

Hafizur Rahaman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1922511/publications.pdf>

Version: 2024-02-01

489
papers

3,367
citations

331538

21
h-index

315616

38
g-index

498
all docs

498
docs citations

498
times ranked

1742
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of medium-ring heterocycles by diene and enyne metathesis. <i>Tetrahedron</i> , 2007, 63, 3919-3952.	1.0	188
2	Comparative Performance Analysis of the Dielectrically Modulated Full- Gate and Short-Gate Tunnel FET-Based Biosensors. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 994-1001.	1.6	151
3	Study and Analysis of the Effects of SiGe Source and Pocket-Doped Channel on Sensing Performance of Dielectrically Modulated Tunnel FET-Based Biosensors. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 2589-2596.	1.6	141
4	Modeling and Analysis of Crosstalk Induced Effects in Multiwalled Carbon Nanotube Bundle Interconnects: An ABCD Parameter-Based Approach. <i>IEEE Nanotechnology Magazine</i> , 2015, 14, 259-274.	1.1	69
5	Analysis of Crosstalk in Single- and Multiwall Carbon Nanotube Interconnects and Its Impact on Gate Oxide Reliability. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 1362-1370.	1.1	67
6	Effective fault detection and routing scheme for wireless sensor networks. <i>Computers and Electrical Engineering</i> , 2014, 40, 291-306.	3.0	59
7	To 3D or Not 3D: Choosing a Photogrammetry Workflow for Cultural Heritage Groups. <i>Heritage</i> , 2019, 2, 1835-1851.	0.9	56
8	From photo to 3D to mixed reality: A complete workflow for cultural heritage visualisation and experience. <i>Digital Applications in Archaeology and Cultural Heritage</i> , 2019, 13, e00102.	0.9	49
9	Survey of 3D digital heritage repositories and platforms. <i>Virtual Archaeology Review</i> , 2020, 11, 1.	0.8	45
10	On the Detection of Missing-Gate Faults in Reversible Circuits by a Universal Test Set. , 2008, , .		43
11	Selectivity Tuning of Graphene Oxide Based Reliable Gas Sensor Devices by Tailoring the Oxygen Functional Groups: A DFT Study Based Approach. <i>IEEE Transactions on Device and Materials Reliability</i> , 2017, 17, 738-745.	1.5	43
12	Low Complexity Digit Serial Systolic Montgomery Multipliers for Special Class of $\{m GF\}(2^m)$. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2010, 18, 847-852.	2.1	42
13	A novel droplet routing algorithm for digital microfluidic biochips. , 2010, , .		36
14	Digital heritage interpretation: a conceptual framework. <i>Digital Creativity</i> , 2018, 29, 208-234.	0.8	35
15	Interpreting Digital Heritage: A Conceptual Model with End-Users' Perspective. <i>International Journal of Architectural Computing</i> , 2011, 9, 99-113.	0.9	32
16	Fault diagnosis in reversible circuits under missing-gate fault model. <i>Computers and Electrical Engineering</i> , 2011, 37, 475-485.	3.0	29
17	Crosstalk and Gate Oxide Reliability Analysis in Graphene Nanoribbon Interconnects. , 2011, , .		28
18	A Post-Synthesis Optimization Technique for Reversible Circuits Exploiting Negative Control Lines. <i>IEEE Transactions on Computers</i> , 2015, 64, 1208-1214.	2.4	28

#	ARTICLE	IF	CITATIONS
19	Stereoselective Synthesis of Tricyclic Pyranoxepin Derivatives by Ruthenium-Catalyzed Enyne Metathesis/Diels-Alder Reaction. <i>Synlett</i> , 2006, 2006, 0466-0468.	1.0	27
20	Tandem Claisen rearrangement and ruthenium catalyzed enyne bond reorganization as a route to the synthesis of tricyclic 1,8-naphthyridinones. <i>Tetrahedron Letters</i> , 2006, 47, 2111-2113.	0.7	26
21	Optimum Test Set for Bridging Fault Detection in Reversible Circuits. , 2007, , .		26
22	3D Digital Heritage Models as Sustainable Scholarly Resources. <i>Sustainability</i> , 2019, 11, 2425.	1.6	24
23	Generator for Test Set Construction of SMGF in Reversible Circuit by Boolean Difference Method. , 2014, , .		22
24	Reduced thickness interconnect model using GNR to avoid crosstalk effects. <i>Journal of Computational Electronics</i> , 2016, 15, 367-380.	1.3	22
25	Load management scheme for energy holes reduction in wireless sensor networks. <i>Computers and Electrical Engineering</i> , 2015, 48, 343-357.	3.0	21
26	Performance analysis of uniaxially strained monolayer black phosphorus and blue phosphorus n-MOSFET and p-MOSFET. <i>Journal of Computational Electronics</i> , 2016, 15, 919-930.	1.3	21
27	Stability Analysis in Top-Contact and Side-Contact Graphene Nanoribbon Interconnects. <i>IETE Journal of Research</i> , 2017, 63, 588-596.	1.8	21
28	A template-based technique for efficient Clifford+T-based quantum circuit implementation. <i>Microelectronics Journal</i> , 2018, 81, 58-68.	1.1	21
29	A Novel Approach for Nearest Neighbor Realization of 2D Quantum Circuits. , 2018, , .		21
30	Exploiting Negative Control Lines in the Optimization of Reversible Circuits. <i>Lecture Notes in Computer Science</i> , 2013, , 209-220.	1.0	20
31	EERIH: Energy efficient routing via information highway in sensor network. , 2011, , .		19
32	Synthesis of Reversible Circuits Using Heuristic Search Method. , 2012, , .		19
33	An Optimized S-Box for Advanced Encryption Standard (AES) Design. , 2012, , .		19
34	Electro-thermal RF modeling and performance analysis of graphene nanoribbon interconnects. <i>Journal of Computational Electronics</i> , 2018, 17, 1695-1708.	1.3	19
35	High speed and low power preset-able modified TSPC D flip-flop design and performance comparison with TSPC D flip-flop. , 2018, , .		19
36	Spread Spectrum Image Watermarking with Digital Design. , 2009, , .		18

#	ARTICLE	IF	CITATIONS
37	Derivation of Optimal Test Set for Detection of Multiple Missing-Gate Faults in Reversible Circuits. , 2010, , .		18
38	Modeling and analysis of crosstalk induced overshoot/undershoot effects in multilayer graphene nanoribbon interconnects and its impact on gate oxide reliability. Microelectronics Reliability, 2016, 63, 231-238.	0.9	18
39	A Device Simulation-Based Investigation on Dielectrically Modulated Fringing Field-Effect Transistor for Biosensing Applications. IEEE Sensors Journal, 2017, 17, 1399-1406.	2.4	18
40	Modeling and Analysis of Electro-Thermal Impact of Crosstalk Induced Gate Oxide Reliability in Pristine and Intercalation Doped MLG NR Interconnects. IEEE Transactions on Device and Materials Reliability, 2019, 19, 543-550.	1.5	18
41	EER: Energy Efficient Routing in Wireless Sensor Networks. , 2011, , .		17
42	Reversible logic implementation of AES algorithm. , 2013, , .		16
43	Analysis of a temperature-dependent delay optimization model for GNR interconnects using a wire sizing method. Journal of Computational Electronics, 2018, 17, 1536-1548.	1.3	16
44	Techniques for fault-tolerant decomposition of a multicontrolled Toffoli gate. Physical Review A, 2019, 100, .	1.0	16
45	Investigation on the Effects of Substrate, Back-Gate Bias and Front-Gate Engineering on the Performance of DMTFET-Based Biosensors. IEEE Sensors Journal, 2020, 20, 10405-10414.	2.4	16
46	Investigation of Spark-Gap Discharge in a Regime of Very High Repetition Rate. IEEE Transactions on Plasma Science, 2010, 38, 2752-2757.	0.6	15
47	Optimal Reversible Logic Circuit Synthesis Based on a Hybrid DFS-BFS Technique. , 2010, , .		15
48	Performance modeling and analysis of carbon nanotube bundles for future VLSI circuit applications. Journal of Computational Electronics, 2014, 13, 673-688.	1.3	15
49	On Finding a Defect-free Component in Nanoscale Crossbar Circuits. Procedia Computer Science, 2015, 70, 421-427.	1.2	15
50	Parametric fault detection of analog circuits based on Bhattacharyya measure. Analog Integrated Circuits and Signal Processing, 2017, 93, 477-488.	0.9	15
51	On residue removal in digital microfluidic biochips. , 2011, , .		14
52	Influence of Channel Length and High-K Oxide Thickness on Subthreshold DC Performance of Graded Channel and Gate Stack DG-MOSFETs. Nano, 2016, 11, 1650101.	0.5	14
53	Design of memristor-based up-down counter using material implication logic. , 2016, , .		14
54	FPGA implementation of semi-fragile reversible watermarking by histogram bin shifting in real time. Journal of Real-Time Image Processing, 2018, 14, 193-221.	2.2	14

