David Atienza Alonso

List of Publications by Year in Descending Order

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	Intelligent Edge Biomedical Sensors in the Internet of Things (IoT) Era. *Computer Architecture and Design Methodologies*, **2023**, 407-433	0.2	1
278	Multi-Centroid Hyperdimensional Computing Approach for Epileptic Seizure Detection.. *Frontiers in Neurology*, **2022**, 13, 816294	4.1	0
277	Systematic Assessment of Hyperdimensional Computing for Epileptic Seizure Detection. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 6361-6367	0.9	3
276	EpilepsyGAN: Synthetic Epileptic Brain Activities With Privacy Preservation. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 2435-2446	5	8
275	SPARE: A Spectral Peak Recovery Algorithm for PPG Signals Pulsewave Reconstruction in Multimodal Wearable Devices. *Sensors*, **2021**, 21,	3.8	2
274	EEG Correlates of Difficulty Levels in Dynamical Transitions of Simulated Flying and Mapping Tasks. *IEEE Transactions on Human-Machine Systems*, **2021**, 51, 99-108	4.1	2
273	The COUGHVID crowdsourcing dataset, a corpus for the study of large-scale cough analysis algorithms. *Scientific Data*, **2021**, 8, 156	8.2	38
272	Interpreting deep learning models for epileptic seizure detection on EEG signals. *Artificial Intelligence in Medicine*, **2021**, 117, 102084	7.4	4
271	ECOGreen: Electricity Cost Optimization for Green Datacenters in Emerging Power Markets. *IEEE Transactions on Sustainable Computing*, **2021**, 6, 289-305	3.5	3
270	Real-Time Personalized Atrial Fibrillation Prediction on Multi-Core Wearable Sensors. *IEEE Transactions on Emerging Topics in Computing*, **2021**, 1-1	4.1	1
269	Multi-Agent Reinforcement Learning for Hyperparameter Optimization of Convolutional Neural Networks. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2021**, 1-1	2.5	3
268	3D-ICE 3.0: efficient nonlinear MPSoC thermal simulation with pluggable heat sink models. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2021**, 1-1	2.5	3
267	MBioTracker: Multimodal Self-Aware Bio-Monitoring Wearable System for Online Workload Detection. *IEEE Transactions on Biomedical Circuits and Systems*, **2021**, 15, 994-1007	5.1	1
266	Personalized Real-Time Federated Learning for Epileptic Seizure Detection. *IEEE Journal of Biomedical and Health Informatics*, **2021**, PP,	7.2	11
265	E2CNNs: Ensembles of Convolutional Neural Networks to Improve Robustness Against Memory Errors in Edge-Computing Devices. *IEEE Transactions on Computers*, **2021**, 70, 1199-1212	2.5	1
264	Gem5-X. *Transactions on Architecture and Code Optimization*, **2021**, 18, 1-27	1.3	1
263	COCKTAIL: Multi-Core Co-Optimization Framework With Proactive Reliability Management. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2021**, 1-1	2.5	

