decoder for nanoscale crossbar memory arrays. <i>IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers</i> , <b>2007</b> ,		7
140	Towards near-threshold server processors <b>2016</b> ,		7
139	The RECIPE approach to challenges in deeply heterogeneous high performance systems. <i>Microprocessors and Microsystems</i> , <b>2020</b> , 77, 103185	2.4	7
138	REWARD: Design, Optimization, and Evaluation of a Real-Time Relative-Energy Wearable R-Peak Detection Algorithm. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2019</b> , 2019, 3341-3347	0.9	7
137	Estimation of Blood Pressure and Pulse Transit Time Using Your Smartphone <b>2015</b> ,		6

136	Temperature-Aware Design and Management for 3D Multi-Core Architectures. <i>Foundations and Trends in Electronic Design Automation</i> , <b>2014</b> , 8, 117-197	1	6
135	Model-based design for wireless body sensor network nodes <b>2012</b> ,		6
134	Temperature sensor placement in thermal management systems for MPSoCs <b>2010</b> ,		6
133	Thermal balancing of liquid-cooled 3D-MPSoCs using channel modulation <b>2012</b> ,		6
132	Comparison of a Timing-Error Tolerant Scheme with a Traditional Re-transmission Mechanism for Networks on Chips <b>2006</b> ,		6
131	Stochastic Modeling and Analysis for Environmentally Powered Wireless Sensor Nodes <b>2008</b> ,		6
130	Cognitive Workload Monitoring in Virtual Reality Based Rescue Missions with Drones. <i>Lecture Notes in Computer Science</i> , <b>2020</b> , 397-409	0.9	6
129	Power Estimation Approach of Dynamic Data Storage on a Hardware Software Boundary Level. <i>Lecture Notes in Computer Science</i> , <b>2003</b> , 289-298	0.9	6
128	Nano-engineered architectures for ultra-low power wireless body sensor nodes <b>2016</b> ,		6
127	Classification Framework for Analysis and Modeling of Physically Induced Reliability Violations. <i>ACM Computing Surveys</i> , <b>2015</b> , 47, 1-33	13.4	5
126	A Patient-Specific Methodology for Prediction of Paroxysmal Atrial Fibrillation Onset <b>2017</b> ,		5
125	<b>2018</b> ,		5
124	i-DPs CGRA: An Interleaved-Datapaths Reconfigurable Accelerator for Embedded Bio-Signal Processing. <i>IEEE Embedded Systems Letters</i> , <b>2019</b> , 11, 50-53	1	5
123	A combined sensor placement and convex optimization approach for thermal management in 3D-MPSoC with liquid cooling. <i>The Integration VLSI Journal</i> , <b>2013</b> , 46, 33-43	1.4	5
122	A Hierarchical Cardiac Rhythm Classification Methodology Based on Electrocardiogram Fiducial Points <b>2017</b> ,		5
121	Design exploration of energy-performance trade-offs for wireless sensor networks <b>2012</b> ,		5
120	Full system simulation of many-core heterogeneous SoCs using GPU and QEMU semihosting <b>2012</b> ,		5
119	Knowledge-based design space exploration of wireless sensor networks <b>2012</b> ,		5

118	TamaRISC-CS: An ultra-low-power application-specific processor for compressed sensing <b>2012</b> ,	5
117	Optimization of dynamic memory managers for embedded systems using grammatical evolution <b>2009</b> ,	5
116	TamaRISC-CS: An ultra-low-power application-specific processor for compressed sensing <b>2012</b> ,	5
115	Joint hardware-Software leakage minimization approach for the register file of VLIW embedded architectures. <i>The Integration VLSI Journal</i> , <b>2008</b> , 41, 38-48	1.4 5
114	Optimization of dynamic data structures in multimedia embedded systems using evolutionary computation <b>2007</b> ,	5
113	Early wire characterization for predictable network-on-chip global interconnects <b>2007</b> ,	5
112	System-Level Design for Nano-Electronics <b>2007</b> ,	5
111	A multi-core reconfigurable architecture for ultra-low power bio-signal analysis <b>2016</b> ,	5
110	Design of ultra-low-power smart wearable systems <b>2015</b> ,	4
109	Self-Aware Machine Learning for Multimodal Workload Monitoring during Manual Labor on Edge Wearable Sensors. <i>IEEE Design and Test</i> , <b>2020</b> , 37, 58-66	1.4 4
108	. <i>IEEE Access</i> , <b>2020</b> , 8, 109297-109308	3.5 4
107	. <i>IEEE Transactions on Parallel and Distributed Systems</i> , <b>2020</b> , 31, 2834-2850	3.7 4
106	Energy proportionality in near-threshold computing servers and cloud data centers: Consolidating or Not? <b>2018</b> ,	4
105	A Semi-Analytical Thermal Modeling Framework for Liquid-Cooled ICs. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2014</b> , 33, 1145-1158	2.5 4
104	PowerCool: Simulation of integrated microfluidic power generation in bright silicon MPSoCs <b>2014</b> ,	4
103	Energy-aware embedded classifier design for real-time emotion analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 2275-8	0.9 4
102	Ultra-Low Power Design of Wearable Cardiac Monitoring Systems <b>2014</b> ,	4
101	Early classification of pathological heartbeats on wireless body sensor nodes. <i>Sensors</i> , <b>2014</b> , 14, 22532-53.8	4

