Yu Cao

List of Publications by Year in descending order

272 papers	8,970 citations	71102 41 h-index	95266 68 g-index
282 all docs	282 docs citations	282 times ranked	6908 citing authors

#	Article	IF	Citations
1	Throughput-Optimized OpenCL-based FPGA Accelerator for Large-Scale Convolutional Neural Networks. , 2016, , .		379
2	Predictive Modeling of the NBTI Effect for Reliable Design. , 2006, , .		321
3	Modeling and minimization of PMOS NBTI effect for robust nanometer design. , 2006, , .		301
4	Compact Modeling and Simulation of Circuit Reliability for 65-nm CMOS Technology. IEEE Transactions on Device and Materials Reliability, 2007, 7, 509-517.	2.0	267
5	Optimizing Loop Operation and Dataflow in FPGA Acceleration of Deep Convolutional Neural Networks. , 2017, , .		244
6	The Impact of NBTI Effect on Combinational Circuit: Modeling, Simulation, and Analysis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 173-183.	3.1	243
7	New Generation of Predictive Technology Model for Sub-45nm Design Exploration. , 0, , .		233
8	Large-scale complementary macroelectronics using hybrid integration of carbon nanotubes and IGZO thin-film transistors. Nature Communications, 2014, 5, 4097.	12.8	233
9	Optimizing the Convolution Operation to Accelerate Deep Neural Networks on FPGA. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 1354-1367.	3.1	225
10	Exploring sub-20nm FinFET design with predictive technology models. , 2012, , .		220
11	Predictive technology model for nano-CMOS design exploration. ACM Journal on Emerging Technologies in Computing Systems, 2007, 3, 1.	2.3	190
12	Screen Printing as a Scalable and Low-Cost Approach for Rigid and Flexible Thin-Film Transistors Using Separated Carbon Nanotubes. ACS Nano, 2014, 8, 12769-12776.	14.6	179
13	Large-Scale Neuromorphic Spiking Array Processors: A Quest to Mimic the Brain. Frontiers in Neuroscience, 2018, 12, 891.	2.8	177
14	GaAs Nanowire Array Solar Cells with Axial p–i–n Junctions. Nano Letters, 2014, 14, 3293-3303.	9.1	168
15	Digital Circuit Design Challenges and Opportunities in the Era of Nanoscale CMOS. Proceedings of the IEEE, 2008, 96, 343-365.	21.3	165
16	Mitigating effects of non-ideal synaptic device characteristics for on-chip learning. , 2015, , .		165
17	Photochemical and Electrochemical Carbon Dioxide Utilization with Organic Compounds. Chinese Journal of Chemistry, 2018, 36, 644-659.	4.9	161
18	Towards high efficiency inverted Sb2Se3 thin film solar cells. Solar Energy Materials and Solar Cells, 2019, 200, 109945.	6.2	132