#	ARTICLE	IF	CITATIONS
55	A Statistical Approach of Analog Circuit Fault Detection Utilizing Kolmogorov-Smirnov Test Method. Circuits, Systems, and Signal Processing, 2021, 40, 2091-2113.	1.2	14
56	Implementing Symmetric Functions with Hierarchical Modules for Stuck-At and Path-Delay Fault Testability. Journal of Electronic Testing: Theory and Applications (JETTA), 2006, 22, 125-142.	0.9	13
57	Notice of Removal: Synthesis of online testable reversible circuit. , 2010, , .		13
58	Crosstalk analysis in Carbon Nanotube interconnects and its impact on gate oxide reliability. , 2010, , .		13
59	Mach-Zehnder Interferometer Based All Optical Reversible Carry-Lookahead Adder. , 2014, , .		13
60	Switching behavior of a double gap pseudospark discharge. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 3299-3304.	1.8	13
61	Homogeneous droplet routing in DMFB: An enhanced technique for high performance bioassay implementation. The Integration VLSI Journal, 2018, 60, 74-91.	1.3	13
62	Error-Oblivious Sample Preparation With Digital Microfluidic Lab-on-Chip. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1886-1899.	1.9	13
63	Thermal-Aware Placement of Standard Cells and Gate Arrays: Studies and Observations. , 2008, , .		12
64	Single error correctable bit parallel multipliers over GF(2 ^m). IET Computers and Digital Techniques, 2009, 3, 281.	0.9	12
65	Test Planning in Digital Microfluidic Biochips Using Efficient Eulerization Techniques. Journal of Electronic Testing: Theory and Applications (JETTA), 2011, 27, 657-671.	0.9	12
66	Modeling of IR-Drop induced delay fault in CNT and GNR power distribution networks. , 2012, , .		12
67	Synthesis of circuits based on all-optical Mach-Zehnder Interferometers using Binary Decision Diagrams. Microelectronics Journal, 2018, 71, 19-29.	1.1	12
68	Easily testable realization of GRM and ESOP networks for detecting stuck-at and bridging faults. , 0, , .		11
69	A heuristic method for constructing hexagonal Steiner minimal trees for routing in VLSI. , 0, , .		11
70	Ultra low-power sequential circuit implementation by a Quasi-Static Single phase Adiabatic Dynamic Logic (SPADL). , 2009, , .		11
71	Testable design of AND-EXOR logic networks with universal test sets. Computers and Electrical Engineering, 2009, 35, 644-658.	3.0	11
72	Unified Digit Serial Systolic Montgomery Multiplication Architecture for Special Classes of Polynomials over GF(2 ^m). , 2010, , .		11

#	ARTICLE	IF	CITATIONS
73	On the design of different concurrent EDC schemes for S-Box and GF(p). , 2010, , .		11
74	Crosstalk overshoot/undershoot analysis and its impact on gate oxide reliability in multi-wall carbon nanotube interconnects. Journal of Computational Electronics, 2011, 10, 360-372.	1.3	11
75	Two-level clustering-based techniques for intelligent droplet routing in digital microfluidic biochips. The Integration VLSI Journal, 2012, 45, 316-330.	1.3	11
76	Nearest-Neighbor and Fault-Tolerant Quantum Circuit Implementation. , 2016, , .		11
77	Parametric Fault Detection in Analog Circuits: A Statistical Approach. , 2016, , .		11
78	Survey on memory management techniques in heterogeneous computing systems. IET Computers and Digital Techniques, 2020, 14, 47-60.	0.9	11
79	The Influence of Collaborative and Multi-Modal Mixed Reality: Cultural Learning in Virtual Heritage. Multimodal Technologies and Interaction, 2021, 5, 79.	1.7	11
80	Accelerated Functional Testing of Digital Microfluidic Biochips. , 2008, , .		10
81	Thermal Aware Placement in 3D ICs. , 2010, , .		10
82	Ant Colony Optimization Based Droplet Routing Technique in Digital Microfluidic Biochip. , 2011, , .		10
83	A new cross contamination aware routing method with intelligent path exploration in digital microfluidic biochips. , 2013, , .		10
84	Implementation of combinational circuits via material implication using memristors. , 2016, , .		10
85	Tuning of electronic properties of edge oxidized armchair graphene nanoribbon by the variation of oxygen amounts and positions. Journal of Materials Science: Materials in Electronics, 2017, 28, 9039-9047.	1.1	10
86	A technique to incorporate both tensile and compressive channel stress in Ge FinFET architecture. Journal of Computational Electronics, 2017, 16, 620-630.	1.3	10
87	Analysis of Crosstalk-Induced Effects in Multilayer Graphene Nanoribbon Interconnects. Journal of Circuits, Systems and Computers, 2017, 26, 1750102.	1.0	10
88	On Designing Testable Reversible Circuits Using Gate Duplication. Communications in Computer and Information Science, 2013, , 322-329.	0.4	10
89	An optoelectronic band-to-band tunnel transistor for near-infrared sensing applications: Device physics, modeling, and simulation. Journal of Applied Physics, 2016, 120, .	1.1	10
90	Multi-source data fusion technique for parametric fault diagnosis in analog circuits. The Integration VLSI Journal, 2022, 84, 92-101.	1.3	10

#	ARTICLE	IF	CITATIONS
91	Scan Chain Design Targeting Dual Power and Delay Optimization for 3D Integrated Circuit. , 2009, , .		9
92	Test Wrapper Design for 3D System-on-Chip Using Optimized Number of TSVs. , 2010, , .		9
93	Modeling of single-wall carbon nanotube interconnects for different process, temperature, and voltage conditions and investigating timing delay. Journal of Computational Electronics, 2012, 11, 349-363.	1.3	9
94	Reversible Logic Circuit Synthesis Using Genetic Algorithm and Particle Swarm Optimization. , 2012, , .		9
95	Performance analysis of multiwalled carbon nanotube bundles. , 2013, , .		9
96	Optimization algorithms for the design of digital microfluidic biochips: A survey. Computers and Electrical Engineering, 2013, 39, 112-121.	3.0	9
97	Derivation of test set for detecting multiple missing-gate faults in reversible circuits. Computers and Electrical Engineering, 2013, 39, 225-236.	3.0	9
98	FPGA and SoC based VLSI architecture of reversible watermarking using rhombus interpolation by difference expansion. , 2014, , .		9
99	An ABCD parameter based modeling and analysis of crosstalk induced effects in Multilayer Graphene Nano Ribbon interconnects. , 2014, , .		9
100	A novel dual purpose spatial domain algorithm for digital image watermarking and cryptography using Extended Hamming Code. , 2015, , .		9
101	BDD-Based Synthesis for All-Optical Mach-Zehnder Interferometer Circuits. , 2015, , .		9
102	An ESOP-Based Reversible Circuit Synthesis Flow Using Simulated Annealing. Advances in Intelligent Systems and Computing, 2015, , 131-144.	0.5	9
103	All optical reversible design of Mach-Zehnder interferometer based Carry-Skip Adder. , 2016, , .		9
104	Impact of gate engineering in enhancement mode n++GaN/InAlN/AlN/GaN HEMTs. Superlattices and Microstructures, 2016, 100, 306-314.	1.4	9
105	Investigating the Applicability of Graphene Nanoribbon as Signal and Power Interconnects for Nanometer Designs. Journal of Circuits, Systems and Computers, 2016, 25, 1650001.	1.0	9
106	Effect of temperature & phonon scattering on the drain current of a MOSFET using SL-MoS2 as its channel material. Superlattices and Microstructures, 2017, 111, 912-921.	1.4	9
107	Analog Circuit Fault Detection by Impulse Response-Based Signature Analysis. Circuits, Systems, and Signal Processing, 2020, 39, 4281-4296.	1.2	9
108	Design of Content Addressable Memory Architecture Using Carbon Nanotube Field Effect Transistors. Lecture Notes in Computer Science, 2012, , 233-242.	1.0	9

