

# Jaehyun Lee

## List of Publications by Year in descending order

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Version: 2024-02-01

24  
papers

216  
citations

1040056

9  
h-index

1125743

13  
g-index

24  
all docs

24  
docs citations

24  
times ranked

148  
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulation of the Impact of Ionized Impurity Scattering on the Total Mobility in Si Nanowire Transistors. <i>Materials</i> , 2019, 12, 124.	2.9	21
2	Nano-electronic Simulation Software (NESS): a flexible nano-device simulation platform. <i>Journal of Computational Electronics</i> , 2020, 19, 1031-1046.	2.5	20
3	A Worst-Case Analysis of Trap-Assisted Tunneling Leakage in DRAM Using a Machine Learning Approach. <i>IEEE Electron Device Letters</i> , 2021, 42, 156-159.	3.9	18
4	Mobility of Circular and Elliptical Si Nanowire Transistors Using a Multi-Subband 1D Formalism. <i>IEEE Electron Device Letters</i> , 2019, 40, 1571-1574.	3.9	15
5	Comprehensive Study of Cross-Section Dependent Effective Masses for Silicon Based Gate-All-Around Transistors. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1895.	2.5	15
6	Investigation of Pt-Salt-Doped-Standalone- Multiwall Carbon Nanotubes for On-Chip Interconnect Applications. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 2346-2352.	3.0	13
7	Random Dopant-Induced Variability in Si-InAs Nanowire Tunnel FETs: A Quantum Transport Simulation Study. <i>IEEE Electron Device Letters</i> , 2018, 39, 1473-1476.	3.9	11
8	Progress on carbon nanotube BEOL interconnects. , 2018, , .		11
9	Variability Study of MWCNT Local Interconnects Considering Defects and Contact Resistances--Part I: Pristine MWCNT. <i>IEEE Transactions on Electron Devices</i> , 2018, , 1-8.	3.0	10
10	Understanding Electromigration in Cu-CNT Composite Interconnects: A Multiscale Electrothermal Simulation Study. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 3884-3892.	3.0	10
11	Carbon Nanotube SRAM in 5-nm Technology Node Design, Optimization, and Performance Evaluation--Part I: CNFET Transistor Optimization. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2022, 30, 432-439.	3.1	10
12	Performance Assessment of III-V Channel Ultra-Thin-Body Schottky-Barrier MOSFETs. <i>IEEE Electron Device Letters</i> , 2014, 35, 726-728.	3.9	8
13	Atomistic- to Circuit-Level Modeling of Doped SWCNT for On-Chip Interconnects. <i>IEEE Nanotechnology Magazine</i> , 2018, 17, 1084-1088.	2.0	7
14	Variability Predictions for the Next Technology Generations of n-type SixGe1-x Nanowire MOSFETs. <i>Micromachines</i> , 2018, 9, 643.	2.9	7
15	Variability Study of MWCNT Local Interconnects Considering Defects and Contact Resistances--Part II: Impact of Charge Transfer Doping. <i>IEEE Transactions on Electron Devices</i> , 2018, , 1-8.	3.0	7
16	Quantum Enhancement of a S/D Tunneling Model in a 2D MS-EMC Nanodevice Simulator: NEGF Comparison and Impact of Effective Mass Variation. <i>Micromachines</i> , 2020, 11, 204.	2.9	7
17	Study of the 1D Scattering Mechanisms' Impact on the Mobility in Si Nanowire Transistors. , 2018, , .		6
18	A physics-based investigation of Pt-salt doped carbon nanotubes for local interconnects. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
19	Impact of the Effective Mass on the Mobility in Si Nanowire Transistors. , 2018, , .		4
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	The impact of vacancy defects on CNT interconnects: From statistical atomistic study to circuit simulations. , 2017, , .		3
22	Carbon Nanotube SRAM in 5-nm Technology Node Design, Optimization, and Performance Evaluationâ€”Part II: CNT Interconnect Optimization. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 440-448.	3.1	3
23	Atoms-to-circuits simulation investigation of CNT interconnects for next generation CMOS technology. , 2017, , .		2
24	Efficient Implementation of S/D tunneling in 2D MS-EMC of Nanoelectronic Devices Including the Thickness Dependent Effective Mass. , 2020, , .		0