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19	Scaling-up resistive synaptic arrays for neuro-inspired architecture: Challenges and prospect. , 2015, , .		128
20	The impact of NBTI on the performance of combinational and sequential circuits. Proceedings - Design Automation Conference, 2007, , .	0.0	121
21	Technological Exploration of RRAM Crossbar Array for Matrix-Vector Multiplication. Journal of Computer Science and Technology, 2016, 31, 3-19.	1.5	117
22	Optimized Circuit Failure Prediction for Aging: Practicality and Promise. , 2008, , .		111
23	Fully parallel write/read in resistive synaptic array for accelerating on-chip learning. Nanotechnology, 2015, 26, 455204.	2.6	109
24	Rotational design of charge carrier transport layers for optimal antimony trisulfide solar cells and its integration in tandem devices. Solar Energy Materials and Solar Cells, 2020, 206, 110279.	6.2	88
25	An automatic RTL compiler for high-throughput FPGA implementation of diverse deep convolutional neural networks. , 2017, , .		86
26	Self-Tuning for Maximized Lifetime Energy-Efficiency in the Presence of Circuit Aging. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 760-773.	2.7	79
27	Effect of Electrolyte and Temperature on Interfacial Tensions of Alkylbenzene Sulfonate Solutions. Energy & Fuels, 2012, 26, 2175-2181.	5.1	78
28	Mapping statistical process variations toward circuit performance variability. , 2005, , .		75
29	A resilience roadmap. , 2010, , .		73
30	Theoretical Insight into Highâ€Efficiency Tripleâ€Junction Tandem Solar Cells via the Band Engineering of Antimony Chalcogenides. Solar Rrl, 2021, 5, 2000800.	5.8	70
31	ALAMO: FPGA acceleration of deep learning algorithms with a modularized RTL compiler. The Integration VLSI Journal, 2018, 62, 14-23.	2.1	68
32	Compact Modeling of Statistical BTI Under Trapping/Detrapping. IEEE Transactions on Electron Devices, 2013, 60, 3645-3654.	3.0	67
33	Radio Frequency Transistors Using Aligned Semiconducting Carbon Nanotubes with Current-Gain Cutoff Frequency and Maximum Oscillation Frequency Simultaneously Greater than 70 GHz. ACS Nano, 2016, 10, 6782-6790.	14.6	63
34	Statistical Modeling and Simulation of Threshold Variation Under Random Dopant Fluctuations and Line-Edge Roughness. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 987-996.	3.1	62
35	Compact modeling of carbon nanotube transistor for early stage process-design exploration. , 2007, , .		61
36	Tuning the permeability of permalloy films for on-chip inductor applications. Applied Physics Letters, 2010, 97, 162506.	3.3	61

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37	Statistical prediction of circuit aging under process variations. , 2008, , .		59
38	On the efficacy of input Vector Control to mitigate NBTI effects and leakage power. , 2009, , .		56
39	Random variability modeling and its impact on scaled CMOS circuits. Journal of Computational Electronics, 2010, 9, 108-113.	2.5	55
40	Mapping Statistical Process Variations Toward Circuit Performance Variability: An Analytical Modeling Approach. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1866-1873.	2.7	53
41	Parallel Architecture With Resistive Crosspoint Array for Dictionary Learning Acceleration. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 194-204.	3.6	53
42	A 1.06-mu W Smart ECG Processor in 65-nm CMOS for Real-Time Biometric Authentication and Personal Cardiac Monitoring. IEEE Journal of Solid-State Circuits, 2019, 54, 2316-2326.	5.4	53
43	Technology-design Co-optimization of Resistive Cross-point Array for Accelerating Learning Algorithms on Chip. , 2015, , .		50
44	Leakage Power and Circuit Aging Cooptimization by Gate Replacement Techniques. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 615-628.	3.1	49
45	An efficient method to identify critical gates under circuit aging. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2007, , .	0.0	48
46	Reliable Systems on Unreliable Fabrics. IEEE Design and Test of Computers, 2008, 25, 322-332.	1.0	48
47	Cross-Layer Modeling and Simulation of Circuit Reliability. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 8-23.	2.7	48
48	Statistical modeling and simulation of threshold variation under dopant fluctuations and line-edge roughness. , 2008, , .		46
49	Performance Enhancement of On-Chip Inductors With Permalloy Magnetic Rings. IEEE Electron Device Letters, 2011, 32, 69-71.	3.9	46
50	Field-Based Capacitance Modeling for Sub-65-nm On-Chip Interconnect. IEEE Transactions on Electron Devices, 2009, 56, 1862-1872.	3.0	45
51	Automatic Compilation of Diverse CNNs Onto High-Performance FPGA Accelerators. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 424-437.	2.7	45
52	The Impact of NBTI on the Performance of Combinational and Sequential Circuits. Proceedings - Design Automation Conference, 2007, , .	0.0	45
53	Carbon Nanotube Macroelectronics for Active Matrix Polymer-Dispersed Liquid Crystal Displays. ACS Nano, 2016, 10, 10068-10074.	14.6	44
54	Epitaxial Growth of Vertically Aligned Antimony Selenide Nanorod Arrays for Heterostructure Based Selfâ€Powered Photodetector. Advanced Optical Materials, 2022, 10, .	7.3	44