#	ARTICLE	IF	CITATIONS
109	Transition count based BIST for detecting multiple stuck-open faults in CMOS circuits. , 0, , .		8
110	Testing of stuck-open faults in generalised Reed-Muller and EXOR sum-of-products CMOS circuits. IEE Proceedings: Computers and Digital Techniques, 2004, 151, 83.	1.6	8
111	UDDN: Unidirectional Data Dissemination via Negotiation. Information Networking, 2008 ICOIN 2008 International Conference on, 2008, , .	0.0	8
112	C-testable bit parallel multipliers over GF (2 m). ACM Transactions on Design Automation of Electronic Systems, 2008, 13, 1-18.	1.9	8
113	Dual Mode VLSI Architecture for Spread Spectrum Image Watermarking using Binary Watermark. Procedia Technology, 2012, 6, 784-791.	1.1	8
114	A Heuristic Method for Co-optimization of Pin Assignment and Droplet Routing in Digital Microfluidic Biochip. , 2012, , .		8
115	Effect of stacking order on device performance of bilayer black phosphorene-field-effect transistor. Journal of Applied Physics, 2015, 118, .	1.1	8
116	Analysis of tunneling currents in multilayer black phosphorous and MoS_2 non-volatile flash memory cells. Journal of Computational Electronics, 2016, 15, 129-137.	1.3	8
117	A New FPGA and Programmable SoC Based VLSI Architecture for Histogram Generation of Grayscale Images for Image Processing Applications. Procedia Computer Science, 2016, 93, 139-145.	1.2	8
118	Potentiality of Density-Functional Theory in Analyzing the Devices Containing Graphene-Crystalline Solid Interfaces: A Review. IEEE Transactions on Electron Devices, 2017, 64, 4738-4745.	1.6	8
119	Digital Heritage Interpretation: Learning from the Realm of Real-World. Journal of Interpretation Research, 2017, 22, 53-64.	0.7	8
120	Ab initio study of mono-layer 2-D insulators (X-(OH) ₂ and h-BN) and their use in MTJ memory device. Microsystem Technologies, 2019, 25, 1909-1917.	1.2	8
121	Prediction and Implementation of Graphene and Other Two-Dimensional Material Based Superconductors: A Review. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-9.	1.1	8
122	DFDNM: A Distributed Fault Detection and Node Management Scheme for Wireless Sensor Network. Communications in Computer and Information Science, 2011, , 68-81.	0.4	8
123	Cost Optimal Design of Nonlinear CA based PRPG for Test Applications. , 2005, , .		7
124	Single Error Correcting Finite Field Multipliers Over GF(2m). , 2008, , .		7
125	On Line Testing of Single Feedback Bridging Fault in Cluster Based FPGA by Using Asynchronous Element. , 2008, , .		7
126	Testing of Digital Microfluidic Biochips Using Improved Eulerization Techniques and the Chinese Postman Problem. , 2010, , .		7

#	ARTICLE	IF	CITATIONS
127	A study on emergency contraceptive practice among nursing staff in Sikkim, India-A cross sectional study. Australasian Medical Journal, 2010, , 667-671.	0.1	7
128	Minimizing Thermal Disparities during Placement in 3D ICs. , 2010, , .		7
129	A novel VLSI architecture for Walsh-Hadamard transform. , 2010, , .		7
130	Modelling, detection and diagnosis of multiple faults in cross referencing DMFBs. , 2012, , .		7
131	System on Biochips: A New Design for Integration of Multiple DMFBs. , 2012, , .		7
132	ESOP-Based Synthesis of Reversible Circuit Using Improved Cube List. , 2013, , .		7
133	Distributed Multipath Fault Tolerance Routing Scheme for Wireless Sensor Networks. , 2013, , .		7
134	An ABCD parameter-based modeling and analysis of crosstalk induced effects in single-walled carbon nanotube bundle interconnects. , 2013, , .		7
135	Faulty TSVs identification and recovery in 3D stacked ICs during pre-bond testing. , 2013, , .		7
136	An ABCD Parameter Based Modeling and Analysis of Crosstalk Induced Effects in Multiwalled Carbon Nanotube Bundle Interconnects. , 2014, , .		7
137	An Improved Reversible Circuit Synthesis Approach using Clustering of ESOP Cubes. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-16.	1.8	7
138	Session Based Core Test Scheduling for 3D SOCs. , 2014, , .		7
139	Design and implementation of fast FPGA based architecture for reversible watermarking. , 2014, , .		7
140	A Novel Photosensitive Tunneling Transistor for Near-Infrared Sensing Applications: Design, Modeling, and Simulation. IEEE Transactions on Electron Devices, 2015, 62, 1516-1523.	1.6	7
141	Boolean Difference Technique for Detecting All Missing Gate Faults in Reversible Circuits. , 2015, , .		7
142	Improving the Realization of Multiple-Control Toffoli Gates Using the NCVW Quantum Gate Library. , 2016, , .		7
143	All optical design of hybrid adder circuit using terahertz optical asymmetric demultiplexer. , 2018, , .		7
144	Improved Look-Ahead Approaches for Nearest Neighbor Synthesis of 1D Quantum Circuits. , 2019, , .		7

#	ARTICLE	IF	CITATIONS
145	Fast locking, startup-circuit free, low area, 32-phase analog DLL. The Integration VLSI Journal, 2019, 66, 60-66.	1.3	7
146	Improved Cube List Based Cube Pairing Approach for Synthesis of ESOP Based Reversible Logic. Lecture Notes in Computer Science, 2014, , 129-146.	1.0	7
147	Synthesis of symmetric functions using quantum cellular automata. , 2006, , .		6
148	Design of Reversible Finite Field Arithmetic Circuits with Error Detection. , 2008, , .		6
149	Revisiting fidelity. , 2008, , .		6
150	Region Specific Spatial Domain Image Watermarking Scheme. , 2009, , .		6
151	Method of droplet routing in digital microfluidic biochip. , 2010, , .		6
152	Derivation of Automatic Test Set for Detection of Missing Gate Faults in Reversible Circuits. , 2011, , .		6
153	Simultaneous switching noise and IR drop in graphene nanoribbon power distribution networks. , 2012, , .		6
154	Design of an NoC with on-chip photonic interconnects using adaptive CDMA links. , 2012, , .		6
155	On-Line Error Detection in Digital Microfluidic Biochips. , 2012, , .		6
156	Particle Swarm Optimization Based Circuit Synthesis of Reversible Logic. , 2012, , .		6
157	A design for testability technique for quantum reversible circuits. , 2013, , .		6
158	Optimizing test time for core-based 3-d integrated circuits by a technique of bi-partitioning. , 2014, , .		6
159	RF performance analysis of graphene nanoribbon interconnect. , 2014, , .		6
160	A Cube Pairing Approach for Synthesis of ESOP-Based Reversible Circuit. , 2014, , .		6
161	All Optical Implementation of Mach-Zehnder Interferometer Based Reversible Sequential Counters. , 2015, , .		6
162	Modeling of Crosstalk Induced Effects in Copper-Based Nanointerconnects: An ABCD Parameter Matrix-Based Approach. Journal of Circuits, Systems and Computers, 2015, 24, 1540007.	1.0	6

#	ARTICLE	IF	CITATIONS
163	High-speed decoder design using memristor-based nano-crossbar architecture. , 2016, , .		6
164	Identification of Faulty TSV with a Built-In Self-Test Mechanism. , 2018, , .		6
165	In-memory designing of Delay and Toggle flip-flops utilizing Memristor Aided loGIC (MAGIC). The Integration VLSI Journal, 2019, 66, 24-34.	1.3	6
166	Maximal Defect-Free Component in Nanoscale Crossbar Circuits Amidst Stuck-Open and Stuck-Closed Faults. Journal of Circuits, Systems and Computers, 2019, 28, 1950180.	1.0	6
167	Simulation-Based Power-Loss Optimization of General-Purpose High-Voltage SiC MOSFET Circuit Under High-Frequency Operation. IEEE Access, 2021, 9, 23786-23794.	2.6	6
168	The effect of the stacking arrangement on the device behavior of bilayer MoS2 FETs. Journal of Computational Electronics, 2021, 20, 161-168.	1.3	6
169	Particle Swarm Optimization Based Reversible Circuit Synthesis Using Mixed Control Toffoli Gates. Journal of Low Power Electronics, 2013, 9, 363-372.	0.6	6
170	A new synthesis of symmetric functions. , 0, , .		5
171	C A Based Sensor Node Management Scheme: An Energy Efficient Approach. , 2007, , .		5
172	Analysis, modeling and optimization of transmission gate delay. , 2011, , .		5
173	Group theory based reversible logic synthesis. , 2012, , .		5
174	Unified model for analyzing timing delay and crosstalk effects in Carbon Nanotube interconnects. , 2012, , .		5
175	Implementation of AES Algorithm in UART Module for Secured Data Transfer. , 2012, , .		5
176	Repairing of faulty TSVs using available number of multiplexers in 3D ICs. , 2013, , .		5
177	Built-in-self-test technique for diagnosis of delay faults in cluster-based field programmable gate arrays. IET Computers and Digital Techniques, 2013, 7, 210-220.	0.9	5
178	Investigating the performance of Short Gate Insulator Less Dielectrically Modulated Tunnel Field Effect Transistor based bio-sensors. , 2015, , .		5
179	Design of content addressable memory cell using carbon nanotube field effect transistors. , 2016, , .		5
180	A new heterogeneous droplet routing technique and its simulator to improve route performance in digital microfluidic biochips. , 2016, , .		5

