

Massoud Pedram

List of Publications by Year in descending order

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514
papers

10,947
citations

87888

38
h-index

106344

65
g-index

519
all docs

519
docs citations

519
times ranked

6269
citing authors

#	ARTICLE	IF	CITATIONS
1	Power minimization in IC design. ACM Transactions on Design Automation of Electronic Systems, 1996, 1, 3-56.	2.6	394
2	An analytical model for predicting the remaining battery capacity of lithium-ion batteries. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2006, 14, 441-451.	3.1	237
3	Energy minimization using multiple supply voltages. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1997, 5, 436-443.	3.1	233
4	Leakage current reduction in CMOS VLSI circuits by input vector control. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2004, 12, 140-154.	3.1	220
5	Task Scheduling with Dynamic Voltage and Frequency Scaling for Energy Minimization in the Mobile Cloud Computing Environment. IEEE Transactions on Services Computing, 2015, 8, 175-186.	4.6	193
6	Dual-Quality 4:2 Compressors for Utilizing in Dynamic Accuracy Configurable Multipliers. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 1352-1361.	3.1	188
7	Minimizing data center cooling and server power costs. , 2009, , .		149
8	Multi-dimensional SLA-Based Resource Allocation for Multi-tier Cloud Computing Systems. , 2011, , .		148
9	JointDNN: An Efficient Training and Inference Engine for Intelligent Mobile Cloud Computing Services. IEEE Transactions on Mobile Computing, 2021, 20, 565-576.	5.8	145
10	RoBA Multiplier: A Rounding-Based Approximate Multiplier for High-Speed yet Energy-Efficient Digital Signal Processing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 393-401.	3.1	130
11	SLA-based Optimization of Power and Migration Cost in Cloud Computing. , 2012, , .		124
12	Adaptive Control for Energy Storage Systems in Households With Photovoltaic Modules. IEEE Transactions on Smart Grid, 2014, 5, 992-1001.	9.0	120
13	Dynamic power management based on continuous-time Markov decision processes. , 1999, , .		118
14	Layout driven technology mapping. , 1991, , .		115
15	Power-aware source routing protocol for mobile ad hoc networks. , 2002, , .		112
16	BDD based decomposition of logic functions with application to FPGA synthesis. , 1993, , .		106
17	A Near-Optimal Model-Based Control Algorithm for Households Equipped With Residential Photovoltaic Power Generation and Energy Storage Systems. IEEE Transactions on Sustainable Energy, 2016, 7, 77-86.	8.8	104
18	Energy-Efficient Virtual Machine Replication and Placement in a Cloud Computing System. , 2012, , .		101

#	ARTICLE	IF	CITATIONS
19	Power estimation methods for sequential logic circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1995, 3, 404-416.	3.1	100
20	Supervised Learning Based Power Management for Multicore Processors. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1395-1408.	2.7	100
21	Energy-Efficient Datacenters. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 1465-1484.	2.7	100
22	Dynamic voltage and frequency scaling based on workload decomposition. , 2004, , .		99
23	Hybrid electrical energy storage systems. , 2010, , .		99
24	RAP-CLA: A Reconfigurable Approximate Carry Look-Ahead Adder. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1089-1093.	3.0	98
25	TOSAM: An Energy-Efficient Truncation- and Rounding-Based Scalable Approximate Multiplier. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1161-1173.	3.1	93
26	BottleNet: A Deep Learning Architecture for Intelligent Mobile Cloud Computing Services. , 2019, , .		89
27	Ground bounce in digital VLSI circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2003, 11, 180-193.	3.1	85
28	Exact and approximate methods for calculating signal and transition probabilities in FSMs. , 1994, , .		82
29	Optimization of quantum circuits for interaction distance in linear nearest neighbor architectures. , 2013, , .		82
30	Constant-current regulator-based battery-supercapacitor hybrid architecture for high-rate pulsed load applications. Journal of Power Sources, 2012, 205, 516-524.	7.8	81
31	Qubit placement to minimize communication overhead in 2D quantum architectures. , 2014, , .		78
32	Accurate modeling and calculation of delay and energy overheads of dynamic voltage scaling in modern high-performance microprocessors. , 2010, , .		76
33	Power punch: Towards non-blocking power-gating of NoC routers. , 2015, , .		76
34	Architectures for silicon nanoelectronics and beyond. Computer, 2007, 40, 25-33.	1.1	74
35	Dynamic voltage scaling of OLED displays. , 2011, , .		74
36	OPL. Transactions on Embedded Computing Systems, 2015, 14, 1-23.	2.9	72