262	Real-Time EEG-Based Cognitive Workload Monitoring on Wearable Devices. *IEEE Transactions on Biomedical Engineering*, **2021**, PP,	5	2
261	ReBeatICG: Real-time Low-Complexity Beat-to-beat Impedance Cardiogram Delineation Algorithm. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 5618-5624	0.9	0
260	ReLearn: A Robust Machine Learning Framework in Presence of Missing Data for Multimodal Stress Detection from Physiological Signals. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 535-541	0.9	0
259	Genome Sequence Alignment - Design Space Exploration for Optimal Performance and Energy Architectures. *IEEE Transactions on Computers*, **2020**, 1-1	2.5	1
258	ContainergyÂ Container-Based Energy and Performance Profiling Tool for Next Generation Workloads. *Energies*, **2020**, 13, 2162	3.1	2
257	An Event-Based System for Low-Power ECG QRS Complex Detection **2020**,		1
256	Noninvasive detection of focal seizures in ambulatory patients. *Epilepsia*, **2020**, 61 Suppl 1, S47-S54	6.4	9
255	Self-Aware Machine Learning for Multimodal Workload Monitoring during Manual Labor on Edge Wearable Sensors. *IEEE Design and Test*, **2020**, 37, 58-66	1.4	4
254	. *IEEE Access*, **2020**, 8, 109297-109308	3.5	4
253	. *IEEE Transactions on Parallel and Distributed Systems*, **2020**, 31, 2834-2850	3.7	4
252	BLADE: An in-Cache Computing Architecture for Edge Devices. *IEEE Transactions on Computers*, **2020**, 69, 1349-1363	2.5	11
251	Predictive Reliability and Fault Management in Exascale Systems. *ACM Computing Surveys*, **2020**, 53, 1-32	13.4	2
250	Accelerating Inference on Binary Neural Networks with Digital RRAM Processing. *IFIP Advances in Information and Communication Technology*, **2020**, 257-278	0.5	
249	Cognitive Workload Monitoring in Virtual Reality Based Rescue Missions with Drones. *Lecture Notes in Computer Science*, **2020**, 397-409	0.9	6
248	Event-Triggered Sensing for High-Quality and Low-Power Cardiovascular Monitoring Systems. *IEEE Design and Test*, **2020**, 37, 85-93	1.4	3
247	Impact of Memory Voltage Scaling on Accuracy and Resilience of Deep Learning Based Edge Devices. *IEEE Design and Test*, **2020**, 37, 84-92	1.4	4
246	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	2.5	2
245	The RECIPE approach to challenges in deeply heterogeneous high performance systems. *Microprocessors and Microsystems*, **2020**, 77, 103185	2.4	7

244	Noise-Resilient and Interpretable Epileptic Seizure Detection **2020**,		3
243	Robust Epileptic Seizure Detection on Wearable Systems with Reduced False-Alarm Rate. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 4248-4251	0.9	8
242	Analysis of Functional Errors Produced by Long-Term Workload-Dependent BTI Degradation in Ultralow Power Processors. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, **2020**, 28, 2122-2133	2.6	1
241	ISLPED 2020: An Experience of Virtual Conference during COVID-19 Time.. *IEEE Design and Test*, **2020**, 37, 96-98	1.4	
240	A Self-Aware Epilepsy Monitoring System for Real-Time Epileptic Seizure Detection. *Mobile Networks and Applications*, **2019**, 1	2.9	13
239	Tailoring SVM Inference for Resource-Efficient ECG-Based Epilepsy Monitors **2019**,		3
238	A Self-Learning Methodology for Epileptic Seizure Detection with Minimally-Supervised Edge Labeling **2019**,		12
237	BLADE **2019**,		8
236	A Fast, Reliable and Wide-Voltage-Range In-Memory Computing Architecture **2019**,		8
235	MAGNETIC: Multi-Agent Machine Learning-Based Approach for Energy Efficient Dynamic Consolidation in Data Centers. *IEEE Transactions on Services Computing*, **2019**, 1-1	4.8	9
234	i-DPs CGRA: An Interleaved-Datapaths Reconfigurable Accelerator for Embedded Bio-Signal Processing. *IEEE Embedded Systems Letters*, **2019**, 11, 50-53	1	5
233	MAMUT: Multi-Agent Reinforcement Learning for Efficient Real-Time Multi-User Video Transcoding **2019**,		8
232	Gem5-X: A Gem5-Based System Level Simulation Framework to Optimize Many-Core Platforms **2019**,		7
231	REWARD: Design, Optimization, and Evaluation of a Real-Time Relative-Energy Wearable R-Peak Detection Algorithm. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*,	0.9	7
230	Enhancing Two-Phase Cooling Efficiency through Thermal-Aware Workload Mapping for Power-Hungry Servers **2019**,		2
229	A Machine Learning-Based Framework for Throughput Estimation of Time-Varying Applications in Multi-Core Servers **2019**,		1
228	An Associativity-Agnostic in-Cache Computing Architecture Optimized for Multiplication **2019**,		3
227	Multi-Modal Acute Stress Recognition Using Off-the-Shelf Wearable Devices. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 2196-2201	0.9	13