#	ARTICLE	IF	CITATIONS
181	BDD based synthesis technique for design of high-speed memristor based circuits. , 2016, , .		5
182	A testing scheme for mixed-control based reversible circuits. , 2016, , .		5
183	Analysis of delay fault in GNR power interconnects. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2018, 31, e2308.	1.2	5
184	Design and synthesis of improved reversible circuits using AIG&E and MIG&E based graph data structures. IET Computers and Digital Techniques, 2019, 13, 38-48.	0.9	5
185	Quantum-dot Cellular Automata Latches for Reversible Logic Using Wave Clocking Scheme. IETE Journal of Research, 2023, 69, 309-324.	1.8	5
186	FFMS: Fuzzy Based Fault Management Scheme in Wireless Sensor Networks. Communications in Computer and Information Science, 2012, , 30-38.	0.4	5
187	On the Suitability of Single-Walled Carbon Nanotube Bundle Interconnects for High-Speed and Power-Efficient Applications. Journal of Low Power Electronics, 2014, 10, 479-494.	0.6	5
188	Analysis of temperature dependent power supply voltage drop in graphene nanoribbon and Cu based power interconnects. AIMS Materials Science, 2016, 3, 1493-1506.	0.7	5
189	Mapping symmetric functions to hierarchical modules for path-delay fault testability. , 2003, , .		4
190	Easily Testable Implementation for Bit Parallel Multipliers in GF (2 ^m). , 2006, , .		4
191	Solid&E State Regioselective Cyclization Initiated by the Electrophilic Attack on the Double Bond by N&E Bromosuccinimide on Montmorillonite K&E 10 Clay Support under Microwave Irradiation. Synthetic Communications, 2007, 37, 1477-1484.	1.1	4
192	Derivation of Reduced Test Vectors for Bit-Parallel Multipliers over GF(2 ^m). IEEE Transactions on Computers, 2008, 57, 1289-1294.	2.4	4
193	A Galois Field Based Logic Synthesis Approach with Testability. , 2008, , .		4
194	Cell level thermal placement in 3D ICs. , 2010, , .		4
195	Comparative Analysis of Adiabatic Compressor Circuits for Ultra-low Power DSP Application. , 2010, , .		4
196	Optimization of Test Wrapper for TSV Based 3D SOCs. , 2011, , .		4
197	Optimizing Test Wrapper for Embedded Cores Using TSV Based 3D SOCs. , 2011, , .		4
198	Near-optimal Y-routed delay trees in nanometric interconnect design. IET Computers and Digital Techniques, 2011, 5, 36.	0.9	4

#	ARTICLE	IF	CITATIONS
199	A New design of a dual mode bioassay detection analyzer for digital microfluidic biochips. , 2012, , .		4
200	Reversible circuit synthesis using evolutionary algorithm. , 2012, , .		4
201	Voltage controlled current starved delay cell for Positron Emission Tomography specific DLL based high precision TDC implementation. , 2012, , .		4
202	A New Look Ahead Technique for Customized Testing in Digital Microfluidic Biochips. , 2012, , .		4
203	VLSI Architecture for Spread Spectrum Image Watermarking in Walsh-Hadamard Transform Domain Using Binary Watermark. , 2012, , .		4
204	A Cycle Based Reversible Logic Synthesis Approach. , 2013, , .		4
205	Optimal stacking of SOCs in a 3D-SIC for post-bond testing. , 2013, , .		4
206	Digital microfluidic system: A new design for heterogeneous sample based integration of multiple DMFBs. , 2013, , .		4
207	Digital Design and Pipelined Architecture for Reversible Watermarking Based on Difference Expansion Using FPGA. , 2014, , .		4
208	Optimizing DD-based synthesis of reversible circuits using negative control lines. , 2014, , .		4
209	A new algorithm on wavelet based robust invisible digital image watermarking for multimedia security. , 2015, , .		4
210	An adaptive feedback based reversible watermarking algorithm using difference expansion. , 2015, , .		4
211	A Boolean Expression based Template Matching Technique for Optical Circuit Generation. , 2016, , .		4
212	Reliable logic design with defective nano-crossbar architecture. , 2016, , .		4
213	Optimization of Test Wrapper for TSV Based 3D SOCs. Journal of Electronic Testing: Theory and Applications (JETTA), 2016, 32, 511-529.	0.9	4
214	All optical design of cost efficient multiplier circuit using terahertz optical asymmetric demultiplexer. , 2017, , .		4
215	TSV repairing for 3D ICs using redundant TSV. , 2017, , .		4
216	Analysis of Simultaneous Switching Noise and IR-Drop in Side-Contact Multilayer Graphene Nanoribbon Power Distribution Network. Journal of Circuits, Systems and Computers, 2018, 27, 1850001.	1.0	4

#	ARTICLE	IF	CITATIONS
217	Test Diagnosis of Digital Microfluidic Biochips Using Image Segmentation. , 2018, , .		4
218	A High-performance Homogeneous Droplet Routing Technique for MEDA-based Biochips. ACM Journal on Emerging Technologies in Computing Systems, 2019, 15, 1-37.	1.8	4
219	Design Automation and Testing of MEDA-Based Digital Microfluidic Biochips: A Brief Survey. IETE Journal of Research, 2020, 66, 662-676.	1.8	4
220	An Approach for Detection and Localization of Missing Gate Faults in Reversible Circuit. IETE Journal of Research, 2022, 68, 3607-3627.	1.8	4
221	Chip level design in MEDA based biochips: application of daisy chain based actuation. Microsystem Technologies, 2020, 26, 2337-2351.	1.2	4
222	An improved heuristic technique for nearest neighbor realization of quantum circuits in 2D architecture. The Integration VLSI Journal, 2021, 76, 40-54.	1.3	4
223	Virtual Heritage: Exploring Photorealism. Lecture Notes in Computer Science, 2012, , 191-200.	1.0	4
224	Offline Washing Schemes for Residue Removal in Digital Microfluidic Biochips. ACM Transactions on Design Automation of Electronic Systems, 2015, 21, 1-33.	1.9	4
225	Efficient Implementation of Nearest Neighbor Quantum Circuits Using Clustering with Genetic Algorithm. , 2020, , .		4
226	Synthesis of Potentially Bioactive Heterocycles: Thermal [3,3]Sigmatropic Rearrangement of 4-(4-aryloxybut-2-ynyloxy)-6-methyl-2-pyridone. Synthetic Communications, 2006, 36, 809-816.	1.1	3
227	Transition Fault Testability in Bit Parallel Multipliers over $GF(2^m)$. VLSI Test Symposium (VTS), Proceedings, IEEE, 2007, , .	1.0	3
228	An Adaptive BIST Design for Detecting Multiple Stuck-Open Faults in a CMOS Complex Cell. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 2838-2845.	2.4	3
229	Accelerated Functional Testing of Digital Microfluidic Biochips. , 2008, , .		3
230	On the synthesis of attack tolerant cryptographic hardware. , 2010, , .		3
231	A Novel Signed Array Multiplier. , 2010, , .		3
232	Timing Analysis in Carbon Nanotube Interconnects with Process, Temperature, and Voltage Variations. , 2010, , .		3
233	Build-in-Self-Test of FPGA for diagnosis of delay fault. , 2011, , .		3
234	IR drop analysis in single- and multi-wall carbon nanotube power interconnects in sub-nanometer designs. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
235	A Best Path Selection Based Parallel Router for DMFBs. , 2011, , .		3
236	RF performance analysis of single- and multi-wall carbon nanotube interconnect. , 2011, , .		3
237	A novel placement algorithm for multi-pin digital microfluidic biochips. , 2011, , .		3
238	A simple analytical model of silicon on insulator tunnel FET. , 2012, , .		3
239	A New Algorithm for Routing-Aware Net Placement in Cross-Referencing Digital Microfluidic Biochips. , 2012, , .		3
240	Automated path planning for washing in digital microfluidic biochips. , 2012, , .		3
241	Efficient and Compact Electrical Modeling of Multi Walled Carbon Nanotube Interconnects. , 2012, , .		3
242	Reversible synthesis of symmetric boolean functions based on unate decomposition. , 2013, , .		3
243	Novel designs of digital detection analyzer for intelligent detection and analysis in digital microfluidic biochips. , 2013, , .		3
244	Multi-objective optimization algorithm for efficient pin-constrained droplet routing technique in digital microfluidic biochip. , 2013, , .		3
245	Diagnosis of SMGF in ESOP Based Reversible Logic Circuit. , 2014, , .		3
246	Design of a Low Complexity and Fast Hardware Architecture for Digital Image Watermarking in FWHT Domain on FPGA. , 2014, , .		3
247	Impact of Line Resistance Variations on Crosstalk Delay and Noise in Multilayer Graphene Nano Ribbon Interconnects. , 2014, , .		3
248	A Novel GNR Interconnect Model to Reduce Crosstalk Delay. , 2014, , .		3
249	A new algorithm for grayscale image histogram computation. , 2015, , .		3
250	Recovery of faulty TSVs in 3D ICs. , 2015, , .		3
251	Performance analysis of gate material engineering in enhancement mode n++GaN/InAlN/AlN/GaN HEMTs. , 2016, , .		3
252	Novel Wire Planning Schemes for Pin Minimization in Digital Microfluidic Biochips. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 3345-3358.	2.1	3