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37	Maximum power transfer tracking for a photovoltaic-supercapacitor energy system. , 2010, , .		70
38	Dynamic power management of complex systems using generalized stochastic Petri nets. , 2000, , .		66
39	Efficient power estimation for highly correlated input streams. , 1995, , .		63
40	An Integrated Row-Based Cell Placement and Interconnect Synthesis Tool for Large SFQ Logic Circuits. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-8.	1.7	61
41	Energy and Performance Efficient Computation Offloading for Deep Neural Networks in a Mobile Cloud Computing Environment. , 2018, , .		60
42	Maximizing Profit in Cloud Computing System via Resource Allocation. , 2011, , .		59
43	Information theoretic measures of energy consumption at register transfer level. , 1995, , .		58
44	Probabilistic error propagation in logic circuits using the Boolean difference calculus. , 2008, , .		58
45	Approximate Reverse Carry Propagate Adder for Energy-Efficient DSP Applications. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 2530-2541.	3.1	58
46	Register Allocation and Binding for Low Power. Proceedings - Design Automation Conference, 1995, , .	0.0	57
47	An energy and deadline aware resource provisioning, scheduling and optimization framework for cloud systems. , 2013, , .		57
48	A near-threshold 7T SRAM cell with high write and read margins and low write time for sub-20 nm FinFET technologies. The Integration VLSI Journal, 2015, 50, 91-106.	2.1	56
49	Temperature-aware dynamic resource provisioning in a power-optimized datacenter. , 2010, , .		55
50	Therminator. , 2014, , .		55
51	Performance Comparisons Between 7-nm FinFET and Conventional Bulk CMOS Standard Cell Libraries. IEEE Transactions on Circuits and Systems II: Express Briefs, 2015, 62, 761-765.	3.0	54
52	Timing-driven placement based on partitioning with dynamic cut-net control. , 2000, , .		53
53	Power and Performance Modeling in a Virtualized Server System. , 2010, , .		52
54	Demand-side load scheduling incentivized by dynamic energy prices. , 2011, , .		52

#	ARTICLE	IF	CITATIONS
55	A scalable and flexible hybrid energy storage system design and implementation. Journal of Power Sources, 2014, 255, 410-422.	7.8	52
56	Leakage Minimization of SRAM Cells in a Dual-\$V_{t}\$ and Dual-\$T_{m ox}\$ Technology. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 851-860.	3.1	51
57	A Stackelberg Game-Based Optimization Framework of the Smart Grid With Distributed PV Power Generations and Data Centers. IEEE Transactions on Energy Conversion, 2014, 29, 978-987.	5.2	51
58	ColdFlux Superconducting EDA and TCAD Tools Project: Overview and Progress. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7.	1.7	50
59	Deriving a near-optimal power management policy using model-free reinforcement learning and Bayesian classification. , 2011, , .		49
60	Charge Allocation in Hybrid Electrical Energy Storage Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 1003-1016.	2.7	49
61	Architecture and Control Algorithms for Combating Partial Shading in Photovoltaic Systems. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 917-930.	2.7	47
62	A Novel Synthetic Traffic Pattern for Power/Performance Analysis of Network-on-Chips Using Negative Exponential Distribution. Journal of Low Power Electronics, 2009, 5, 396-405.	0.6	47
63	A Robust Power Gating Structure and Power Mode Transition Strategy for MTCMOS Design. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2007, 15, 80-89.	3.1	46
64	Cycle-accurate macro-models for RT-level power analysis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1998, 6, 520-528.	3.1	45
65	Minimizing the Electricity Bill of Cooperative Users under a Quasi-Dynamic Pricing Model. , 2010, , .		45
66	Reinforcement learning based power management for hybrid electric vehicles. , 2014, , .		45
67	FinCACTI: Architectural Analysis and Modeling of Caches with Deeply-Scaled FinFET Devices. , 2014, , .		45
68	Balanced reconfiguration of storage banks in a hybrid electrical energy storage system. , 2011, , .		44
69	High-Speed and Energy-Efficient Carry Skip Adder Operating Under a Wide Range of Supply Voltage Levels. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 421-433.	3.1	43
70	Block-Based Carry Speculative Approximate Adder for Energy-Efficient Applications. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 137-141.	3.0	43
71	Dynamic thermal management in mobile devices considering the thermal coupling between battery and application processor. , 2013, , .		41
72	Statistical logic cell delay analysis using a current-based model. , 2006, , .		40