100	Island-Based Adaptable Embedded System Design. <i>IEEE Embedded Systems Letters</i> , <b>2011</b> , 3, 53-57	1	4
99	Simulation of high-performance memory allocators. <i>Microprocessors and Microsystems</i> , <b>2011</b> , 35, 755-765.	4	4
98	A multi-lead ECG classification based on random projection features <b>2012</b> ,		4
97	Optimal multi-processor SoC thermal simulation via adaptive differential equation solvers <b>2009</b> ,		4
96	A parallel evolutionary algorithm to optimize dynamic data types in embedded systems. <i>Soft Computing</i> , <b>2008</b> , 12, 1157-1167	3.5	4
95	Energy-aware compilation and hardware design for VLIW embedded systems. <i>International Journal of Embedded Systems</i> , <b>2007</b> , 3, 73	0.5	4
94	Thermal-aware compilation for system-on-chip processing architectures <b>2010</b> ,		4
93	Power-Thermal Modeling and Control of Energy-Efficient Servers and Datacenters <b>2015</b> , 857-913		4
92	Through Silicon Via-based Grid for Thermal Control in 3D Chips <b>2012</b> , 303-320		4
91	Impact of Memory Voltage Scaling on Accuracy and Resilience of Deep Learning Based Edge Devices. <i>IEEE Design and Test</i> , <b>2020</b> , 37, 84-92	1.4	4
90	Interpreting deep learning models for epileptic seizure detection on EEG signals. <i>Artificial Intelligence in Medicine</i> , <b>2021</b> , 117, 102084	7.4	4
89	Low-Power Wearable System for Real-Time Screening of Obstructive Sleep Apnea <b>2016</b> ,		4
88	Challenges in Deeply Heterogeneous High Performance Systems <b>2019</b> ,		4
87	A Product Engine for Energy-Efficient Execution of Binary Neural Networks Using Resistive Memories <b>2019</b> ,		4
86	Online efficient bio-medical video transcoding on MPSoCs through content-aware workload allocation <b>2018</b> ,		4
85	Tailoring SVM Inference for Resource-Efficient ECG-Based Epilepsy Monitors <b>2019</b> ,		3
84	Design of a Two-Phase Gravity-Driven Micro-Scale Thermosyphon Cooling System for High-Performance Computing Data Centers <b>2018</b> ,		3
83	Synchronizing code execution on ultra-low-power embedded multi-channel signal analysis platforms <b>2013</b> ,		3

82	The MANGO FET-HPC Project: An Overview <b>2015</b> ,		3
81	Hardware/software approach for code synchronization in low-power multi-core sensor nodes <b>2014</b> ,		3
80	A hybrid HW-SW approach for intermittent error mitigation in streaming-based embedded systems <b>2012</b> ,		3
79	SIMinG-1k: A thousand-core simulator running on general-purpose graphical processing units. <i>Concurrency Computation Practice and Experience</i> , <b>2013</b> , 25, 1443-1461	1.4	3
78	Improving reliability of embedded systems through dynamic memory manager optimization using grammatical evolution <b>2010</b> ,		3
77	Multicore thermal management using approximate explicit model predictive control <b>2010</b> ,		3
76	A high-performance parallel implementation of the Chambolle algorithm <b>2011</b> ,		3
75	Multi-objective optimization of dynamic memory managers using grammatical evolution <b>2011</b> ,		3
74	Accelerating thermal simulations of 3D ICs with liquid cooling using neural networks <b>2012</b> ,		3
73	Reducing memory fragmentation in network applications with dynamic memory allocators optimized for performance. <i>Computer Communications</i> , <b>2006</b> , 29, 2612-2620	5.1	3
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69	Event-Triggered Sensing for High-Quality and Low-Power Cardiovascular Monitoring Systems. <i>IEEE Design and Test</i> , <b>2020</b> , 37, 85-93	1.4	3
68	Noise-Resilient and Interpretable Epileptic Seizure Detection <b>2020</b> ,		3
67	Parallelizing the Chambolle Algorithm for Performance-Optimized Mapping on FPGA Devices. <i>Transactions on Embedded Computing Systems</i> , <b>2016</b> , 15, 1-27	1.8	3
66	An Associativity-Agnostic in-Cache Computing Architecture Optimized for Multiplication <b>2019</b> ,		3
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60	Resolving the memory bottleneck for single supply near-threshold computing <b>2014</b> ,		2
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57	Heterogeneous Error-Resilient Scheme for Spectral Analysis in Ultra-Low Power Wearable Electrocardiogram Devices <b>2015</b> ,		2
56	Wearout-aware compiler-directed register assignment for embedded systems <b>2012</b> ,		2
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54	Simulation of High-Performance Memory Allocators <b>2010</b> ,		2
53	Run-time adaptable on-chip thermal triggers <b>2011</b> ,		2
52	Run-Time mapping for dynamically-added applications in reconfigurable embedded systems <b>2009</b> ,		2
51	OS-based sensor node platform and energy estimation model for health-care wireless sensor networks <b>2008</b> ,		2
50	Improving the Fault Tolerance of Nanometric PLA Designs <b>2007</b> ,		2
49	Design of Energy Efficient Wireless Networks Using Dynamic Data Type Refinement Methodology. <i>Lecture Notes in Computer Science</i> , <b>2004</b> , 26-37	0.9	2
48	Reducing Memory Fragmentation with Performance-Optimized Dynamic Memory Allocators in Network Applications. <i>Lecture Notes in Computer Science</i> , <b>2005</b> , 354-364	0.9	2
47	Exploration of memory hierarchy configurations for efficient garbage collection on high-performance embedded systems <b>2009</b> ,		2