226	Challenges in Deeply Heterogeneous High Performance Systems **2019**,		4
225	Resource-Aware Distributed Epilepsy Monitoring Using Self-Awareness From Edge to Cloud. *IEEE Transactions on Biomedical Circuits and Systems*, **2019**, 13, 1338-1350	5.1	20
224	A Product Engine for Energy-Efficient Execution of Binary Neural Networks Using Resistive Memories **2019**,		4
223	Real-Time Cognitive Workload Monitoring Based on Machine Learning Using Physiological Signals in Rescue Missions. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 3779-3785	0.9	9
222	. *IEEE Robotics and Automation Letters*, **2018**, 3, 2362-2369	4.2	36
221	**2018**,		5
220	Machine Learning-Based Quality-Aware Power and Thermal Management of Multistream HEVC Encoding on Multicore Servers. *IEEE Transactions on Parallel and Distributed Systems*, **2018**, 29, 2268-2281	3.7	10
219	Energy proportionality in near-threshold computing servers and cloud data centers: Consolidating or Not? **2018**,		4
218	TheSPoT: Thermal Stress-Aware Power and Temperature Management for Multiprocessor Systems-on-Chip. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2018**, 37, 1532-1545	2.5	21
217	A Modular Low-Complexity ECG Delineation Algorithm for Real-Time Embedded Systems. *IEEE Journal of Biomedical and Health Informatics*, **2018**, 22, 429-441	7.2	35
216	PowerCool: Simulation of Cooling and Powering of 3D MPSoCs with Integrated Flow Cell Arrays. *IEEE Transactions on Computers*, **2018**, 67, 73-85	2.5	9
215	Design of a Two-Phase Gravity-Driven Micro-Scale Thermosyphon Cooling System for High-Performance Computing Data Centers **2018**,		3
214	Real-Time Event-Driven Classification Technique for Early Detection and Prevention of Myocardial Infarction on Wearable Systems. *IEEE Transactions on Biomedical Circuits and Systems*, **2018**,	5.1	33
213	Online Obstructive Sleep Apnea Detection on Medical Wearable Sensors. *IEEE Transactions on Biomedical Circuits and Systems*, **2018**, 12, 762-773	5.1	57
212	e-Glass: A Wearable System for Real-Time Detection of Epileptic Seizures **2018**,		28
211	Physiological characterization of need for assistance in rescue missions with drones **2018**,		7
210	Exploring manycore architectures for next-generation HPC systems through the MANGO approach. *Microprocessors and Microsystems*, **2018**, 61, 154-170	2.4	10
209	Integrating Heuristic and Machine-Learning Methods for Efficient Virtual Machine Allocation in Data Centers. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2018**, 37, 1667-1680	2.5	20

208	Reliable power and time-constraints-aware predictive management of heterogeneous exascale systems **2018**,		9
207	Self-Aware Wearable Systems in Epileptic Seizure Detection **2018**,		17
206	Online efficient bio-medical video transcoding on MPSoCs through content-aware workload allocation **2018**,		4
205	Report on DATE 2017 in Lausanne. *IEEE Design and Test*, **2017**, 34, 76-77	1.4	
204	HEAL-WEAR: An Ultra-Low Power Heterogeneous System for Bio-Signal Analysis. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2017**, 64, 2448-2461	3.9	16
203	Classification of Resilience Techniques Against Functional Errors at Higher Abstraction Layers of Digital Systems. *ACM Computing Surveys*, **2017**, 50, 1-38	13.4	2
202	A Patient-Specific Methodology for Prediction of Paroxysmal Atrial Fibrillation Onset **2017**,		5
201	A Synchronization-Based Hybrid-Memory Multi-Core Architecture for Energy-Efficient Biomedical Signal Processing. *IEEE Transactions on Computers*, **2017**, 66, 575-585	2.5	8
200	A machine learning-based approach for power and thermal management of next-generation video coding on MPSoCs **2017**,		1
199	Real-time classification technique for early detection and prevention of myocardial infarction on wearable devices **2017**,		17
198	Thermal characterization of next-generation workloads on heterogeneous MPSoCs **2017**,		8
197	An Inexact Ultra-low Power Bio-signal Processing Architecture With Lightweight Error Recovery. *Transactions on Embedded Computing Systems*, **2017**, 16, 1-19	1.8	7
196	A Hierarchical Cardiac Rhythm Classification Methodology Based on Electrocardiogram Fiducial Points **2017**,		5
195	MANGO: Exploring Manycore Architectures for Next-GeneratiOn HPC Systems **2017**,		9
194	Joint Computing and Electric Systems Optimization for Green Datacenters **2017**, 1163-1183		2
193	Inexact-aware architecture design for ultra-low power bio-signal analysis. *IET Computers and Digital Techniques*, **2016**, 10, 306-314	0.9	1
192	Ultra-Low Power Estimation of Heart Rate Under Physical Activity Using a Wearable Photoplethysmographic System **2016**,		8
191	Methods for reliable estimation of pulse transit time and blood pressure variations using smartphone sensors. *Microprocessors and Microsystems*, **2016**, 46, 84-95	2.4	8