#	ARTICLE	IF	CITATIONS
73	Optimal Design of the Power-Delivery Network for Multiple Voltage-Island System-on-Chips. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 888-900.	2.7	40
74	Charge migration efficiency optimization in hybrid electrical energy storage (HEES) systems. , 2011, , .		40
75	Dynamic thermal management for FinFET-based circuits exploiting the temperature effect inversion phenomenon. , 2014, , .		40
76	Analysis of non-uniform temperature-dependent interconnect performance in high performance ICs. , 2001, , .		39
77	Yield and Speedup Improvements in Extensible Processors by Allocating Extra Cycles to Some Custom Instructions. ACM Transactions on Design Automation of Electronic Systems, 2016, 21, 1-25.	2.6	39
78	VIBNN. , 2018, , .		39
79	Energy-Aware Task Scheduling and Dynamic Voltage Scaling in a Real-Time System. Journal of Low Power Electronics, 2008, 4, 1-10.	0.6	39
80	Routability-driven fanout optimization. , 1993, , .		38
81	PBMap: A Path Balancing Technology Mapping Algorithm for Single Flux Quantum Logic Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-14.	1.7	38
82	Linear-depth quantum circuits for n -qubit Toffoli gates with no ancilla. Physical Review A, 2013, 87, .	2.5	37
83	Res-DNN: A Residue Number System-Based DNN Accelerator Unit. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 658-671.	5.4	37
84	Spike-Thrift: Towards Energy-Efficient Deep Spiking Neural Networks by Limiting Spiking Activity via Attention-Guided Compression. , 2021, , .		37
85	Stochastic modeling of a thermally-managed multi-core system. , 2008, , .		36
86	BZ-FAD: A Low-Power Low-Area Multiplier Based on Shift-and-Add Architecture. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2009, 17, 302-306.	3.1	34
87	Battery-supercapacitor hybrid system for high-rate pulsed load applications. , 2011, , .		34
88	LETAM: A low energy truncation-based approximate multiplier. Computers and Electrical Engineering, 2017, 63, 1-17.	4.8	34
89	NISQ+: Boosting quantum computing power by approximating quantum error correction. , 2020, , .		34
90	Probabilistic Error Propagation in a Logic Circuit Using the Boolean Difference Calculus. , 2011, , 359-381.		34

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91	Logic extraction and factorization for low power. , 1995, , .		33
92	Near-optimal, dynamic module reconfiguration in a photovoltaic system to combat partial shading effects. , 2012, , .		33
93	TruncApp: A truncation-based approximate divider for energy efficient DSP applications. , 2017, , .		33
94	TAPP: Temperature-Aware Application Mapping for NoC-Based Many-Core Processors. , 2015, , .		33
95	An Ultra Low-Power Memristive Neuromorphic Circuit for Internet of Things Smart Sensors. IEEE Internet of Things Journal, 2018, 5, 1011-1022.	8.7	32
96	POLAR: A Pipelined/Overlapped FPGA-Based LSTM Accelerator. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 838-842.	3.1	32
97	VIBNN. ACM SIGPLAN Notices, 2018, 53, 476-488.	0.2	32
98	Off-chip latency-driven dynamic voltage and frequency scaling for an MPEG decoding. , 2004, , .		31
99	X-CGRA: An Energy-Efficient Approximate Coarse-Grained Reconfigurable Architecture. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 2558-2571.	2.7	31
100	Multi-objective optimization techniques for VLSI circuits. , 2011, , .		30
101	Dynamic Driver Supply Voltage Scaling for Organic Light Emitting Diode Displays. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 1017-1030.	2.7	30
102	Model-Free Reinforcement Learning and Bayesian Classification in System-Level Power Management. IEEE Transactions on Computers, 2016, 65, 3713-3726.	3.4	30
103	A Theoretical Framework for Quality Estimation and Optimization of DSP Applications Using Low-Power Approximate Adders. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 327-340.	5.4	30
104	NBTI-aware flip-flop characterization and design. , 2008, , .		29
105	Dual-mode power regulator for photovoltaic module emulation. Applied Energy, 2013, 101, 730-739.	10.1	29
106	Machine learning-based energy management in a hybrid electric vehicle to minimize total operating cost. , 2015, , .		29
107	FFT-based deep learning deployment in embedded systems. , 2018, , .		29
108	PX-CGRA: Polymorphic approximate coarse-grained reconfigurable architecture. , 2018, , .		29