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55	Imperceptible and Ultraflexible p-Type Transistors and Macroelectronics Based on Carbon Nanotubes. ACS Nano, 2016, 10, 199-206.	14.6	43
56	Review of Electronics Based on Single-Walled Carbon Nanotubes. Topics in Current Chemistry, 2017, 375, 75.	5.8	43
57	Physics matters. , 2012, , .		42
58	Phosphatase-responsive amphiphilic calixarene assembly. RSC Advances, 2013, 3, 8058.	3.6	42
59	MNSIM: Simulation Platform for Memristor-based Neuromorphic Computing System. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, , 1-1.	2.7	42
60	Integrative Photoreduction of CO_2 with Subsequent Carbonylation: Photocatalysis for Reductive Functionalization of CO_2. ChemSusChem, 2018, 11, 3382-3387.	6.8	40
61	Substrate dependence on (Sb4Se6)n ribbon orientations of antimony selenide thin films: Morphology, carrier transport and photovoltaic performance. Journal of Alloys and Compounds, 2021, 862, 158703.	5.5	40
62	Algorithm and hardware design of discrete-time spiking neural networks based on back propagation with binary activations. , 2017, , .		39
63	End-to-end scalable FPGA accelerator for deep residual networks. , 2017, , .		39
64	Exploiting resistive cross-point array for compact design of physical unclonable function. , 2015, , .		38
65	Atomic Insights into the Enhanced Surface Stability in High Voltage Cathode Materials by Ultrathin Coating. Advanced Functional Materials, 2017, 27, 1602873.	14.9	37
66	Circuit aging prediction for low-power operation. , 2009, , .		36
67	Simulation, fabrication, and application of transparent conductive Mo-doped ZnO film in a solar cell. Solar Energy Materials and Solar Cells, 2016, 145, 171-179.	6.2	35
68	MNSIM 2.0: A Behavior-Level Modeling Tool for Memristor-based Neuromorphic Computing Systems. , 2020, , .		35
69	Scalable and modularized RTL compilation of Convolutional Neural Networks onto FPGA. , 2016, , .		34
70	Performance Modeling for CNN Inference Accelerators on FPGA. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 843-856.	2.7	33
71	Enhancing the Reliability of STT-RAM through Circuit and System Level Techniques. , 2012, , .		32
72	Ultrathin microcrystalline hydrogenated Si/Ge alloyed tandem solar cells towards full solar spectrum conversion. Frontiers of Chemical Science and Engineering, 2020, 14, 997-1005.	4.4	32

