Manoj Kumar Majumder

List of Publications by Year
in descending order

Version: 2024-02-01

59 papers	764 citations	687220 13 h-index	580701 25 g-index
60 all docs	60 docs citations	60 times ranked	204 citing authors

#	Article	IF	Citations
1	Compact AC Modeling of Eddy Current for Cylindrical Through Silicon Via. IETE Journal of Research, 2023, 69, 5399-5411.	1.8	2
2	Impact of Interconnect Spacing on Crosstalk for Multi-layered Graphene Nanoribbon. IETE Journal of Research, 2022, 68, 1064-1073.	1.8	14
3	High-Speed Interconnects: History, Evolution, and the Road Ahead. IEEE Microwave Magazine, 2022, 23, 66-82.	0.7	8
4	Relative stability of shielded top- and side-contact MLGNR interconnects. International Journal of Electronics Letters, 2021, 9, 447-458.	0.7	1
5	Role of Through Silicon Via in 3D Integration: Impact on Delay and Power. Journal of Circuits, Systems and Computers, 2021, 30, 2150051.	1.0	12
6	Modeling and Fabrication Aspects of Cu- and Carbon Nanotube-Based Through-Silicon Vias. IETE Journal of Research, 2021, 67, 377-393.	1.8	5
7	Tunnel FETâ€based ultraâ€lightweight reconfigurable TRNG and PUF design for resourceâ€constrained internet of things. International Journal of Circuit Theory and Applications, 2021, 49, 2299-2311.	1.3	4
8	First Principle Study of Electronic Property of Doped/Undoped Graphene Structure for Interconnect Application. , 2021, , .		0
9	An analysis of the eddy effect in through-silicon vias based on Cu and CNT bundles: the impact on crosstalk and power. Journal of Computational Electronics, 2021, 20, 2456-2470.	1.3	2
10	Hardware Security Exploiting Post-CMOS Devices: Fundamental Device Characteristics, State-of-the-Art Countermeasures, Challenges and Roadmap. IEEE Circuits and Systems Magazine, 2021, 21, 4-30.	2.6	9
11	Signal Integrity Analysis for Diameter-Dependent Mixed Carbon Nanotube Bundle Interconnects. Advances in Intelligent Systems and Computing, 2020, , 481-489.	0.5	1
12	Low area overhead DPA countermeasure exploiting tunnel transistorâ€based random number generator. IET Circuits, Devices and Systems, 2020, 14, 640-647.	0.9	4
13	Analysis of top- and side-contact MLGNR interconnects: impact on crosstalk, stability, and electromigration. Journal of Computational Electronics, 2020, 19, 1588-1596.	1.3	7
14	Tunnel FETâ€based ultralowâ€power and hardwareâ€secure circuit design considering pâ€iâ€n forward leakage. International Journal of Circuit Theory and Applications, 2020, 48, 524-538.	1.3	5
15	Performance analysis of mixed CNT bundle interconnects at 10Ânm technology. IET Circuits, Devices and Systems, 2020, 14, 1049-1057.	0.9	6
16	Adsorption of Carbon Monoxide on Multilayered Graphene. , 2020, , .		0
17	Novel Approach for Improved Signal Integrity and Power Dissipation Using MLGNR Interconnects. Communications in Computer and Information Science, 2019, , 617-629.	0.4	1
18	Tunnel FET ambipolarityâ€based energy efficient and robust true random number generator against reverse engineering attacks. IET Circuits, Devices and Systems, 2019, 13, 689-695.	0.9	6