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109	Pre-defined Sparsity for Low-Complexity Convolutional Neural Networks. IEEE Transactions on Computers, 2020, , 1-1.	3.4	29
110	SEERAD: A High Speed yet Energy-Efficient Rounding-based Approximate Divider. , 2016, , .		29
111	A new canonical form for fast boolean matching in logic synthesis and verification. , 2005, , .		28
112	Designing Fault-Tolerant Photovoltaic Systems. IEEE Design and Test, 2014, 31, 76-84.	1.2	28
113	Scaling Analysis of On-Chip Power Grid Voltage Variations in Nanometer Scale ULSI. Analog Integrated Circuits and Signal Processing, 2005, 42, 277-290.	1.4	27
114	Charge Recycling in Power-Gated CMOS Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 1798-1811.	2.7	27
115	Layout Optimization for Quantum Circuits with Linear Nearest Neighbor Architectures. IEEE Circuits and Systems Magazine, 2016, 16, 62-74.	2.3	27
116	SFQmap: A Technology Mapping Tool for Single Flux Quantum Logic Circuits. , 2018, , .		27
117	POSE. , 1996, , .		26
118	Design and application of multimodal power gating structures. , 2009, , .		26
119	Geographical Load Balancing for Online Service Applications in Distributed Datacenters. , 2013, , .		26
120	Prediction and control of bursty cloud workloads. , 2014, , .		26
121	Pilot Register File: Energy Efficient Partitioned Register File for GPUs. , 2017, , .		26
122	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.	2.7	26
123	Energy-efficient, low-latency realization of neural networks through boolean logic minimization. , 2019, , .		26
124	Statistical Design Optimization of FinFET SRAM Using Back-Gate Voltage. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1911-1916.	3.1	25
125	Enhancing efficiency and robustness of a photovoltaic power system under partial shading. , 2012, , .		25
126	Design of a Tri-Modal Multi-Threshold CMOS Switch With Application to Data Retentive Power Gating. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 380-385.	3.1	25

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127	Concurrent Task Scheduling and Dynamic Voltage and Frequency Scaling in a Real-Time Embedded System With Energy Harvesting. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1890-1902.	2.7	25
128	Superconducting Magnetic Field Programmable Gate Array. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-12.	1.7	25
129	Logic Optimization, Complex Cell Design, and Retiming of Single Flux Quantum Circuits. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-9.	1.7	25
130	Energy and Performance-Aware Task Scheduling in a Mobile Cloud Computing Environment. , 2014, , .		24
131	Design Exploration of Energy-Efficient Accuracy-Configurable Dadda Multipliers With Improved Lifetime Based on Voltage Overscaling. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 1207-1220.	3.1	24
132	Minimizing the power consumption of a Chip Multiprocessor under an average throughput constraint. , 2010, , .		23
133	A Reinforcement Learning-Based Power Management Framework for Green Computing Data Centers. , 2016, , .		23
134	Power minimization in a backlit TFT-LCD display by concurrent brightness and contrast scaling. , 0, , .		22
135	Symmetry Detection and Boolean Matching Utilizing a Signature-Based Canonical Form of Boolean Functions. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 1128-1137.	2.7	22
136	Versatile high-fidelity photovoltaic module emulation system. , 2011, , .		22
137	A study of the effectiveness of CPU consolidation in a virtualized multi-core server system. , 2012, , .		22
138	Fast photovoltaic array reconfiguration for partial solar powered vehicles. , 2014, , .		22
139	Joint sizing and adaptive independent gate control for FinFET circuits operating in multiple voltage regimes using the logical effort method. , 2013, , .		21
140	A Nested Two Stage Game-Based Optimization Framework in Mobile Cloud Computing System. , 2013, , .		21
141	5nm FinFET Standard Cell Library Optimization and Circuit Synthesis in Near-and Super-Threshold Voltage Regimes. , 2014, , .		21
142	Optimizing a Reconfigurable Power Distribution Network in a Multicore Platform. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 1110-1123.	2.7	21
143	HIRE-SNN: Harnessing the Inherent Robustness of Energy-Efficient Deep Spiking Neural Networks by Training with Crafted Input Noise. , 2021, , .		21
144	POWER ESTIMATION AND OPTIMIZATION AT THE LOGIC LEVEL. International Journal of High Speed Electronics and Systems, 1994, 05, 179-202.	0.7	20