#	ARTICLE	IF	CITATIONS
253	Effect of Ca(OH) ₂ , hBN and Mg(OH) ₂ based insulators as composite oxides in magnetic tunnel junction memory device properties. , 2017, , .		3
254	Spin Dependent Electronic Transport in Edge Oxidized Zigzag Graphene Nanoribbon. Materials Today: Proceedings, 2018, 5, 9892-9898.	0.9	3
255	Optimized Concurrent Testing of Digital Microfluidic Biochips. , 2018, , .		3
256	All optical implementation of universal shift-register using terahertz optical asymmetric de-multiplexer based Optical Devices. , 2018, , .		3
257	A phototransistor based on field-effect with bias-dependent mode switching from thermionic to tunneling. , 2018, , .		3
258	Improved circuit synthesis approach for exclusive-OR product-based reversible circuits. IET Computers and Digital Techniques, 2018, 12, 167-175.	0.9	3
259	Hardware Efficient Convolution Processing Unit for Deep Neural Networks. , 2019, , .		3
260	Micro-electrode-dot Array Based Biochips : Advantages of Using Different Shaped CMAAs. , 2019, , .		3
261	Boltzmann transport equation-based semi-classical drain current model for bilayer GFET including scattering effects. IET Circuits, Devices and Systems, 2019, 13, 456-464.	0.9	3
262	A Heuristic Qubit Placement Strategy for Nearest Neighbor Realization in 2D Architecture. Communications in Computer and Information Science, 2019, , 593-605.	0.4	3
263	Approach of genetic algorithm for power-aware testing of 3D IC. IET Computers and Digital Techniques, 2019, 13, 383-396.	0.9	3
264	Carrier Transport and Thermoelectric Properties of Differently Shaped Germanene (Ge) and Silicene (Si) Nanoribbon Interconnects. IEEE Transactions on Electron Devices, 2019, 66, 664-669.	1.6	3
265	An Accelerated Prototype with Movidius Neural Compute Stick for Real-Time Object Detection. , 2020, , .		3
266	Function-mapping on defective nano-crossbars with enhanced reliability. Journal of Computational Electronics, 2020, 19, 555-564.	1.3	3
267	High Performance Kernel Architecture for Convolutional Neural Network Acceleration. Journal of Circuits, Systems and Computers, 2021, 30, .	1.0	3
268	Droplet Transportation in MEDA-Based Biochips: An Enhanced Technique for Intelligent Cross-Contamination Avoidance. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 1451-1464.	2.1	3
269	Temperature Dependent IR-Drop Analysis in Graphene Nanoribbon Based Power Interconnect. Journal of Nano- and Electronic Physics, 2016, 8, 01001-1-01001-4.	0.2	3
270	Efficient Quantum Implementation of Majority-Based Full Adder Circuit Using Clifford+T-Group. Lecture Notes in Electrical Engineering, 2022, , 53-63.	0.3	3

#	ARTICLE	IF	CITATIONS
271	An adaptive BIST to detect multiple stuck-open faults in CMOS circuits. , 1999, , .		2
272	BIST design for detecting multiple stuck-open faults in CMOS circuits using transition count. Journal of Computer Science and Technology, 2002, 17, 731-737.	0.9	2
273	Secure Testable S-box Architecture for Cryptographic Hardware Implementation. Computer Journal, 2010, 53, 581-591.	1.5	2
274	Runtime Congestion and Crosstalk Aware Router for FPGA Using Jbits3.0 for Partial Reconfigurable Application. , 2011, , .		2
275	Post-bond Stack Testing for 3D Stacked IC. Lecture Notes in Computer Science, 2012, , 59-68.	1.0	2
276	Diametric Mesh of Tree (DiaMoT) Routing Framework for High Performance NoCs: A Hierarchical Approach. , 2012, , .		2
277	Obstacle discovery and localization scheme for wireless sensor network. , 2012, , .		2
278	Delay Uncertainty in Single- and Multi-Wall Carbon Nanotube Interconnects. Lecture Notes in Computer Science, 2012, , 289-299.	1.0	2
279	Modeling of crosstalk delay and noise in single-walled carbon nanotube bundle interconnects. , 2013, , .		2
280	Optimizing test architecture of 3D stacked ICs for partial stack/complete stack using hard SoCs. , 2013, , .		2
281	Bridging fault detection in cluster based FPGA by using Muller C element. Computers and Electrical Engineering, 2013, 39, 2469-2482.	3.0	2
282	An Intelligent Biochip System for Diagnostic Process Flow Based Integration of Combined Detection Analyzer. , 2013, , .		2
283	A new customized testing technique using a novel design of droplet motion detector for digital microfluidic Biochip systems. , 2013, , .		2
284	Multilevel Homogeneous Detection Analyzer for Medical Diagnostic Application in Digital Microfluidic Biochips. , 2014, , .		2
285	A 45 uW 13 pJ/conv-step 7.4-ENOB 40 kS/s SAR ADC for digital microfluidic biochip applications. , 2014, , .		2
286	Session based core test scheduling for minimizing the testing time of 3D SOC. , 2014, , .		2
287	A new feedback circuit based charge-pump for wide-range and low-jitter DLL suitable for PET imaging applications. , 2014, , .		2
288	A Novel Wire Planning Technique for Optimum Pin Utilization in Digital Microfluidic Biochips. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
289	Fault detection of continuous time filter using nonlinear feedback based OBIST. , 2015, , .		2
290	Development of AGC and channel equalization algorithm for multi-channel RF system in FPGA. , 2015, , .		2
291	Exact Synthesis of Reversible Circuits Using A* Algorithm. Journal of the Institution of Engineers (India): Series B, 2015, 96, 121-130.	1.3	2
292	Detection of Crosstalk Faults in Field Programmable Gate Arrays (FPGA). Journal of the Institution of Engineers (India): Series B, 2015, 96, 227-236.	1.3	2
293	3D integration in biochips: New proposed architectures for 3D applications in ATDA based digital microfluidic biochips. , 2015, , .		2
294	Cross-reference EWOD driving scheme and cross-contamination aware net placement technique for MEDA based DMFBs. , 2016, , .		2
295	Reversible Synthesis of Symmetric Functions with a Simple Regular Structure and Easy Testability. ACM Journal on Emerging Technologies in Computing Systems, 2016, 12, 1-29.	1.8	2
296	VLSI thermal placement issues: A cooperative game theory based approach. , 2016, , .		2
297	Design of a High-Performance CDMA-Based Broadcast-Free Photonic Multi-Core Network on Chip. Transactions on Embedded Computing Systems, 2016, 15, 1-30.	2.1	2
298	Modeling and Performance Analysis of Graphene Nanoribbon Interconnects. The National Academy of Sciences, India, 2017, 40, 325-329.	0.8	2
299	Design and Investigation on Bioinverter and Bioring-Oscillator for Dielectrically Modulated Biosensing Applications. IEEE Nanotechnology Magazine, 2017, 16, 974-981.	1.1	2
300	Effect of Barrier Thickness on Linearity of Underlap AlInN/GaN DG-MOSHEMTs. Nano, 2017, 12, 1750009.	0.5	2
301	Detection and localization of appearance faults in reversible circuits. , 2017, , .		2
302	A Hybrid Atomistic - Semi-Analytical Modeling on Schottky Barrier Au-MoS ₂ -Au MOSFETs. , 2018, , .		2
303	Incorporation of Tensile and Compressive Channel Stress by Modulating SiGe Stressor Length in Embedded Source/Drain Si-FinFET Architecture. , 2018, , .		2
304	Performance modeling of intercalation doped graphene-nanoribbon interconnects. , 2018, , .		2
305	Improved Designs for All-Optical Adder Circuit Using Mach-Zehnder Interferometers (MZI) Based Optical Components. Journal of the Institution of Engineers (India): Series B, 2018, 99, 451-465.	1.3	2
306	MOSFET optimization toward power efficient circuit design. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
307	Investigation of process induced stress in the channel of a SiGe embedded source/drain Ge-FinFET architecture. , 2018, , .		2
308	Estimation of non-linear effects for Capacitive DAC in SAR ADC: An Analytical Model. , 2019, , .		2
309	Boolean Difference Technique for Detecting All Missing Gate and Stuck-at Faults in Reversible Circuits. Journal of Circuits, Systems and Computers, 2019, 28, 1950212.	1.0	2
310	A Surface Potential-Based Model for Dual Gate Bilayer Graphene Field Effect Transistor Including the Capacitive Effects. Journal of Circuits, Systems and Computers, 2019, 28, 1950241.	1.0	2
311	Prediction of Adsorption Probability of Oxidizing and Reducing Species on 2-D Hybrid Junction of rGO-ZnO From First Principle Analysis. IEEE Nanotechnology Magazine, 2019, 18, 119-125.	1.1	2
312	Thermal Stability Analysis of Graphene Nano-ribbon Interconnect and Applicability for Terahertz Frequency. The National Academy of Sciences, India, 2020, 43, 253-257.	0.8	2
313	Improving the Designs of Nearest Neighbour Quantum Circuits for 1D and 2D Architectures. IETE Journal of Research, 2023, 69, 340-353.	1.8	2
314	Reversible Circuit Synthesis of Symmetric Functions Using a Simple Regular Structure. Lecture Notes in Computer Science, 2013, , 182-195.	1.0	2
315	A New Combined Routing Technique in Digital Microfluidic Biochip. Advances in Intelligent Systems and Computing, 2019, , 441-450.	0.5	2
316	Synthesis of ESOP-Based Reversible Logic Using Positive Polarity Reed-Muller Form. Lecture Notes in Electrical Engineering, 2014, , 363-376.	0.3	2
317	Symmetric Function Based Memristive Polimino PUF with Enhanced Security. , 2020, , .		2
318	An Efficient 2D Mapping of Quantum Circuits to Nearest Neighbor Designs. , 2021, , .		2
319	Testable design of GRM network with EXOR-tree for detecting stuck-at and bridging faults. , 0, , .		1
320	Universal test set for detecting stuck-at and bridging faults in double fixed-polarity Reed-Muller programmable logic arrays. IEE Proceedings: Computers and Digital Techniques, 2006, 153, 109.	1.6	1
321	Minimum-Congestion Placement for Y-interconnects: Some studies and observations. , 2007, , .		1
322	Constant Function Independent Test Set for Fault Detection in Bit Parallel Multipliers in $GF(2^m)$. , 2007, , .		1
323	A Method for the Multi-Net Multi-Pin Routing Problem with Layer Assignment. , 2009, , .		1
324	Error Detecting Dual Basis Bit Parallel Systolic Multiplication Architecture over $GF(2^m)$. , 2009, , .		1

