

Jaehyun Lee

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Carbon Nanotube SRAM in 5-nm Technology Node Design, Optimization, and Performance Evaluation—Part I: CNFET Transistor Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 432-439.	3.1	10
2	Carbon Nanotube SRAM in 5-nm Technology Node Design, Optimization, and Performance Evaluation—Part II: CNT Interconnect Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 440-448.	3.1	3
3	A Worst-Case Analysis of Trap-Assisted Tunneling Leakage in DRAM Using a Machine Learning Approach. IEEE Electron Device Letters, 2021, 42, 156-159.	3.9	18
4	Nano-electronic Simulation Software (NESS): a flexible nano-device simulation platform. Journal of Computational Electronics, 2020, 19, 1031-1046.	2.5	20
5	Quantum Enhancement of a S/D Tunneling Model in a 2D MS-EMC Nanodevice Simulator: NEGF Comparison and Impact of Effective Mass Variation. Micromachines, 2020, 11, 204.	2.9	7
6	Efficient Implementation of S/D tunneling in 2D MS-EMC of Nanoelectronic Devices Including the Thickness Dependent Effective Mass. , 2020, , .		0
7	Mobility of Circular and Elliptical Si Nanowire Transistors Using a Multi-Subband 1D Formalism. IEEE Electron Device Letters, 2019, 40, 1571-1574.	3.9	15
8	Investigation of Pt-Salt-Doped-Standalone- Multiwall Carbon Nanotubes for On-Chip Interconnect Applications. IEEE Transactions on Electron Devices, 2019, 66, 2346-2352.	3.0	13
9	Simulation of the Impact of Ionized Impurity Scattering on the Total Mobility in Si Nanowire Transistors. Materials, 2019, 12, 124.	2.9	21
10	Comprehensive Study of Cross-Section Dependent Effective Masses for Silicon Based Gate-All-Around Transistors. Applied Sciences (Switzerland), 2019, 9, 1895.	2.5	15
11	Atomistic- to Circuit-Level Modeling of Doped SWCNT for On-Chip Interconnects. IEEE Nanotechnology Magazine, 2018, 17, 1084-1088.	2.0	7
12	Variability Predictions for the Next Technology Generations of n-type SixGe1 ^x Nanowire MOSFETs. Micromachines, 2018, 9, 643.	2.9	7
13	Impact of the Effective Mass on the Mobility in Si Nanowire Transistors. , 2018, , .		4
14	Variability Study of MWCNT Local Interconnects Considering Defects and Contact Resistances--Part I: Pristine MWCNT. IEEE Transactions on Electron Devices, 2018, , 1-8.	3.0	10
15	Variability Study of MWCNT Local Interconnects Considering Defects and Contact Resistances--Part II: Impact of Charge Transfer Doping. IEEE Transactions on Electron Devices, 2018, , 1-8.	3.0	7
16	Study of the 1D Scattering Mechanisms' Impact on the Mobility in Si Nanowire Transistors. , 2018, , .		6
17	Random Dopant-Induced Variability in Si-InAs Nanowire Tunnel FETs: A Quantum Transport Simulation Study. IEEE Electron Device Letters, 2018, 39, 1473-1476.	3.9	11
18	Understanding Electromigration in Cu-CNT Composite Interconnects: A Multiscale Electrothermal Simulation Study. IEEE Transactions on Electron Devices, 2018, 65, 3884-3892.	3.0	10

#	ARTICLE	IF	CITATIONS
19	Progress on carbon nanotube BEOL interconnects. , 2018, , .		11
20	A theoretical model for predicting Schottky-barrier height of the nanostructured silicide-silicon junction. Applied Physics Letters, 2017, 110, 233110.	3.3	3
21	A physics-based investigation of Pt-salt doped carbon nanotubes for local interconnects. , 2017, , .		5
22	Atoms-to-circuits simulation investigation of CNT interconnects for next generation CMOS technology. , 2017, , .		2
23	The impact of vacancy defects on CNT interconnects: From statistical atomistic study to circuit simulations. , 2017, , .		3
24	Performance Assessment of 110°V Channel Ultra-Thin-Body Schottky-Barrier MOSFETs. IEEE Electron Device Letters, 2014, 35, 726-728.	3.9	8