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145	Active bank switching for temperature control of the register file in a microprocessor. , 2007, , .		20
146	Charge allocation for hybrid electrical energy storage systems. , 2011, , .		20
147	Online fault detection and tolerance for photovoltaic energy harvesting systems. , 2012, , .		20
148	Power conversion efficiency characterization and optimization for smartphones. , 2012, , .		20
149	Optimal Control of a Grid-Connected Hybrid Electrical Energy Storage System for Homes. , 2013, , .		20
150	7nm FinFET standard cell layout characterization and power density prediction in near- and super-threshold voltage regimes. , 2014, , .		20
151	Hierarchical SLA-Driven Resource Management for Peak Power-Aware and Energy-Efficient Operation of a Cloud Datacenter. IEEE Transactions on Cloud Computing, 2016, 4, 222-236.	4.4	20
152	PHAX: Physical Characteristics Aware <italic>Ex-Situ</italic> Training Framework for Inverter-Based Memristive Neuromorphic Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1602-1613.	2.7	20
153	Opportunities for Machine Learning in Electronic Design Automation. , 2018, , .		20
154	Internal write-back and read-before-write schemes to eliminate the disturbance to the half-selected cells in SRAMs. IET Circuits, Devices and Systems, 2018, 12, 460-466.	1.4	20
155	A Minimum-Skew Clock Tree Synthesis Algorithm for Single Flux Quantum Logic Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-13.	1.7	20
156	GOP-Level Dynamic Thermal Management in MPEG-2 Decoding. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 662-672.	3.1	19
157	A Hierarchical Control Algorithm for Managing Electrical Energy Storage Systems in Homes Equipped with PV Power Generation. , 2012, , .		19
158	Optimizing the Power Delivery Network in a Smartphone Platform. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 36-49.	2.7	19
159	Single-Bit Pseudoparallel Processing Low-Oversampling Delta-Sigma Modulator Suitable for SDR Wireless Transmitters. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 922-931.	3.1	19
160	Towards Collaborative Intelligence Friendly Architectures for Deep Learning. , 2019, , .		19
161	An effective power mode transition technique in MTCMOS circuits. , 2005, , .		19
162	Formal verification using edge-valued binary decision diagrams. IEEE Transactions on Computers, 1996, 45, 247-255.	3.4	18

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163	Factored Edge-Valued Binary Decision Diagrams. Formal Methods in System Design, 1997, 10, 243-270.	0.8	18
164	An electricity trade model for microgrid communities in smart grid. , 2014, , .		18
165	DNR. , 2021, , .		18
166	Stochastic sequential machine synthesis targeting constrained sequence generation. , 1996, , .		17
167	Power-optimal encoding for DRAM address bus (poster session). , 2000, , .		17
168	Design of an efficient power delivery network in an soc to enable dynamic power management. , 2007, , .		17
169	Networked architecture for hybrid electrical energy storage systems. , 2012, , .		17
170	Reinforcement learning based dynamic power management with a hybrid power supply. , 2012, , .		17
171	Performance prediction for multiple-threshold 7nm-FinFET-based circuits operating in multiple voltage regimes using a cross-layer simulation framework. , 2014, , .		17
172	Reinforcement learning-based control of residential energy storage systems for electric bill minimization. , 2015, , .		17
173	All-Region Statistical Model for Delay Variation Based on Log-Skew-Normal Distribution. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1503-1508.	2.7	17
174	Design of multiple fanout clock distribution network for rapid single flux quantum technology. , 2017, , .		17
175	Energy and Reliability Improvement of Voltage-Based, Clustered, Coarse-Grain Reconfigurable Architectures by Employing Quality-Aware Mapping. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2018, 8, 480-493.	3.6	17
176	An Efficient Pipelined Architecture for Superconducting Single Flux Quantum Logic Circuits Utilizing Dual Clocks. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-12.	1.7	17
177	Power-optimal encoding for a DRAM address bus. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2002, 10, 109-118.	3.1	16
178	Statistical timing analysis of flip-flops considering codependent setup and hold times. , 2008, , .		16
179	Hierarchical Virtual Machine Consolidation in a Cloud Computing System. , 2013, , .		16
180	A Game Theoretic Framework of SLA-based Resource Allocation for Competitive Cloud Service Providers. , 2014, , .		16

