Ramesh Kumar Vobulapuram

List of Publications by Year
in descending order

		840776	713466
32 papers	507 citations	11 h-index	21 g-index
34 all docs	34 docs citations	34 times ranked	193 citing authors

#	Article	IF	Citations
1	Time and Frequency Domain Analysis of MLGNR Interconnects. IEEE Nanotechnology Magazine, 2015, 14, 484-492.	2.0	65
2	An Accurate FDTD Model for Crosstalk Analysis of CMOS-Gate-Driven Coupled RLC Interconnects. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1185-1193.	2.2	48
3	Stability and delay analysis of multi-layered GNR and multi-walled CNT interconnects. Journal of Computational Electronics, 2015, 14, 611-618.	2.5	43
4	An accurate model for dynamic crosstalk analysis of CMOS gate driven on-chip interconnects using FDTD method. Microelectronics Journal, 2014, 45, 441-448.	2.0	42
5	An Unconditionally Stable FDTD Model for Crosstalk Analysis of VLSI Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 1810-1817.	2.5	37
6	Graphene Based On-Chip Interconnects and TSVs : Prospects and Challenges. IEEE Nanotechnology Magazine, 2014, 8, 14-20.	1.3	36
7	Carbon Nanotube Based 3-D Interconnects - A Reality or a Distant Dream. IEEE Circuits and Systems Magazine, 2014, 14, 16-35.	2.3	34
8	Crosstalk noise modeling of multiwall carbon nanotube (MWCNT) interconnects using finite-difference time-domain (FDTD) technique. Microelectronics Reliability, 2015, 55, 155-163.	1.7	32
9	Transient Analysis of Crosstalk Induced Effects in Mixed CNT Bundle Interconnects Using FDTD Technique. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1621-1629.	2.2	27
10	Improved crosstalk noise modeling of MWCNT interconnects using FDTD technique. Microelectronics Journal, 2015, 46, 1263-1268.	2.0	22
11	Crosstalk Induced Delay Analysis of Randomly Distributed Mixed CNT Bundle Interconnect. Journal of Circuits, Systems and Computers, 2015, 24, 1550145.	1.5	22
12	Performance analysis of single- and multi-walled carbon nanotube based through silicon vias. , 2015, , .		12
13	Performance analysis for randomly distributed mixed carbon nanotube bundle interconnects. Micro and Nano Letters, 2014, 9, 792-796.	1.3	11
14	Design of hardened flip-flop using Schmitt trigger-based SEM latch in CNTFET technology. Circuit World, 2020, 47, 51-59.	0.9	11
15	Design of MWCNT based Through Silicon Vias with Polymer Liners to Reduce the Crosstalk Effects. ECS Journal of Solid State Science and Technology, 2020, 9, 041002.	1.8	9
16	Modeling of CMSâ€based nonuniform interconnects using FDTD technique. International Journal of Circuit Theory and Applications, 2019, 47, 43-54.	2.0	8
17	Modeling of crosstalk effects in coupled MLGNR interconnects based on FDTD method. , 2014, , .		6
18	Signal integrity improvement with peripherally placed MWCNTs in mixed CNT bundle based TSVs. , 2015, , .		4

#	Article	IF	Citations
19	A prominent unified crosstalk model for linear and sub-threshold regions in mixed CNT bundle interconnects. Microelectronics Journal, 2021, 118, 105294.	2.0	4
20	Accurate Numerical Model for Crosstalk Analysis of SWCNT Bundle Interconnects Using FDTD Method. , 2015, , .		2
21	Crosstalk modeling with width dependent MFP in MLGNR interconnects using FDTD technique. , 2015, , .		2
22	Crosstalk Modeling with Width Dependent MFP in MLGNR Interconnects Using FDTD Technique. SpringerBriefs in Applied Sciences and Technology, 2016, , 81-96.	0.4	2
23	Design and Simulation of CNT Based Nano-Transistor for Greenhouse Gas Detection. Journal of Nanoelectronics and Optoelectronics, 2018, 13, 593-601.	0.5	2
24	Dynamic crosstalk analysis of CMOS driven RLC interconnects using FDTD method. , 2013, , .		1
25	FDTD Model for Crosstalk Analysis of CMOS Gate-Driven Coupled Copper Interconnects. SpringerBriefs in Applied Sciences and Technology, 2016, , 43-59.	0.4	1
26	Effect of Skin Impedance on Delay and Crosstalk in Lossy and Non-uniform On-Chip Interconnects. Advances in Intelligent Systems and Computing, 2018, , 569-576.	0.6	1
27	Bilayer Graphene Nanoribbon Tunnel FET for Low-Power Nanoscale IC Design. Engergy Systems in Electrical Engineering, 2020, , 83-100.	0.7	1
28	Corrections to â€œAn Accurate FDTD Model for Crosstalk Analysis of CMOS-Gate-Driven Coupled RLC Interconnectsâ€•[Oct 14 1185-1193]. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1756-1756.	2.2	0
29	Interconnect Modeling, CNT and GNR Structures, Properties, and Characteristics. SpringerBriefs in Applied Sciences and Technology, 2016, , 11-41.	0.4	0
30	FDTD Model for Crosstalk Analysis of Multiwall Carbon Nanotube (MWCNT) Interconnects. SpringerBriefs in Applied Sciences and Technology, 2016, , 61-79.	0.4	0
31	An Efficient US-FDTD Model for Crosstalk Analysis of On-Chip Interconnects. SpringerBriefs in Applied Sciences and Technology, 2016, , 97-116.	0.4	0
32	Introduction to On-Chip Interconnects and Modeling. SpringerBriefs in Applied Sciences and Technology, 2016, , 1-9.	0.4	0