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73	Aging statistics based on trapping/detrapping: Silicon evidence, modeling and long-term prediction. , 2012, , .		31
74	Optimizing Interfacial Cross-Linking in Graphene-Derived Materials, Which Balances Intralayer and Interlayer Load Transfer. ACS Applied Materials & Interfaces, 2017, 9, 24830-24839.	8.0	31
75	Automatic Compiler Based FPGA Accelerator for CNN Training. , 2019, , .		31
76	Air-stable N-type printed carbon nanotube thin film transistors for CMOS logic circuits. Carbon, 2020, 163, 145-153.	10.3	31
77	Modeling and minimization of PMOS NBTI effect for robust nanometer design. Proceedings - Design Automation Conference, 2006, , .	0.0	31
78	Dual-function of CdCl2 treated SnO2 in Sb2Se3 solar cells. Applied Surface Science, 2020, 534, 147632.	6.1	30
79	Improved Frequency Response of On-Chip Inductors With Patterned Magnetic Dots. IEEE Electron Device Letters, 2010, 31, 207-209.	3.9	28
80	Compact oscillation neuron exploiting metal-insulator-transition for neuromorphic computing. , 2016, , .		28
81	MNSIM: Simulation Platform for Memristor-based Neuromorphic Computing System. , 2016, , .		27
82	Design benchmarking to 7nm with FinFET predictive technology models. , 2012, , .		26
83	Radio frequency transistors based on ultra-high purity semiconducting carbon nanotubes with superior extrinsic maximum oscillation frequency. Nano Research, 2016, 9, 363-371.	10.4	26
84	Modeling and analysis of non-rectangular gate for post-lithography circuit simulation. Proceedings - Design Automation Conference, 2007, , .	0.0	25
85	Accurate Inference with Inaccurate RRAM Devices: Statistical Data, Model Transfer, and On-line Adaptation. , 2020, , .		25
86	A Latency-Optimized Reconfigurable NoC for In-Memory Acceleration of DNNs. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2020, 10, 362-375.	3.6	25
87	Interconnect-Aware Area and Energy Optimization for In-Memory Acceleration of DNNs. IEEE Design and Test, 2020, 37, 79-87.	1.2	25
88	Enhanced charge carrier transport via efficient grain conduction mode for Sb2Se3 solar cell applications. Applied Surface Science, 2022, 591, 153169.	6.1	25
89	Low temperature deposition of high open-circuit voltage (>1.0V) pâ€"iâ€"n type amorphous silicon solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 1922-1926.	6.2	24
90	Accurate Inference With Inaccurate RRAM Devices: A Joint Algorithm-Design Solution. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2020, 6, 27-35.	1.5	24

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91	Variation-Aware Supply Voltage Assignment for Simultaneous Power and Aging Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 2143-2147.	3.1	23
92	Random sparse adaptation for accurate inference with inaccurate multi-level RRAM arrays. , 2017, , .		23
93	Guest Editors' Introduction: Reliability Challenges in Nano-CMOS Design. IEEE Design and Test of Computers, 2009, 26, 6-7.	1.0	22
94	Compact Model of Carbon Nanotube Transistor and Interconnect. IEEE Transactions on Electron Devices, 2009, 56, 2232-2242.	3.0	21
95	On-Chip Sparse Learning Acceleration With CMOS and Resistive Synaptic Devices. IEEE Nanotechnology Magazine, 2015, 14, 969-979.	2.0	21
96	Sub-100 Î¼m scale on-chip inductors with CoZrTa for GHz applications. Journal of Applied Physics, 2011, 109, .	2.5	20
97	SIAM: Chiplet-based Scalable In-Memory Acceleration with Mesh for Deep Neural Networks. Transactions on Embedded Computing Systems, 2021, 20, 1-24.	2.9	20
98	Optimized self-tuning for circuit aging. , 2010, , .		19
99	Hydrogenated microcrystalline silicon germanium as bottom sub-cell absorber for triple junction solar cell. Solar Energy Materials and Solar Cells, 2013, 114, 161-164.	6.2	19
100	Compact modeling of STT-MTJ devices. Solid-State Electronics, 2014, 102, 76-81.	1.4	19
101	Accelerated Aging in Analog and Digital Circuits With Feedback. IEEE Transactions on Device and Materials Reliability, 2015, 15, 384-393.	2.0	19
102	A 65 nm Programmable ANalog Device Array (PANDA) for Analog Circuit Emulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 181-190.	5.4	19
103	Algorithm-hardware co-design of single shot detector for fast object detection on FPGAs. , 2018, , .		19
104	Failure diagnosis of asymmetric aging under NBTI. , 2011, , .		18
105	Improving reliability of non-volatile memory technologies through circuit level techniques and error control coding. Eurasip Journal on Advances in Signal Processing, 2012, 2012, .	1.7	18
106	High-performance radio frequency transistors based on diameter-separated semiconducting carbon nanotubes. Applied Physics Letters, 2016, 108, 233105.	3.3	18
107	A TDC-based test platform for dynamic circuit aging characterization. , 2011, , .		17
108	Failure Analysis of Asymmetric Aging Under NBTI. IEEE Transactions on Device and Materials Reliability, 2013, 13, 340-349.	2.0	17