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181	TEI-NoC: Optimizing Ultralow Power NoCs Exploiting the Temperature Effect Inversion. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 458-471.	2.7	16
182	Toward Approximate Computing for Coarse-Grained Reconfigurable Architectures. IEEE Micro, 2018, 38, 63-72.	1.8	16
183	VeriSFQ: A Semi-formal Verification Framework and Benchmark for Single Flux Quantum Technology. , 2019, , .		16
184	qGDR: A Via-Minimization-Oriented Routing Tool for Large-Scale Superconductive Single-Flux-Quantum Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-12.	1.7	16
185	Deep Learning-Based Circuit Recognition Using Sparse Mapping and Level-Dependent Decaying Sum Circuit Representations. , 2019, , .		16
186	Circuit-Level Techniques for Logic and Memory Blocks in Approximate Computing Systemsx. Proceedings of the IEEE, 2020, 108, 2150-2177.	21.3	16
187	Continuous Frequency Adjustment Technique Based on Dynamic Workload Prediction. , 2008, , .		15
188	Low write-energy STT-MRAMs using FinFET-based access transistors. , 2014, , .		15
189	Trace-Based Analysis and Prediction of Cloud Computing User Behavior Using the Fractal Modeling Technique. , 2014, , .		15
190	Design of Complex Rapid Single-Flux-Quantum Cells with Application to Logic Synthesis. , 2017, , .		15
191	Dynamic Power Management under Uncertain Information. , 2007, , .		14
192	White-LED backlight control for motion-blur reduction and power minimization in large LCD TVs. Journal of the Society for Information Display, 2009, 17, 37-45.	2.1	14
193	Concurrent optimization of consumer's electrical energy bill and producer's power generation cost under a dynamic pricing model. , 2012, , .		14
194	Minimizing the latency of quantum circuits during mapping to the ion-trap circuit fabric. , 2012, , .		14
195	Optimal control of PEVs for energy cost minimization and frequency regulation in the smart grid accounting for battery state-of-health degradation. , 2015, , .		14
196	Optimal co-scheduling of HVAC control and battery management for energy-efficient buildings considering state-of-health degradation. , 2016, , .		14
197	Lifetime improvement by exploiting aggressive voltage scaling during runtime of error-resilient applications. The Integration VLSI Journal, 2018, 61, 29-38.	2.1	14
198	A placement algorithm for superconducting logic circuits based on cell grouping and super-cell placement. , 2018, , .		14

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199	Simulation Analysis and Energy-Saving Techniques for ERSFQ Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-7.	1.7	14
200	A Dynamic Programming-Based, Path Balancing Technology Mapping Algorithm Targeting Area Minimization. , 2019, , .		14
201	A Current-based Method for Short Circuit Power Calculation under Noisy Input Waveforms. , 2007, , .		13
202	Portfolio Theory-Based Resource Assignment in a Cloud Computing System. , 2012, , .		13
203	A framework of concurrent task scheduling and dynamic voltage and frequency scaling in real-time embedded systems with energy harvesting. , 2013, , .		13
204	Maximizing return on investment of a grid-connected hybrid electrical energy storage system. , 2013, , .		13
205	Design of a universal logic block for fault-tolerant realization of any logic operation in trapped-ion quantum circuits. Quantum Information Processing, 2014, 13, 1267-1299.	2.2	13
206	Stack sizing analysis and optimization for FinFET logic cells and circuits operating in the sub/near-threshold regime. , 2014, , .		13
207	Hierarchical, Portfolio Theory-Based Virtual Machine Consolidation in a Compute Cloud. IEEE Transactions on Services Computing, 2018, 11, 63-77.	4.6	13
208	Approximate Logic Synthesis: A Reinforcement Learning-Based Technology Mapping Approach. , 2019, , .		13
209	Timing Characterization for Static Timing Analysis of Single Flux Quantum Circuits. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-8.	1.7	13
210	Frame-Based Dynamic Voltage and Frequency Scaling for an MPEG Player. Journal of Low Power Electronics, 2005, 1, 27-43.	0.6	13
211	Constructing minimal spanning/Steiner trees with bounded path length. The Integration VLSI Journal, 1997, 22, 137-163.	2.1	12
212	Low power sequential circuit design by using priority encoding and clock gating. , 2000, , .		12
213	Coarse-Grain MTCMOS Sleep Transistor Sizing Using Delay Budgeting. , 2008, , .		12
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