Hai-Bao Chen

List of Publications by Year
in descending order

48	573	933447	713466
48	**573**	**10**	**21**
papers	citations	h-index	g-index
48	**48**	**48**	**455**
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Scale Adaptive Proposal Network for Object Detection in Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 864-868.	3.1	80
2	Time Domain Model Order Reduction of General Orthogonal Polynomials for Linear Input-Output Systems. IEEE Transactions on Automatic Control, 2012, 57, 330-343.	5.7	71
3	Analytical Modeling and Characterization of Electromigration Effects for Multibranch Interconnect Trees. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1811-1824.	2.7	51
4	Compact Lateral Thermal Resistance Model of TSVs for Fast Finite-Difference Based Thermal Analysis of 3-D Stacked ICs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1490-1502.	2.7	44
5	Analytical Modeling of Electromigration Failure for VLSI Interconnect Tree Considering Temperature and Segment Length Effects. IEEE Transactions on Device and Materials Reliability, 2017, 17, 653-666.	2.0	32
6	Application of General Orthogonal Polynomials to Fast Simulation of Nonlinear Descriptor Systems Through Piecewise-Linear Approximation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 804-808.	2.7	30
7	Electromigration recovery modeling and analysis under time-dependent current and temperature stressing. , 2016, , .		22
8	Energy and Lifetime Optimizations for Dark Silicon Manycore Microprocessor Considering Both Hard and Soft Errors. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 2561-2574.	3.1	18
9	ANN-Based Outlier Detection for Wireless Sensor Networks in Smart Buildings. IEEE Access, 2019, 7, 95987-95997.	4.2	18
10	A Difference-Based Local Contrast Method for Infrared Small Target Detection Under Complex Background. IEEE Access, 2019, 7, 105503-105513.	4.2	18
11	IR-drop based electromigration assessment: Parametric failure chip-scale analysis. , 2014, , .		16
12	Exploring the Impact of Random Telegraph Noise-Induced Accuracy Loss on Resistive RAM-Based Deep Neural Network. IEEE Transactions on Electron Devices, 2020, 67, 3335-3340.	3.0	15
13	Interconnect reliability modeling and analysis for multi-branch interconnect trees. , 2015, , .		12
14	Model-order reduction of coupled DAE systems via technique and Krylov subspace method. Journal of the Franklin Institute, 2012, 349, 3027-3045.	3.4	10
15	Learning-Based Dynamic Reliability Management For Dark Silicon Processor Considering EM Effects. , 2016, , .		9
16	Statistical Rare-Event Analysis and Parameter Guidance by Elite Learning Sample Selection. ACM Transactions on Design Automation of Electronic Systems, 2016, 21, 1-21.	2.6	9
17	SVM Based Intrusion Detection Using Nonlinear Scaling Scheme. , 2018, , .		8
18	TEANS: A Target Enhancement and Attenuated Nonmaximum Suppression Object Detector for Remote Sensing Images. IEEE Geoscience and Remote Sensing Letters, 2021, 18, 632-636.	3.1	8

#	Article	IF	Citations
19	A 3.85-Gb/s 8 Ã— 8 Soft-Output MIMO Detector With Lattice-Reduction-Aided Channel Preprocessing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 307-320.	3.1	8
20	Lifetime optimization for real-time embedded systems considering electromigration effects. , 2014, , .		7
21	Nonlinear model order reduction based on tensor Kronecker product expansion with Arnoldi process. Journal of the Franklin Institute, 2016, 353, 3641-3655.	3.4	7
22	S3-Net: A Fast Scene Understanding Network by Single-Shot Segmentation for Autonomous Driving. ACM Transactions on Intelligent Systems and Technology, 2021, 12, 1-19.	4.5	7
23	New electromigration modeling and analysis considering time-varying temperature and current densities. , 2015, , .		6
24	Physics-Based Compact TDDB Models for Low- k BEOL Copper Interconnects With Time-Varying Voltage Stressing. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 239-248.	3.1	6
25	Model Order Reduction Based on Dynamic Relative Gain Array for MIMO Systems. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2507-2511.	3.0	6
26	A Spaceâ€"Time Neural Network for Analysis of Stress Evolution Under DC Current Stressing. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 5501-5514.	2.7	6
27	An -embedding model-order reduction approach for differential-algebraic equation systems. Mathematical and Computer Modelling of Dynamical Systems, 2012, 18, 223-241.	2.2	5
28	Learning-based occupancy behavior detection for smart buildings. , 2016, , .		5
29	Learning based compact thermal modeling for energy-efficient smart building management. , 2015, , .		4
30	*H* -Matrix-Based Finite-Element-Based Thermal Analysis for 3D ICs. ACM Transactions on Design Automation of Electronic Systems, 2015, 20, 1-25.	2.6	4
31	Energy-efficient wireless temperature sensing for smart building applications. , 2016, , .		4
32	A large-scale in-memory computing for deep neural network with trained quantization. The Integration VLSI Journal, 2019, 69, 345-355.	2.1	4
33	Multilayer Perceptron-Based Stress Evolution Analysis Under DC Current Stressing for Multisegment Wires. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2023, 42, 544-557.	2.7	4
34	Statistical rare event analysis using smart sampling and parameter guidance. , 2015, , .		3
35	Towards establishing a meaningful and practical dynamics results for the unified RNN model. Neurocomputing, 2015, 157, 315-322.	5.9	3
36	A Low-Bit Quantized and HLS-Based Neural Network FPGA Accelerator for Object Detection. , 2021, , .		3

#	Article	IF	Citations
37	Occupancy Detection in Smart Buildings Using Support Vector Regression Method. , 2016, , .		2
38	Comprehensive detection of counterfeit ICs via on-chip sensor and post-fabrication authentication policy. , 2017, , .		2
39	SVM Based Intrusion Detection Method with Nonlinear Scaling and Feature Selection. IEICE Transactions on Information and Systems, 2022, E105.D, 1024-1038.	0.7	2
40	Full-chip electromigration assessment: Effect of cross-layout temperature and thermal stress distributions. , 2015, , .		1
41	Fast two-dimensional finite element analysis for power network DC integrity checks of PCBs. , 2017, , .		1
42	Dynamic temperature-aware reliability modeling for multi-branch interconnect trees. , 2017, , .		1
43	Stress Evolution Analysis of EM-Induced Void Growth for Multi-Segment Interconnect Wires. , 2020, , .		1
44	^{2}-matrix-based finite element linear solver for fast transient thermal analysis of high-performance ICs. International Journal of Circuit Theory and Applications, 2015, 43, 1953-1970.	2.0	0
45	Online Unusual Behavior Detection for Temperature Sensor Networks. , 2016, , .		0
46	Thermal modeling for energy-efficient smart building with advanced overfitting mitigation technique. , 2016, , .		0
47	ABCD: A Compact Object Detector Based on Channel Quantization and Tensor Decomposition. , 2020, , .		0
48	RGA-SOBAR: Second-Order Block Arnoldi Method Based on Relative Gain Array for Model Order Reduction of MIMO RCS Circuits. , 2021, , .		0