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109	Charge trapping in aligned single-walled carbon nanotube arrays induced by ionizing radiation exposure. Journal of Applied Physics, 2014, 115, 054506.	2.5	17
110	RTN in Scaled Transistors for On-Chip Random Seed Generation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 2248-2257.	3.1	17
111	FPGA-based low-batch training accelerator for modern CNNs featuring high bandwidth memory. , 2020, , .		17
112	Asymmetric Aging and Workload Sensitive Bias Temperature Instability Sensors. IEEE Design and Test of Computers, 2012, 29, 18-26.	1.0	16
113	Technological exploration of RRAM crossbar array for matrix-vector multiplication. , 2015, , .		16
114	Optimizing latency, energy, and reliability of 1T1R ReRAM through appropriate voltage settings. , 2015, , .		16
115	Band gap grading in microcrystalline silicon germanium thin film solar cells. Journal of Alloys and Compounds, 2015, 632, 456-459.	5.5	16
116	Non-uniform distribution in μc-Si1$\tilde{}$xGex:H and its influence on thin film and device performance. Solar Energy Materials and Solar Cells, 2016, 151, 1-6.	6.2	16
117	Assessment of Self‐Assembled Monolayers as High‐Performance Thermal Interface Materials. Advanced Materials Interfaces, 2017, 4, 1700355.	3.7	16
118	An analytical approach to efficient circuit variability analysis in scaled CMOS design. , 2012, , .		15
119	Optimizing Latency, Energy, and Reliability of 1T1R ReRAM Through Cross-Layer Techniques. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2016, 6, 352-363.	3.6	15
120	A novel and fast method to prepare a Cu-supported α-Sb$_2$S$_3$@CuSbS$_2$ binder-free electrode for sodium-ion batteries. RSC Advances, 2020, 10, 29567-29574.	3.6	15
121	An Integrated Modeling Paradigm of Circuit Reliability for 65nm CMOS Technology. , 2007, , .		14
122	Simulation of random telegraph Noise with 2-stage equivalent circuit. , 2010, , .		14
123	Design sensitivity of single event transients in scaled logic circuits. , 2011, , .		14
124	Hierarchical modeling of Phase Change memory for reliable design. , 2012, , .		14
125	Bridged bis(β-cyclodextrin)s-based polysaccharide nanoparticles for controlled paclitaxel delivery. RSC Advances, 2016, 6, 28593-28598.	3.6	14
126	Impact of on-chip interconnect frequency-dependent R(f)L(f) on digital and RF design. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2005, 13, 158-162.	3.1	13

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127	Circuit-level delay modeling considering both TDDB and NBTI. , 2011, , .		13
128	Parallel Programming of Resistive Cross-point Array for Synaptic Plasticity. Procedia Computer Science, 2014, 41, 126-133.	2.0	13
129	p-Sulfonatocalix[4]arene-induced amphiphilic aggregation of fluorocarbon surfactant. Science China Chemistry, 2014, 57, 371-378.	8.2	13
130	Towards a Wearable Cough Detector Based on Neural Networks. , 2018, , .		13
131	Rigorous extraction of process variations for 65nm CMOS design. , 2007, , .		12
132	A New Simulation Method for NBTI Analysis in SPICE Environment. , 2007, , .		12
133	Statistical aging under dynamic voltage scaling: A logarithmic model approach. , 2012, , .		12
134	BTI-Induced Aging under Random Stress Waveforms. , 2014, , .		12
135	GAR: Graph Assisted Reasoning for Object Detection. , 2020, , .		12
136	Robust RRAM-based In-Memory Computing in Light of Model Stability. , 2021, , .		12
137	Predictive Technology Model for Nano-CMOS Design Exploration. , 2006, , .		11
138	Variation-aware supply voltage assignment for minimizing circuit degradation and leakage. , 2009, , .		11
139	New-Age: A Negative Bias Temperature Instability-Estimation Framework for Microarchitectural Components. International Journal of Parallel Programming, 2009, 37, 417-431.	1.5	11
140	Active roles of helium in the growth of hydrogenated microcrystalline silicon germanium thin films. Thin Solid Films, 2012, 520, 5940-5945.	1.8	11
141	Logarithmic modeling of BTI under dynamic circuit operation: Static, dynamic and long-term prediction. , 2013, , .		11
142	The Stochastic Loss of Spikes in Spiking Neural P Systems: Design and Implementation of Reliable Arithmetic Circuits. Fundamenta Informaticae, 2014, 134, 183-200.	0.4	11
143	Neurophysics-inspired parallel architecture with resistive crosspoint array for dictionary learning. , 2014, , .		11
144	Impact of On-chip Interconnect on In-memory Acceleration of Deep Neural Networks. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-22.	2.3	11