190	Towards near-threshold server processors **2016**,		7
189	Exploiting CPU-load and data correlations in multi-objective VM placement for geo-distributed data centers **2016**,		2
188	Enabling HPC for QoS-sensitive applications: The MANGO approach **2016**,		3
187	Nano-engineered architectures for ultra-low power wireless body sensor nodes **2016**,		6
186	A multi-core reconfigurable architecture for ultra-low power bio-signal analysis **2016**,		5
185	Parallelizing the Chambolle Algorithm for Performance-Optimized Mapping on FPGA Devices. *Transactions on Embedded Computing Systems*, **2016**, 15, 1-27	1.8	3
184	. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2016**, 35, 2018-2031	2.5	2
183	Big-Data Streaming Applications Scheduling Based on Staged Multi-Armed Bandits. *IEEE Transactions on Computers*, **2016**, 1-1	2.5	11
182	Low-Power Wearable System for Real-Time Screening of Obstructive Sleep Apnea **2016**,		4
181	Classification Framework for Analysis and Modeling of Physically Induced Reliability Violations. *ACM Computing Surveys*, **2015**, 47, 1-33	13.4	5
180	Design of ultra-low-power smart wearable systems **2015**,		4
179	Neural Analysis of HTTP Traffic for Web Attack Detection. *Advances in Intelligent Systems and Computing*, **2015**, 201-212	0.4	15
178	A wearable device for physical and emotional health monitoring **2015**,		23
177	Heterogeneous Error-Resilient Scheme for Spectral Analysis in Ultra-Low Power Wearable Electrocardiogram Devices **2015**,		2
176	. *IEEE Transactions on Parallel and Distributed Systems*, **2015**, 26, 1336-1349	3.7	10
175	Dynamic Memory Management for Embedded Systems **2015**,		1
174	Near-Optimal Thermal Monitoring Framework for Many-Core Systems-on-Chip. *IEEE Transactions on Computers*, **2015**, 64, 3197-3209	2.5	7
173	Real-time probabilistic heart beat classification and correction for embedded systems **2015**,		1

172	The MANGO FET-HPC Project: An Overview **2015**,		3
171	Estimation of Blood Pressure and Pulse Transit Time Using Your Smartphone **2015**,		6
170	Energy-aware embedded classifier design for real-time emotion analysis. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2015**, 2015, 2275-8	0.9	4
169	Power-Thermal Modeling and Control of Energy-Efficient Servers and Datacenters **2015**, 857-913		4
168	A unified online directed acyclic graph flow manager for multicore schedulers **2014**,		1
167	Power-efficient joint compressed sensing of multi-lead ECG signals **2014**,		11
166	Online Energy-Efficient Task-Graph Scheduling for Multicore Platforms. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2014**, 33, 1194-1207	2.5	11
165	Low Power and Scalable Many-Core Architecture for Big-Data Stream Computing **2014**,		7
164	A Semi-Analytical Thermal Modeling Framework for Liquid-Cooled ICs. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2014**, 33, 1145-1158	2.5	4
163	Resolving the memory bottleneck for single supply near-threshold computing **2014**,		2
162	PowerCool: Simulation of integrated microfluidic power generation in bright silicon MPSoCs **2014**,		4
161	Temperature-Aware Design and Management for 3D Multi-Core Architectures. *Foundations and Trends in Electronic Design Automation*, **2014**, 8, 117-197	1	6
160	A Wireless Body Sensor Network for Activity Monitoring with Low Transmission Overhead **2014**,		7
159	Ultra-Low Power Design of Wearable Cardiac Monitoring Systems **2014**,		4
158	3D-ICE: A Compact Thermal Model for Early-Stage Design of Liquid-Cooled ICs. *IEEE Transactions on Computers*, **2014**, 63, 2576-2589	2.5	58
157	A Mapping-Scheduling Algorithm for Hardware Acceleration on Reconfigurable Platforms. *ACM Transactions on Reconfigurable Technology and Systems*, **2014**, 7, 1-27	2.7	10
156	Early classification of pathological heartbeats on wireless body sensor nodes. *Sensors*, **2014**, 14, 22532-53	3.8	4
155	Ultra-low power design of wearable cardiac monitoring systems **2014**,		7

