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Loop unrolling for energy efficiency in low-cost field-programmable gate arrays	Dumpala, N.K., Patil, S.B., Holcomb, D., Tessier, R.	2019	ACM Transactions on Reconfigurable Technology and Systems 11(4),26	0
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Bimodal Oscillation as a Mechanism for Autonomous Majority Voting in PUFs	Xu, X., Keshavarz, S., Forte, D.J., Tehranipoor, M.M., Holcomb, D.E.	2018	IEEE Transactions on Very Large Scale Integration (VLSI) Systems 26(11),8438897, pp. 2431-2442	1
View abstract	Full Text Finder	View at Publisher	Related documents	

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ASHES 2018— workshop on attacks and solutions in hardware security	Chang, C.H., Guajardo, J., Holcomb, D., Regazzoni, F., Ruhrmair, U.	2018	Proceedings of the ACM Conference on Computer and Communications Security pp. 2168-2170	0
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FPGA Side Channel Attacks without Physical Access	Ramesh, C., Patil, S.B., Dhanuskodi, S.N., (...), Holcomb, D., Tessier, R.	2018	Proceedings - 26th IEEE International Symposium on Field-Programmable Custom Computing Machines, FCCM 2018 8457631, pp. 45-52	5
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Imaging systems and algorithms to analyze biological samples in real-time using mobile phone microscopy Open Access	Shanmugam, A., Usmani, M., Mayberry, A., Perkins, D.L., Holcomb, D.E.	2018	PLoS ONE 13(3),e0193797	1
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Nanoscale diffusive memristor crossbars as physical unclonable functions Open Access	Zhang, R., Jiang, H., Wang, Z.R., (...), Yang, J.J., Xia, Q.	2018	Nanoscale 10(6), pp. 2721-2726	5
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Threshold-based obfuscated keys with quantifiable security against invasive readout	Keshavarz, S., Holcomb, D.	2017	IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, ICCAD 2017-November, pp. 57-64	2
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An improved clocking methodology for energy efficient low area AES architectures using register renaming	Dhanuskodi, S.N., Holcomb, D.	2017	Proceedings of the International Symposium on Low Power Electronics and Design 8009193	0

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Improving reliability of weak PUFs via circuit techniques to enhance mismatch	Patil, V.C., Vijayakumar, A., Holcomb, D.E., Kundu, S.	2017	Proceedings of the 2017 IEEE International Symposium on Hardware Oriented Security and Trust, HOST 2017 7951814, pp. 146-150	5
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Design automation for obfuscated circuits with multiple viable functions	Keshavarz, S., Paar, C., Holcomb, D.	2017	Proceedings of the 2017 Design, Automation and Test in Europe, DATE 2017 7927112, pp. 886-889	4
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Reverse engineering of irreducible polynomials in $GF(2^m)$ arithmetic	Yu, C., Holcomb, D., Ciesielski, M.	2017	Proceedings of the 2017 Design, Automation and Test in Europe, DATE 2017 7927238, pp. 1558-1563	1
View abstract  Full Text Finder View at Publisher Related documents				
Nanoscale CMOS memory-based security primitive design (Chapter)	Book Holcomb, D.E.	2017	<i>Security Opportunities in Nano Devices and Emerging Technologies</i> pp. 19-54	0
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Energy optimization of unrolled block ciphers using combinational checkpointing	Dhanuskodi, S.N., Holcomb, D.	2017	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 10155 LNCS, pp. 47-61	0
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Physical Design Obfuscation of Hardware: A Comprehensive Investigation of Device and Logic-Level Techniques Open Access	Vijayakumar, A., Patil, V.C., Holcomb, D.E., Paar, C., Kundu, S.	2017	IEEE Transactions on Information Forensics and Security 12(1),7546854, pp. 64-77	24
View abstract  Full Text Finder View at Publisher Related documents				
Reliable PUF design using failure patterns from time-controlled power gating	Xu, X., Holcomb, D.E.	2016	2016 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems, DFT 2016 7684085, pp. 135-140	6
View abstract  Full Text Finder View at Publisher Related documents				
Improving the efficiency of PUF-based key generation in FPGAs using variation-aware placement	Vyas, S., Dumpala, N.K., Tessier, R., Holcomb, D.E.	2016	FPL 2016 - 26th International Conference on Field-Programmable Logic and Applications 7577307	3
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Document title	Authors	Year	Source	Cited by
Using statistical models to improve the reliability of delay-based PUFs	Xu, X., Burleson, W., Holcomb, D.E.	2016	Proceedings of IEEE Computer Society Annual Symposium on VLSI, ISVLSI 2016-September,7560256, pp. 547-552	14
View abstract Full Text Finder View at Publisher Related documents				
LLPA: Logic state based leakage power analysis	Dhanuskodi, S.N., Keshavarz, S., Holcomb, D.	2016	Proceedings of IEEE Computer Society Annual Symposium on VLSI, ISVLSI 2016-September,7560200, pp. 218-223	1
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A clockless sequential PUF with autonomous majority voting	Xu, X., Holcomb, D.	2016	Proceedings of the ACM Great Lakes Symposium on VLSI, GLSVLSI 18-20-May-2016, pp. 27-32	7
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Oracle-guided incremental SAT solving to reverse engineer camouflaged logic circuits	Liu, D., Yu, C., Zhang, X., Holcomb, D.	2016	Proceedings of the 2016 Design, Automation and Test in Europe Conference and Exhibition, DATE 2016 7459350, pp. 433-438	24
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A design methodology for stealthy parametric Trojans and its application to bug attacks	Ghandali, S., Becker, G.T., Holcomb, D., Paar, C.	2016	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9813 LNCS, pp. 625-647	6
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Persistent clocks for batteryless sensing devices	Hester, J., Tobias, N., Rahmati, A., (...), Burleson, W.P., Sorber, J.	2016	ACM Transactions on Embedded Computing Systems 15(4),77	5
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Probable cause: The deanonymizing effects of approximate DRAM	Rahmati, A., Hicks, M., Holcomb, D.E., Fu, K.	2015	Proceedings - International Symposium on Computer Architecture 13-17-June-2015, pp. 604-615	6
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Reliable physical unclonable functions using data retention voltage of SRAM Cells	Xu, X., Rahmati, A., Holcomb, D.E., Fu, K., Burleson, W.	2015	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems 34(6),7078918, pp. 903-914	18
View abstract Full Text Finder View at Publisher Related documents				
Security evaluation and enhancement of Bistable Ring PUFs	Xu, X., Rührmair, U., Holcomb, D.E., Burleson, W.	2015	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 9440, pp. 3-16	15
View abstract Full Text Finder View at Publisher Related documents				
Bitline PUF: Building native challenge-response PUF capability into any SRAM	Holcomb, D.E., Fu, K.	2014	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 8731, pp. 510-526	20