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145	Deep Neural Network Training Accelerator Designs in ASIC and FPGA. , 2020, , .		11
146	Experimental tests and CFD simulations of a horizontal wave flow turbine under the joint waves and currents. Ocean Engineering, 2021, 237, 109480.	4.3	10
147	Efficient Sb2S3 solar cells employing favorable (Sb4S6)n ribbon orientation via hydrothermal method. Materials Letters, 2022, 316, 132032.	2.6	10
148	Pathfinding for 22nm CMOS designs using Predictive Technology Models. , 2009, , .		9
149	Compact modeling of a PD SOI MESFET for wide temperature designs. Microelectronics Journal, 2009, 40, 1264-1273.	2.0	9
150	Programmable analog device array (PANDA). , 2011, , .		9
151	NBTI-aware circuit node criticality computation. ACM Journal on Emerging Technologies in Computing Systems, 2013, 9, 1-19.	2.3	9
152	Bi-Level Rare Temporal Pattern Detection. , 2016, , .		9
153	A Reconstruction Method for Missing Data in Power System Measurement Based on LSGAN. Frontiers in Energy Research, 2021, 9, .	2.3	9
154	Switch-factor based loop RLC modeling for efficient timing analysis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2005, 13, 1072-1078.	3.1	8
155	Design rule optimization of regular layout for leakage reduction in nanoscale design. , 2008, , .		8
156	Workload-Aware Neuromorphic Design of the Power Controller. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2011, 1, 381-390.	3.6	8
157	Diagnosing bias runaway in analog/mixed signal circuits. , 2014, , .		8
158	Programming strategies to improve energy efficiency and reliability of ReRAM memory systems. , 2015, , .		8
159	High-performance face detection with CPU-FPGA acceleration. , 2016, , .		8
160	Efficient Network Construction Through Structural Plasticity. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2019, 9, 453-464.	3.6	8
161	Non-uniform DNN Structured Subnets Sampling for Dynamic Inference. , 2020, , .		8
162	Robust design of high fan-in/out subthreshold circuits. , 0, , .		7