154	OCEAN. *Transactions on Embedded Computing Systems*, **2014**, 13, 1-26	1.8	8
153	Approximate compressed sensing **2014**,		21
152	Hardware/software approach for code synchronization in low-power multi-core sensor nodes **2014**,		3
151	Online thermal control methods for multiprocessor systems. *ACM Transactions on Design Automation of Electronic Systems*, **2013**, 18, 1-26	1.5	8
150	**2013**,		1
149	. *IEEE Design and Test*, **2013**, 30, 71-80	1.4	2
148	GreenCool: An Energy-Efficient Liquid Cooling Design Technique for 3-D MPSoCs Via Channel Width Modulation. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2013**, 32, 524-537	2.5	17
147	Synchronizing code execution on ultra-low-power embedded multi-channel signal analysis platforms **2013**,		3
146	Correlation-aware virtual machine allocation for energy-efficient datacenters **2013**,		30
145	A combined sensor placement and convex optimization approach for thermal management in 3D-MPSoC with liquid cooling. *The Integration VLSI Journal*, **2013**, 46, 33-43	1.4	5
144	Effects of age, sex, and treatment on weight-loss dynamics in overweight people. *Applied Physiology, Nutrition and Metabolism*, **2013**, 38, 967-76	3	7
143	PRO3D, Programming for Future 3D Manycore Architectures: Project Interim Status. *Lecture Notes in Computer Science*, **2013**, 277-293	0.9	2
142	. *IEEE Transactions on Multimedia*, **2013**, 15, 268-278	6.6	22
141	STEAM: A fast compact thermal model for two-phase cooling of integrated circuits **2013**,		10
140	A high-level synthesis flow for the implementation of iterative stencil loop algorithms on FPGA devices **2013**,		19
139	A methodology for embedded classification of heartbeats using random projections **2013**,		11
138	SIMinG-1k: A thousand-core simulator running on general-purpose graphical processing units. *Concurrency Computation Practice and Experience*, **2013**, 25, 1443-1461	1.4	3
137	An Ultra-Low-Power Application-Specific Processor with Sub-VT Memories for Compressed Sensing. *IFIP Advances in Information and Communication Technology*, **2013**, 88-106	0.5	1