Document title	Authors	Year	Source	Cited by
View abstract  Full Text Finder View at Publisher Related documents				
Compositional performance verification of network-on-chip designs	Holcomb, D.E., Seshia, S.A.	2014	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems 33(9),6879626, pp. 1370-1383	4
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PUFs at a glance	Rührmair, U., Holcomb, D.E.	2014	Proceedings -Design, Automation and Test in Europe, DATE 6800561	37
View abstract  Full Text Finder View at Publisher Related documents				
DRV-fingerprinting: Using data retention voltage of SRAM cells for chip identification	Holcomb, D.E., Rahmati, A., Salajegheh, M., Burleson, W.P., Fu, K.	2013	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 7739 LNCS, pp. 165-179	11
View abstract  Full Text Finder View at Publisher Related documents				
Compositional performance verification of NoC designs	Holcomb, D.E., Gotmanov, A., Kishinevsky, M., Seshia, S.A.	2012	10th ACM/IEEE International Conference on Formal Methods and Models for Codesign, MEMOCODE 2012 6292294, pp. 1-10	4
View abstract  Full Text Finder View at Publisher Related documents				
Abstraction-based performance verification of NoCs	Holcomb, D., Brady, B., Seshia, S.	2011	Proceedings - Design Automation Conference 5981970, pp. 492-497	5
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Counterexample-guided SMT-driven optimal buffer sizing	Brady, B.A., Holcomb, D., Seshia, S.A.	2011	Proceedings -Design, Automation and Test in Europe, DATE 5763058, pp. 329-334	3
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Low-power sub-threshold design of secure physical unclonable functions	Lin, L., Holcomb, D., Krishnappa, D.K., Shabadi, P., Burleson, W.	2010	Proceedings of the International Symposium on Low Power Electronics and Design pp. 43-48	46
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Overnight atmospheric transport and chemical processing of photochemically aged Houston urban and petrochemical industrial plume Open Access	Zaveri, R.A., Voss, P.B., Berkowitz, C.M., (...), Hartley, T.P., Baran, L.	2010	Journal of Geophysical Research Atmospheres 115(23),D23303	9
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Design as you see FIT: System-level soft error analysis of sequential circuits	Holcomb, D., Wenchao, L., Seshia, S.A.	2009	Proceedings -Design, Automation and Test in Europe, DATE 5090770, pp. 785-790	35
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Power-Up SRAM state as an identifying fingerprint and source of true random numbers	Holcomb, D.E., Burleson, W.P., Fu, K.	2009	IEEE Transactions on Computers 58(9), pp. 1198-1210	364

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Integrated system optimization of Controlled Meteorological (CMET) balloons	Voss, P.B., Holcomb, D., Berkowitz, C.M., Zaveri, R.A.	2005	Collection of Technical Papers - AIAA 5th ATIO and the AIAA 16th Lighter-than-Air Systems Technology Conference and Balloon Systems Conference 2, pp. 780-783	1
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