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163	Predictive technology modeling for 32nm low power design. , 2007, , .		7
164	The Predictive Technology Model in the Late Silicon Era and Beyond. Foundations and Trends in Electronic Design Automation, 2009, 3, 305-401.	1.0	7
165	Compact modeling of Fe-FET and implications on variation-insensitive design. , 2010, , .		7
166	Temporal Performance Degradation under RTN: Evaluation and Mitigation for Nanoscale Circuits. , 2012, , .		7
167	A self-tuning design methodology for power-efficient multi-core systems. ACM Transactions on Design Automation of Electronic Systems, 2013, 18, 1-24.	2.6	7
168	Optical absorption enhancement of Î¼c-SiGe:H films deposited via high pressure and high power. Optoelectronics Letters, 2014, 10, 202-205.	0.8	7
169	Ranking the parameters of deep neural networks using the fisher information. , 2016, , .		7
170	A 1.06 Î¼w smart ecg processor in 65 nm cmos for real-time biometric authentication and personal cardiac monitoring. , 2017, , .		7
171	Single-Net Continual Learning with Progressive Segmented Training. , 2019, , .		7
172	End-to-End FPGA-based Object Detection Using Pipelined CNN and Non-Maximum Suppression. , 2021, , .		7
173	A robust finite-point based gate model considering process variations. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2007, , .	0.0	6
174	Compact Modeling of Stress Effects in Scaled CMOS. , 2009, , .		6
175	On the bias dependence of time exponent in NBTI and CHC effects. , 2010, , .		6
176	Open-circuit voltage analysis of pâ€"iâ€"n type amorphous silicon solar cells deposited at low temperature. Chinese Physics B, 2011, 20, 087309.	1.4	6
177	The potential of Fe-FET for robust design under variations: A compact modeling study. Microelectronics Journal, 2012, 43, 898-903.	2.0	6
178	Compact modeling of STT-MTJ for SPICE simulation. , 2013, , .		6
179	Programmable ANalog Device Array (PANDA): A Methodology for Transistor-Level Analog Emulation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 1369-1380.	5.4	6
180	Cost-Effective Design Solutions for Enhancing PRAM Reliability and Performance. IEEE Transactions on Multi-Scale Computing Systems, 2017, 3, 1-11.	2.4	6

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181	Monolithic 3D IC designs for low-power deep neural networks targeting speech recognition. , 2017, , .		6
182	Towards Efficient Neural Networks On-A-Chip: Joint Hardware-Algorithm Approaches. , 2019, , .		6
183	Safety analysis of an offshore platform for leakage and deflagration accidents from adjacent oil and gas storage and transportation units. Ships and Offshore Structures, 2021, 16, 815-826.	1.9	6
184	Noise-based Selection of Robust Inherited Model for Accurate Continual Learning. , 2020, , .		6
185	Compact Modeling of BTI for Circuit Reliability Analysis. , 2015, , 93-119.		6
186	Power Performance Analysis of Digital Standard Cells for 28 nm Bulk CMOS at Cryogenic Temperature Using BSIM Models. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2021, 7, 193-200.	1.5	6
187	Small-world-based Structural Pruning for Efficient FPGA Inference of Deep Neural Networks. , 2020, , .		6
188	The impact of correlation between NBTI and TDDB on the performance of digital circuits. , 2011, , .		5
189	Numerical simulation of a triple-junction thin-film solar cell based on $\mu c-Si_{1-x}Ge_x$:H. Chinese Physics B, 2013, 22, 098803.	1.4	5
190	Statistical analysis of random telegraph noise in digital circuits. , 2014, , .		5
191	A Low Cost Multi-Tiered Approach to Improving the Reliability of Multi-Level Cell Pram. Journal of Signal Processing Systems, 2014, 76, 133-147.	2.1	5
192	Design of a reliable RRAM-based PUF for compact hardware security primitives. , 2016, , .		5
193	A Real-Time 17-Scale Object Detection Accelerator With Adaptive 2000-Stage Classification in 65 nm CMOS. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 3843-3853.	5.4	5
194	A Method for Cleaning Power Grid Operation Data Based on Spatiotemporal Correlation Constraints. IEEE Access, 2020, 8, 224741-224749.	4.2	5
195	Interfacial Modification of Mesoporous TiO2 Films with PbI2-Ethanolamine-Dimethyl Sulfoxide Solution for CsPbIBr2 Perovskite Solar Cells. Nanomaterials, 2020, 10, 962.	4.1	5
196	XST: A Crossbar Column-wise Sparse Training for Efficient Continual Learning. , 2022, , .		5
197	Statistical leakage minimization through joint selection of gate sizes, gate lengths and threshold voltage. , 0, , .		4
198	LOTUS: Leakage Optimization under Timing Uncertainty for Standard-cell designs. , 0, , .		4

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202	On-chip Sparse Learning with Resistive Cross-point Array Architecture. , 2015, , .		4
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