136	Memory power optimization of Java-based embedded systems exploiting garbage collection information. *Journal of Systems Architecture*, **2012**, 58, 61-72	5.5	2
135	Neural Network-Based Thermal Simulation of Integrated Circuits on GPUs. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2012**, 31, 23-36	2.5	21
134	Wearout-aware compiler-directed register assignment for embedded systems **2012**,		2
133	Design exploration of energy-performance trade-offs for wireless sensor networks **2012**,		5
132	Full system simulation of many-core heterogeneous SoCs using GPU and QEMU semihosting **2012**,		5
131	Model-based design for wireless body sensor network nodes **2012**,		6
130	Knowledge-based design space exploration of wireless sensor networks **2012**,		5
129	Embedded real-time ECG delineation methods: A comparative evaluation **2012**,		10
128	TamaRISC-CS: An ultra-low-power application-specific processor for compressed sensing **2012**,		5
127	Design and Exploration of Low-Power Analog to Information Conversion Based on Compressed Sensing. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2012**, 2, 493-501	5.2	43
126	A hybrid HW-SW approach for intermittent error mitigation in streaming-based embedded systems **2012**,		3
125	EigenMaps **2012**,		25
124	Accelerating thermal simulations of 3D ICs with liquid cooling using neural networks **2012**,		3
123	Thermal balancing of liquid-cooled 3D-MPSoCs using channel modulation **2012**,		6
122	Multi-core architecture design for ultra-low-power wearable health monitoring systems **2012**,		22
121	A multi-lead ECG classification based on random projection features **2012**,		4
120	Low-power processor architecture exploration for online biomedical signal analysis. *IET Circuits, Devices and Systems*, **2012**, 6, 279	1.1	9
119	Automated real-time atrial fibrillation detection on a wearable wireless sensor platform. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 2472-5	0.9	27

118	Free cooling-aware dynamic power management for green datacenters **2012**,		14
117	TamaRISC-CS: An ultra-low-power application-specific processor for compressed sensing **2012**,		5
116	Through Silicon Via-based Grid for Thermal Control in 3D Chips **2012**, 303-320		4
115	Design of Energy Efficient and Dependable Health Monitoring Systems under Unreliable Nanometer Technologies **2012**,		2
114	**2011**,		8
113	Hierarchical Thermal Management Policy for High-Performance 3D Systems With Liquid Cooling. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2011**, 1, 88-101	5.2	13
112	Island-Based Adaptable Embedded System Design. *IEEE Embedded Systems Letters*, **2011**, 3, 53-57	1	4
111	A Mapping Flow for Dynamically Reconfigurable Multi-Core System-on-Chip Design. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2011**, 30, 1211-1224	2.5	10
110	Simulation of high-performance memory allocators. *Microprocessors and Microsystems*, **2011**, 35, 755-765	2.4	4
109	Attaining Single-Chip, High-Performance Computing through 3D Systems with Active Cooling. *IEEE Micro*, **2011**, 31, 63-75	1.8	12
108	Compressed sensing for real-time energy-efficient ECG compression on wireless body sensor nodes. *IEEE Transactions on Biomedical Engineering*, **2011**, 58, 2456-66	5	476
107	. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2011**, 30, 1883-1896	2.5	41
106	Development and evaluation of multilead wavelet-based ECG delineation algorithms for embedded wireless sensor nodes. *IEEE Transactions on Information Technology in Biomedicine*, **2011**, 15, 854-63		60
105	Run-time adaptable on-chip thermal triggers **2011**,		2
104	GPGPU-Accelerated Parallel and Fast Simulation of Thousand-Core Platforms **2011**,		10
103	Fast thermal simulation of 2D/3D integrated circuits exploiting neural networks and GPUs **2011**,		12
102	A Hybrid Mapping-Scheduling Technique for Dynamically Reconfigurable Hardware **2011**,		12
101	Towards thermally-aware design of 3D MPSoCs with inter-tier cooling **2011**,		15