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45	Exploiting CPU-load and data correlations in multi-objective VM placement for geo-distributed data centers <b>2016</b> ,		2
44	Joint Computing and Electric Systems Optimization for Green Datacenters <b>2017</b> , 1163-1183		2
43	Design of Energy Efficient and Dependable Health Monitoring Systems under Unreliable Nanometer Technologies <b>2012</b> ,		2
42	Modular Design and Optimization of Biomedical Applications for Ultralow Power Heterogeneous Platforms. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2020</b> , 39, 3821-3832	2.5	2
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37	Real-Time EEG-Based Cognitive Workload Monitoring on Wearable Devices. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2021</b> , PP,	5	2
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35	Genome Sequence Alignment - Design Space Exploration for Optimal Performance and Energy Architectures. <i>IEEE Transactions on Computers</i> , <b>2020</b> , 1-1	2.5	1
34	An Event-Based System for Low-Power ECG QRS Complex Detection <b>2020</b> ,		1
33	Inexact-aware architecture design for ultra-low power bio-signal analysis. <i>IET Computers and Digital Techniques</i> , <b>2016</b> , 10, 306-314	0.9	1
32	A unified online directed acyclic graph flow manager for multicore schedulers <b>2014</b> ,		1
31	<b>2013</b> ,		1
30	A machine learning-based approach for power and thermal management of next-generation video coding on MPSoCs <b>2017</b> ,		1
29	Dynamic Memory Management for Embedded Systems <b>2015</b> ,		1

28	Real-time probabilistic heart beat classification and correction for embedded systems <b>2015</b> ,		1
27	Thermal-aware design of 3D ICs with inter-tier liquid cooling <b>2010</b> ,		1
26	Run-time mapping of applications on FPGA-based reconfigurable systems <b>2010</b> ,		1
25	A stochastic perturbative approach to design a defect-aware thresholder in the sense amplifier of crossbar memories <b>2009</b> ,		1
24	Systematic methodology for exploration of performance  Energy trade-offs in network applications using Dynamic Data Type refinement. <i>Journal of Systems Architecture</i> , <b>2007</b> , 53, 417-436	5.5	1
23	Designing Routing and Message-Dependent Deadlock Free Networks on Chips <b>2008</b> , 337-355		1
22	Parallel and Distributed Optimization of Dynamic Data Structures for Multimedia Embedded Systems. <i>Studies in Computational Intelligence</i> , <b>2010</b> , 263-290	0.8	1
21	An Ultra-Low-Power Application-Specific Processor with Sub-VT Memories for Compressed Sensing. <i>IFIP Advances in Information and Communication Technology</i> , <b>2013</b> , 88-106	0.5	1
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19	A Machine Learning-Based Framework for Throughput Estimation of Time-Varying Applications in Multi-Core Servers <b>2019</b> ,		1
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15	Gem5-X. <i>Transactions on Architecture and Code Optimization</i> , <b>2021</b> , 18, 1-27	1.3	1
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13	Intelligent Edge Biomedical Sensors in  The Internet of Things (IoT) Era. <i>Computer Architecture and Design Methodologies</i> , <b>2023</b> , 407-433	0.2	1
12	Thermal-Aware Compilation for Register Window-Based Embedded Processors. <i>IEEE Embedded Systems Letters</i> , <b>2010</b> , 2, 103-106	1	0
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4	Thermal Modeling and Management of Liquid-Cooled 3D Stacked Architectures. <i>International Federation for Information Processing</i> , <b>2011</b> , 34-55		
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