#	ARTICLE	IF	CITATIONS
325	On the synthesis of bit-parallel Galois field multipliers with on-line SEC and DED. International Journal of Electronics, 2009, 96, 1161-1173.	0.9	1
326	C-testable S-box implementation for secure advanced encryption standard. , 2009, , .		1
327	A Galois field-based logic synthesis with testability. IET Computers and Digital Techniques, 2010, 4, 263-273.	0.9	1
328	Simplified bit parallel systolic multipliers for special class of Galois field (2m) with testability. IET Computers and Digital Techniques, 2010, 4, 428-437.	0.9	1
329	Design and analysis of tree-multiplier using single-clocked energy efficient adiabatic Logic. , 2011, , .		1
330	Crosstalk aware coupled line delay tree construction for on-chip interconnects. , 2011, , .		1
331	Optimizing Test Architecture for TSV Based 3D Stacked ICs Using Hard SOCs. , 2011, , .		1
332	New technique for testing of delay fault in cluster based FPGA. , 2011, , .		1
333	Pseudo-Parallel Datapath Structure for Power Optimal Implementation of 128-pt FFT/IFFT for WPAN. Circuits, Systems, and Signal Processing, 2011, 30, 871-882.	1.2	1
334	Wrapper design of embedded cores for three dimensional system-on-chips (SoC) using available TSVs. , 2011, , .		1
335	VLSI Architecture for Spatial Domain Spread Spectrum Image Watermarking Using Gray-Scale Watermark. Lecture Notes in Computer Science, 2012, , 375-376.	1.0	1
336	A Generalized Wavelet Transformation Technique for High Selectivity over a Wide Frequency Range. , 2012, , .		1
337	A detail simulation study on Extended Source Ultra-Thin Body Double-Gated Tunnel FET. , 2012, , .		1
338	Analytical modeling of crosstalk effects in coupled copper interconnects in deep sub micron technology. , 2012, , .		1
339	A study on the performance of stress induced p-channel MOSFETs with embedded Si¹Ge^x source/drain. , 2012, , .		1
340	A novel design technique for effective SCE control in nano-scaled devices using a buried metal. , 2012, , .		1
341	Parallel operation of four spark gaps in a pulser system. , 2012, , .		1
342	Analysis and study of different parameters affecting the I–V characteristics of tunnel-FET transistor. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
343	Binary Difference Based Test Data Compression for NoC Based SoCs. , 2012, , .		1
344	Multiplier-less VLSI architecture of 1-D Hilbert transform pair using Biorthogonal Wavelets. , 2013, , .		1
345	Multiplier-less VLSI architecture of 1-D Hilbert transform pair using Biorthogonal Wavelets for QCM-SS image watermarking. , 2013, , .		1
346	Automated parallel detection based analyzer for integrated bioassays in digital microfluidic biochip. , 2013, , .		1
347	A 1.8 V 64.9 μ W 54.1 dB SNDR 1 st order sigma-delta modulator design using clocked comparator Based Switched Capacitor technique. , 2013, , .		1
348	Power constraints test scheduling of 3D stacked ICs. , 2013, , .		1
349	High repetitive switching of parallel micro-plasma spark gaps. , 2013, , .		1
350	Impact of Inductance on the Performance of Single Walled Carbon Nanotube Bundle Interconnects. , 2013, , .		1
351	An Area and Power Efficient Dynamic TDMA Based Photonic Network on Chip. , 2013, , .		1
352	A new technique for layout based functional testing of modules in Digital Microfluidic Biochips. , 2014, , .		1
353	Automated two stage detection and analyzer system in multipartitioned Digital Microfluidic Biochips. , 2014, , .		1
354	All optical implementation of Mach-Zehnder interferometer based reversible sequential circuit. , 2014, , .		1
355	Electrical transport in graphene nanoribbon interconnect. , 2014, , .		1
356	Optical detection in Biochips: A fuzzy based detection analyzer for homogeneous samples in DMFBs. , 2014, , .		1
357	Synthesis of ESOP-based reversible logic using negative polarity reed-muller form. , 2014, , .		1
358	Charge pump circuit with improved absolute current deviation and increased dynamic output voltage range across PVT variations. , 2015, , .		1
359	Optimizing test time for core-based 3-D integrated circuits by genetic algorithm. , 2015, , .		1
360	Improved supply regulation and temperature compensated current reference circuit with low process variations. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
361	Strain modulated variations in monolayer phosphorene n-MOSFET. , 2015, , .		1
362	Optimisation of test architecture in three-dimensional stacked integrated circuits for partial stack/complete stack using hard system-on-chips. IET Computers and Digital Techniques, 2015, 9, 268-274.	0.9	1
363	TSV-aware 3-D IC structural planning with irregular die-size. , 2016, , .		1
364	Online testing of SMGF in ESOP based reversible circuit. , 2016, , .		1
365	Synchronous location-aware media and augmented visualization for real world tourist (SMART): An application for Khalifatabad heritage site, Bagerhat, Bangladesh. , 2016, , .		1
366	An automated design of pin-constrained digital microfluidic biochip on MEDA architecture. , 2016, , .		1
367	Analytical study of BTE based multilayer GFET model. , 2016, , .		1
368	Impact of mutual inductance on the crosstalk induced effects in single-walled carbon nanotube bundle interconnects. , 2016, , .		1
369	Design of 9-transistor content addressable memory cells using Schottky-barrier carbon nanotube field effect transistors. , 2016, , .		1
370	A Verilog-A based semiclassical model for dual gated graphene field-effect transistor. , 2016, , .		1
371	Low noise and low power switched biased CSA with clocked reset and minimal PVT variation for APD based positron emission tomography. Analog Integrated Circuits and Signal Processing, 2016, 88, 495-504.	0.9	1
372	Effect of Temperature & phonon scattering on the Drain current of a MOSFET using SL-MoS ₂ as its channel material. Journal of Non-Crystalline Solids, 2017, 463, 108.	1.5	1
373	Effect of doping in p-GaN gate on DC performances of AlGaN/GaN normally-off scaled HFETs. , 2017, , .		1
374	Performance Analysis of Schottky Barrier Height Modulation in Strained (10, 0) MoS ₂ Armchair Nano Ribbon-Metal Junction. , 2018, , .		1
375	Soft fault detection in analog circuits from probability density function. , 2018, , .		1
376	Adsorption probability of CH ₄ , H ₂ O and H ₂ in two-dimensional zinc oxide matrix: A prediction by DFT analysis. , 2018, , .		1
377	Analysis of Temperature-Dependent Crosstalk for Graphene Nanoribbon and Copper Interconnects. IETE Journal of Research, 2019, , 1-12.	1.8	1
378	A Complete Routing Simulator for Digital Microfluidic Biochip. International Journal of Information System Modeling and Design, 2019, 10, 70-85.	0.9	1