100	Emulation-based transient thermal modeling of 2D/3D systems-on-chip with active cooling. *Microelectronics Journal*, **2011**, 42, 564-571	1.8	11
99	Structured sparsity models for compressively sensed electrocardiogram signals: A comparative study **2011**,		13
98	Thermal-aware system-level modeling and management for Multi-Processor Systems-on-Chip **2011**,		9
97	A high-performance parallel implementation of the Chambolle algorithm **2011**,		3
96	A real-time compressed sensing-based personal electrocardiogram monitoring system **2011**,		33
95	Adaptive Task Migration Policies for Thermal Control in MPSoCs. *Lecture Notes in Electrical Engineering*, **2011**, 83-115	0.2	7
94	Multi-objective optimization of dynamic memory managers using grammatical evolution **2011**,		3
93	Power/Performance Exploration of Single-core and Multi-core Processor Approaches for Biomedical Signal Processing. *Lecture Notes in Computer Science*, **2011**, 102-111	0.9	17
92	Thermal Modeling and Management of Liquid-Cooled 3D Stacked Architectures. *International Federation for Information Processing*, **2011**, 34-55		
91	Convex-Based Thermal Management for 3D MPSoCs Using DVFS and Variable-Flow Liquid Cooling. *Lecture Notes in Computer Science*, **2011**, 341-350	0.9	
90	Thermal-aware design of 3D ICs with inter-tier liquid cooling **2010**,		1
89	Neural network based on-chip thermal simulator **2010**,		9
88	Energy-efficient variable-flow liquid cooling in 3D stacked architectures **2010**,		44
87	Run-time mapping of applications on FPGA-based reconfigurable systems **2010**,		1
86	**2010**,		12
85	Improving reliability of embedded systems through dynamic memory manager optimization using grammatical evolution **2010**,		3
84	HOLLOWS: A Power-aware Task Scheduler for Energy Harvesting Sensor Nodes. *Journal of Intelligent Material Systems and Structures*, **2010**, 21, 1317-1335	2.3	15
83	Multicore thermal management using approximate explicit model predictive control **2010**,		3

82	3D-ICE: Fast compact transient thermal modeling for 3D ICs with inter-tier liquid cooling **2010**,		158
81	Thermal-Aware Compilation for Register Window-Based Embedded Processors. *IEEE Embedded Systems Letters*, **2010**, 2, 103-106	1	0
80	Temperature sensor placement in thermal management systems for MPSoCs **2010**,		6
79	Simulation of High-Performance Memory Allocators **2010**,		2
78	Scalable instruction set simulator for thousand-core architectures running on GPGPUs **2010**,		7
77	Evaluation and design exploration of solar harvested-energy prediction algorithm **2010**,		20
76	Adaptive Task Migration Policies for Thermal Control in MPSoCs **2010**,		17
75	Online convex optimization-based algorithm for thermal management of MPSoCs **2010**,		18
74	A parallel evolutionary algorithm to optimize dynamic memory managers in embedded systems. *Parallel Computing*, **2010**, 36, 572-590	1	8
73	Thermal-aware compilation for system-on-chip processing architectures **2010**,		4
72	Parallel and Distributed Optimization of Dynamic Data Structures for Multimedia Embedded Systems. *Studies in Computational Intelligence*, **2010**, 263-290	0.8	1
71	A Reconfigurable Network-on-Chip Architecture for Optimal Multi-Processor SoC Communication. *International Federation for Information Processing*, **2010**, 232-250		8
70	Run-Time mapping for dynamically-added applications in reconfigurable embedded systems **2009**,		2
69	Inducing Thermal-Awareness in Multicore Systems Using Networks-on-Chip **2009**,		8
68	Multicore thermal management with model predictive control **2009**,		44
67	Design of compact imperfection-immune CNFET layouts for standard-cell-based logic synthesis **2009**,		19
66	A stochastic perturbative approach to design a defect-aware thresholder in the sense amplifier of crossbar memories **2009**,		1
65	Wavelet-Based ECG Delineation on a Wearable Embedded Sensor Platform **2009**,		15

64	Through Silicon Via-Based Grid for Thermal Control in 3D Chips. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering*, **2009**, 90-98	0.2	14
63	Minimization of the reconfiguration latency for the mapping of applications on FPGA-based systems **2009**,		16
62	Optimization of dynamic memory managers for embedded systems using grammatical evolution **2009**,		5
61	Optimization methodology of dynamic data structures based on genetic algorithms for multimedia embedded systems. *Journal of Systems and Software*, **2009**, 82, 590-602	3.3	10
60	Dynamic thermal management in 3D multicore architectures **2009**,		87
59	Modeling and dynamic management of 3D multicore systems with liquid cooling **2009**,		38
58	Optimal multi-processor SoC thermal simulation via adaptive differential equation solvers **2009**,		4
57	A control theory approach for thermal balancing of MPSoC **2009**,		22
56	Processor Speed Control With Thermal Constraints. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2009**, 56, 1994-2008	3.9	34
55	Prediction and management in energy harvested wireless sensor nodes **2009**,		48
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