#	Article	IF	Citations
19	Performance Analysis of Graphene Based Optical Interconnect at Nanoscale Technology. Communications in Computer and Information Science, 2019, , 418-429.	0.4	0
20	Analytical Study of Bundled MWCNT and Edged MLGNR Interconnects: Impact on Propagation Delay and Area. IEEE Nanotechnology Magazine, 2019, 18, 606-610.	1.1	34
21	An Efficient Method to Reduce Crosstalk for Multi-layered GNR Interconnects at 32 nm Technology. , 2019, , .		5
22	Designing SRAM Using CMOS and CNTFET at 32 nm Technology. , 2019, , .		1
23	Analysis of propagation delay for bundled SWCNT and bundled MWCNT in global VLSI interconnects. , 2017, , .		1
24	Performance analysis of graphene nanoribbon based vertical interconnects â€" Through silicon vias. , 2016, , .		2
25	Process-Induced Delay Variation in SWCNT, MWCNT, and Mixed CNT Interconnects. IETE Journal of Research, 2015, 61, 533-540.	1.8	27
26	Stability and delay analysis of multi-layered GNR and multi-walled CNT interconnects. Journal of Computational Electronics, 2015, 14, 611-618.	1.3	43
27	Time and Frequency Domain Analysis of MLGNR Interconnects. IEEE Nanotechnology Magazine, 2015, 14, 484-492.	1.1	65
28	Propagation delay and power dissipation for different aspect ratio of single-walled carbon nanotube bundled TSV. Journal of Semiconductors, 2015, 36, 065001.	2.0	3
29	Performance analysis of single- and multi-walled carbon nanotube based through silicon vias. , 2015, , .		12
30	Crosstalk Induced Delay Analysis of Randomly Distributed Mixed CNT Bundle Interconnect. Journal of Circuits, Systems and Computers, 2015, 24, 1550145.	1.0	22
31	Graphene Based On-Chip Interconnects and TSVs : Prospects and Challenges. IEEE Nanotechnology Magazine, 2014, 8, 14-20.	0.9	36
32	Carbon Nanotube Based 3-D Interconnects - A Reality or a Distant Dream. IEEE Circuits and Systems Magazine, 2014, 14, 16-35.	2.6	34
33	Analysis of Delay and Dynamic Crosstalk in Bundled Carbon Nanotube Interconnects. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1666-1673.	1.4	80
34	Performance analysis for randomly distributed mixed carbon nanotube bundle interconnects. Micro and Nano Letters, 2014, 9, 792-796.	0.6	11
35	Signal Integrity Analysis in Carbon Nanotube Based Through-Silicon Via. Active and Passive Electronic Components, 2014, 2014, 1-7.	0.3	6
36	Frequency response and bandwidth analysis of multiâ€layer graphene nanoribbon and multiâ€walled carbon nanotube interconnects. Micro and Nano Letters, 2014, 9, 557-560.	0.6	51

#	Article	IF	Citations
37	Delay uncertainty in MLGNR interconnects under process induced variations of width, doping, dielectric thickness and mean free path. Journal of Computational Electronics, 2014, 13, 639-646.	1.3	24
38	Delay and crosstalk reliability issues in mixed MWCNT bundle interconnects. Microelectronics Reliability, 2014, 54, 2570-2577.	0.9	40
39	Dynamic crosstalk analysis of mixed multiâ€walled carbon nanotube bundle interconnects. Journal of Engineering, 2014, 2014, 227-233.	0.6	5
40	Propagation Delay Analysis for Bundled Multi-Walled CNT in Global VLSI Interconnects. Advances in Intelligent Systems and Computing, 2014, , 1117-1126.	0.5	2
41	Analysis of Crosstalk Deviation for Bundled MWCNT with Process Induced Height and Width Variations. Communications in Computer and Information Science, 2013, , 214-222.	0.4	0
42	Signal Integrity Analysis in Single and Bundled Carbon Nanotube Interconnects. Journal of Nanoscience, 2013, 2013, 1-6.	2.6	2
43	Dynamic crosstalk effect in mixed CNT bundle interconnects. Electronics Letters, 2012, 48, 384.	0.5	39
44	Novel VLSI architecture for two-dimensional radon transform computations. , 2012, , .		2
45	Analysis of mixed CNT bundle interconnects: Impact on delay and power dissipation. , 2012, , .		3
46	Novel modeling approach for multi-walled CNT bundle in global VLSI interconnects. , 2012, , .		2
47	Optimized delay and power performances in multilayer graphene nanoribbon interconnects. , 2012, , .		6
48	Comparison of propagation delay in single- and multi-layer graphene nanoribbon interconnects. , 2012, , .		4
49	Optimized delay and power performances for multi-walled CNT in global VLSI interconnects. , 2012, , .		3
50	Comparison of crosstalk delay between single and bundled SWNT for global VLSI interconnects. , 2012, , .		1
51	Performance Comparision of Mixed CNT Bundle in Global VLSI Interconnect. , 2012, , .		6
52	Analysis of propagation delay in mixed carbon nanotube bundle as global VLSI interconnects. , 2012, , .		4
53	Analysis of MWCNT and Bundled SWCNT Interconnects: Impact on Crosstalk and Area. IEEE Electron Device Letters, 2012, 33, 1180-1182.	2.2	59
54	Dynamic crosstalk effect in multi-layer graphene nanoribbon interconnects. , 2012, , .		5

#	Article	IF	Citations
55	Analysis of crosstalk delay and power dissipation in mixed CNT bundle interconnects. , 2012, , .		4
56	Analysis of crosstalk delay and area for MWNT and bundled SWNT in global VLSI interconnects. , 2012, , .		5
57	Propagation delay deviations due to process induced line parasitic variations in global VLSI interconnects. , 2011, , .		5
58	Comparison of propagation delay characteristics for single-walled CNT bundle and multiwalled CNT in global VLSI interconnects. , 2011, , .		0
59	Performance comparison between single wall carbon nanotube bundle and multiwall carbon nanotube for global interconnects. , 2011, , .		2