#	ARTICLE	IF	CITATIONS
379	An Online Testing Scheme for Detection of Gate Faults in ESOP-Based Reversible Circuit. Journal of the Institution of Engineers (India): Series B, 2019, 100, 309-319.	1.3	1
380	Empirical Drain Current Model of Graphene Field-Effect Transistor for Application as a Circuit Simulation Tool. IETE Journal of Research, 2022, 68, 645-657.	1.8	1
381	Fault-tolerant Quantum Implementation of 1-bit and 4-bit Comparator Circuit using Clifford+T-group. , 2019, , .		1
382	Efficient Implementation of Fault-Tolerant 4:1 Quantum Multiplexer (QMUX) Using Clifford+T-Group. , 2019, , .		1
383	Detection and Identification of Gate Faults in Reversible Circuit. Lecture Notes in Electrical Engineering, 2020, , 169-184.	0.3	1
384	Improving the Designs of ESOP-Based Reversible Circuits. Lecture Notes in Electrical Engineering, 2020, , 49-64.	0.3	1
385	Linear Nearest Neighbor Realization of Quantum Circuits Using Clustering and Look-ahead Policy. Journal of Circuits, Systems and Computers, 2020, 29, 2050263.	1.0	1
386	Machine Learning based Temperature Estimation for Test Scheduling of 3D ICs. , 2020, , .		1
387	Fault-Tolerant Implementation of Quantum Arithmetic and Logical Unit (QALU) Using Clifford+T-Group. Advances in Intelligent Systems and Computing, 2021, , 833-844.	0.5	1
388	Audio-augmented arboreality: wildflowers and language. Digital Creativity, 2021, 32, 22-37.	0.8	1
389	A survey on pristine and intercalation doped graphene nanoribbon interconnect for future VLSI circuits. AIMS Materials Science, 2021, 8, 247-260.	0.7	1
390	Neural Network based Indirect Estimation of Functional Parameters of Amplifier by extracting features from Wavelet Transform. , 2021, , .		1
391	Fault-tolerant quantum implementation of conventional decoder logic with enable input. IET Circuits, Devices and Systems, 2021, 15, 415-423.	0.9	1
392	Photogrammetry: What, How, and Where. , 2021, , 25-37.		1
393	Hardware Design with Real-Time Implementation for Security of Medical Images and EPMR. Circuits, Systems, and Signal Processing, 0, , 1.	1.2	1
394	BDD-based synthesis approach for in-memory logic realization utilizing Memristor Aided loGIC (MAGIC). The Integration VLSI Journal, 2021, 81, 254-267.	1.3	1
395	A Photonic Network on Chip with CDMA Links. Lecture Notes in Computer Science, 2012, , 377-378.	1.0	1
396	A New Homogeneous Droplet Transportation Algorithm and Its Simulator to Boost Route Performance in Digital Microfluidic Biochips. Advances in Intelligent Systems and Computing, 2019, , 429-440.	0.5	1

#	ARTICLE	IF	CITATIONS
397	Optimum Test Set for Bridging Fault Detection in Reversible Circuits. Proceedings of the Asian Test Symposium, 2007, , .	0.0	1
398	Study of TMR with Different Ferromagnetic Material and Variations in Spin-Split, Thickness and Oxide Barrier Height of a MTJ Memory Device. Journal of Nanoelectronics and Optoelectronics, 2018, 13, 245-250.	0.1	1
399	Prevention of Highly Power-Efficient Circuits due to Short-Channel Effects in MOSFETs. IEICE Transactions on Electronics, 2019, E102.C, 487-494.	0.3	1
400	MDVM System Concept, Paging Latency and Round-2 Randomized Leader Election Algorithm in SG. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2006, 10, 752-760.	0.5	1
401	Field Programmable Gate Array and System-on-Chip Based Implementation of Discrete Fast Walsh-Hadamard Transform Domain Image Watermarking Architecture for Real-Time Applications. Journal of Low Power Electronics, 2015, 11, 375-386.	0.6	1
402	An Angular Steiner Tree Based Global Routing Algorithm for Graphene Nanoribbon Circuit. Communications in Computer and Information Science, 2019, , 670-681.	0.4	1
403	An Approach for Detection of Node Displacement Fault (NDF) in Reversible Circuit. Communications in Computer and Information Science, 2019, , 605-616.	0.4	1
404	Effect of Volumetric Split-Errors on Reactant-Concentration During Sample Preparation with Microfluidic Biochips. Advances in Intelligent Systems and Computing, 2020, , 159-165.	0.5	1
405	Bio-inspired Routing in DMFB. , 2020, , .		1
406	FPGA based Structural Radial Basis Function Neural Network with Hybrid Optimization for Neural Activity. , 2020, , .		1
407	An improved synthesis technique for optical circuits using MIG and XMG. Microelectronics Journal, 2022, 120, 105341.	1.1	1
408	DFT with Universal Test Set for All Missing Gate Faults in Reversible Circuits. Journal of Circuits, Systems and Computers, 2022, 31, .	1.0	1
409	Operating-Condition Optimization of MG-MOSFETs for Low-Voltage Application. , 2022, , .		1
410	Bridging fault detection in double fixed-polarity Reed-Muller (DFPRM) PLA. , 0, , .		0
411	Efficient Testable Bit Parallel Multipliers over $GF(2^m)$ with Constant Test set. , 2007, , .		0
412	Testable Design of Digital Summation Threshold Logic Array for Synthesis of Symmetric Functions. International Journal of Computers and Applications, 2007, 29, 115-123.	0.8	0
413	Area efficient pseudo-parallel Galois field multipliers. , 2007, , .		0
414	Implementation of Ultra Low-Power 8 Bit CLA Using Single Phase Adiabatic Dynamic Logic. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
415	SSMCA: CA based Segmented Sensor Network Management scheme. , 2010, , .		0
416	Test Generation in Systolic Architecture for Multiplication Over $GF(2^m)$. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1366-1371.	2.1	0
417	Low complexity montgomery multiplication architecture for elliptic curve cryptography over $GF(p^m)$. , 2010, , .		0
418	Non-preemptive test scheduling for Network-on-Chip(NoC) based systems by reusing NoC as TAM. , 2010, , .		0
419	DJSS: Distributed job scheduling scheme for WSN. , 2011, , .		0
420	A Group-Preferential Parallel-Routing Algorithm for Cross-Referencing Digital Microfluidic Biochips. , 2011, , .		0
421	Routing-aware placement technique for intelligent collision avoidance in digital microfluidic biochips. , 2011, , .		0
422	Fast high-performance algorithms for multi-pin droplet routing in digital microfluidic biochips. , 2011, , .		0
423	An intelligent compaction technique for pin constrained routing in cross referencing digital microfluidic biochips. , 2012, , .		0
424	Analytical study of the effect of asymmetric gate bias on the performance of double gate TFET. , 2012, , .		0
425	A new digital analyzer for optically detected samples in Digital Microfluidic Biochips. , 2012, , .		0
426	Performance analysis and simulation study of a Sandwiched Barrier Tunnel FET. , 2012, , .		0
427	Partitioning-based wirelength estimation technique for Y-routing. , 2012, , .		0
428	A novel high performance routing technique for Cross-referencing DMFBs. , 2012, , .		0
429	VLSI Architecture for Spread Spectrum Image Watermarking Using Binary Watermark. , 2012, , .		0
430	Design of 4-Bit Array Multiplier Using Multi-wall Carbon Nanotube Interconnects. , 2012, , .		0
431	Modeling the channel potential and threshold voltage of a fully depleted Double Gate Junctionless FET. , 2012, , .		0
432	An evolutionary approach to reversible logic synthesis using output permutation. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
433	Feedback based automated detection analysis in Digital Microfluidic Biochip Systems. , 2013, , .		0
434	Design of an improved algorithm for blind digital image watermarking using both grayscale and binary watermark in DFWHT domain. , 2014, , .		0
435	A transformation based heuristic synthesis approach for reversible circuits. , 2014, , .		0
436	A layout based customized testing technique for total microfluidic operations in digital microfluidic biochips. , 2014, , .		0
437	Modeling of crosstalk induced effects in nanoscale copper interconnects. , 2014, , .		0
438	Analysis of design-oriented compact model for zigzag semiconducting CNTFETs. , 2014, , .		0
439	A low power, low jitter DLL based low frequency (250 kHz) clock generator. International Journal of Signal and Imaging Systems Engineering, 2014, 7, 3.	0.6	0
440	Adaptive CDMA based multicast method for photonic networks on chip. , 2015, , .		0
441	Modeling of crosstalk induced overshoot/undershoot effects in Multilayer Graphene Nanoribbon Interconnects. , 2015, , .		0
442	Decision-based Biochips: A novel design for concurrent execution of networked bioassays integrated in scalable DMFBs. , 2015, , .		0
443	A new sample preparation technique for linear dilution gradient with minimal sample utilization and waste generation in DMFBs. , 2015, , .		0
444	Analytical drain current model for graphene metal-oxide semiconductor field-effect transistor. , 2015, , .		0
445	Investigating the performance of SiGe embedded dual source p-FinFET architecture. Superlattices and Microstructures, 2016, 98, 37-45.	1.4	0
446	Delay minimization of multilayer graphene nanoribbon based interconnect using wire sizing method. , 2016, , .		0
447	A synthesis approach for ESOP-based reversible circuit. , 2016, , .		0
448	Temperature dependent IR-drop and delay analysis in side-contact multilayer graphene nanoribbon based power interconnects. , 2016, , .		0
449	Synthesis aware sample preparation techniques using random sample sets in DMFB. , 2016, , .		0
450	Improving the Design of Nearest Neighbor Quantum Circuits in 2D Space. Communications in Computer and Information Science, 2017, , 421-426.	0.4	0

