

IEEE TRANSACTIONS ON COMPUTER-AIDED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS

A PUBLICATION OF THE IEEE COUNCIL ON ELECTRONIC DESIGN AUTOMATION



JULY 2016

VOLUME 35

NUMBER 7

ITCSDI

(ISSN 0278-0070)

REGULAR PAPERS

<i>Embedded Security</i>	
PolyPUF: Physically Secure Self-Divergence	S. T. C. Konigsmark, D. Chen, and M. D. F. Wong 1053
P-Val: Antifuse-Based Package-Level Defense Against Counterfeit ICs	A. Basak and S. Bhunia 1067
<i>Embedded Systems</i>	
An Integrated Approach for Managing Read Disturbs in High-Density NAND Flash Memory	K. Ha, J. Jeong, and J. Kim 1079
<i>FPGAs and Reconfigurable Computing</i>	
Mapping Imperfect Loops to Coarse-Grained Reconfigurable Architectures	H. Sim, H. Lee, S. Seo, and J. Lee 1092
<i>Modeling and Simulation</i>	
Full-Component Modeling and Simulation of Charged Device Model ESD	K.-H. Meng, V. Shukla, and E. Rosenbaum 1105
Fast Thermal Simulation of FinFET Circuits Based on a Multiblock Reduced-Order Model	W. Jia, B. T. Helenbrook, and M.-C. Cheng 1114
Improving Computing Systems Automatic Multiobjective Optimization Through Meta-Optimization	L. Vinçan, R. Chiş, M. A. Ismail, and C. Coşofană 1125
A Multicircuit Simulator Based on Inverse Jacobian Matrix Reuse	H.-I. Lee, C.-Y. Han, and J. C.-M. Li 1130
Compact Model Parameter Extraction Using Bayesian Inference, Incomplete New Measurements, and Optimal Bias Selection ..	L. Yu, S. Saxena, C. Hess, I. M. Elfadel, D. A. Antoniadis, and D. S. Boning 1138
<i>System-Level Design</i>	
Toward a Profitable Grid-Connected Hybrid Electrical Energy Storage System for Residential Use	D. Zhu, S. Yue, N. Chang, and M. Pedram 1151
An Accurate GPU Performance Model for Effective Control Flow Divergence Optimization	Y. Liang, M. T. Satria, K. Rupnow, and D. Chen 1165
<i>Test</i>	
Fault Diagnosis for Leakage and Blockage Defects in Flow-Based Microfluidic Biochips	K. Hu, B. B. Bhattacharya, and K. Chakrabarty 1179
A Novel Test Method for Metallic CNTs in CNFET-Based SRAMs	T. Li, F. Xie, X. Liang, Q. Xu, K. Chakrabarty, N. Jing, and L. Jiang 1192
<i>Verification</i>	
Efficient Symbolic Computation for Word-Level Abstraction From Combinational Circuits for Verification Over Finite Fields ...	T. Pruss, P. Kalla, and F. Enescu 1206

SHORT PAPERS

Parallelized Network-on-Chip-Reused Test Access Mechanism for Multiple Identical Cores	T. Han, I. Choi, H. Oh, and S. Kang 1219
A SVM Surrogate Model-Based Method for Parametric Yield Optimization	A. Ciccazzo, G. Di Pillo, and V. Latorre 1224