#	ARTICLE	IF	CITATIONS
451	Computational study of Silicene-CNT double junctions. , 2017, , .		0
452	OTORNoC: Optical tree of rings network on chip for 1000 core systems. , 2017, , .		0
453	Adaptive medical detection system: An iterative averaging method for automated detection analysis using DMFBs. , 2017, , .		0
454	Performance analysis of 2D Graphene FET embedded with hexagonal boron nitride clusters. , 2017, , .		0
455	A novel reversible synthesis of array multiplier. , 2018, , .		0
456	Computing Fr�chet Distance Metric Based L-Shape Tile Decomposition for E-Beam Lithography. , 2018, , .		0
457	Implementation of nearest neighbor quantum circuit with low quantum cost. , 2018, , .		0
458	Clifford+T-based quantum high speed multiplier. , 2018, , .		0
459	Effect of Uniaxial Strain on Properties of Blue Phosphorene-CNT Heterojunction. , 2019, , .		0
460	A low power driver amplifier for Fully Differential ADC. , 2019, , .		0
461	Test Generation from Boolean Generator for Detection of Missing Gate Faults (MGF) in Reversible Circuit Using Boolean Difference Method. IETE Journal of Research, 2019, , 1-17.	1.8	0
462	Optimizing Quantum Circuits for Modular Exponentiation. , 2019, , .		0
463	Optimization of DC-DC Power Converter Design with Second Generation HiSIM_HV Model. , 2019, , .		0
464	Comparative Stability Analysis of Pristine and AsF5 Intercalation Doped Top Contact Graphene Nano Ribbon Interconnects. , 2019, , .		0
465	Distortion Analysis Using Volterra Kernel for Amplifier Circuits. , 2019, , .		0
466	Detection of Hardware Trojan in Presence of Sneak Path in Memristive Nanocrossbar Circuits. , 2021, , .		0
467	A Brief Review of Recent Studies on Performance Improvement of Graphene Nanoribbon Interconnect. , 2021, , .		0
468	Implementation of Symmetric Functions Using Memristive Nanocrossbar Arrays and their Application in Cryptography. Journal of Circuits, Systems and Computers, 0, , 2150223.	1.0	0

#	ARTICLE	IF	CITATIONS
469	Computational analysis of doped (10, 0) MoS ₂ ANR metal junction by Schottky Barrier height modulation. , 2021, , .		0
470	Complementary Memresistive Switch Based Realization of Delay and Toggle Flip-Flop. , 2021, , .		0
471	VLSI Architecture for Bit Parallel Systolic Multipliers for Special Class of GF(2 ^m) Using Dual Bases. Lecture Notes in Computer Science, 2012, , 258-269.	1.0	0
472	Simulation Study of an Ultra Thin Body Silicon On Insulator Tunnel Field Effect Transistor. Lecture Notes in Computer Science, 2012, , 379-380.	1.0	0
473	A New Method for Route Based Synthesis and Placement in Digital Microfluidic Biochips. Communications in Computer and Information Science, 2013, , 361-375.	0.4	0
474	An Approach to Reversible Logic Synthesis Using Input and Output Permutations. Lecture Notes in Computer Science, 2014, , 92-110.	1.0	0
475	Selected Articles from the IEEE ISD 2014 Conference. Journal of Low Power Electronics, 2015, 11, 373-374.	0.6	0
476	Modeling and Analysis of Transient Heat for 3D IC. Communications in Computer and Information Science, 2017, , 365-375.	0.4	0
477	Hausdorff Distance Driven L-Shape Matching Based Layout Decomposition for E-Beam Lithography. Communications in Computer and Information Science, 2017, , 287-295.	0.4	0
478	Selected Articles from the IEEE ISD 2016 Conference. Journal of Low Power Electronics, 2017, 13, 605-606.	0.6	0
479	Chemically Functionalized Penta-Graphene for Electronic Device Applications: Journey from Theoretical Prediction to Practical Implementation. Carbon Nanostructures, 2019, , 335-361.	0.1	0
480	A Survey Report on Recent Progresses in Nearest Neighbor Realization of Quantum Circuits. Advances in Intelligent Systems and Computing, 2020, , 57-68.	0.5	0
481	HLS Based Implementation of Modified DE-RIW Algorithm on FPGA and P-SoC. , 2020, , .		0
482	Fusion of Information for Fault Diagnosis in Analog Circuits. , 2020, , .		0
483	Binary decision diagram based synthesis technique for improved mapping of Boolean functions inside memristive crossbar slices. IET Computers and Digital Techniques, 2021, 15, 112-124.	0.9	0
484	PEE Based Reversible Watermarking Algorithm for Authentication and Security of Medical Images. , 2020, , .		0
485	Experimental Verification of a New Oscillation-based Test Algorithm for Analog Circuits. IETE Journal of Research, 0, , 1-11.	1.8	0
486	3-D IC: An Overview of Technologies, Design Methodology, and Test Strategies. Advances in Intelligent Systems and Computing, 2021, , 859-871.	0.5	0

#	ARTICLE	IF	CITATIONS
487	Potentiality of Data Fusion in Analog Circuit Fault Diagnosis. , 2020, , .		0
488	A Novel Heuristic Method for Linear Nearest Neighbour Realization of Reversible Circuits. IETE Journal of Research, 2023, 69, 7169-7187.	1.8	0
489	Optimization of Low-Voltage-Operating Conditions for MG-MOSFETs. IEEE Journal of the Electron Devices Society, 2022, 10, 913-919.	1.2	0