Afiq Hamzah

List of Publications by Year
in descending order

		1163117	1281871
32	144	8	11
papers	citations	h-index	g-index
32	32	32	118
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Band gap engineering of BC 2 N for nanoelectronic applications. Superlattices and Microstructures, 2017, 112, 328-338.	3.1	16
2	Low-voltage high-speed programming gate-all-around floating gate memory cell with tunnel barrier engineering. Japanese Journal of Applied Physics, 2018, 57, 06KC02.	1.5	13
3	2D Honeycomb Silicon: A Review on Theoretical Advances for Silicene Field-Effect Transistors. Current Nanoscience, 2020, 16, 595-607.	1.2	12
4	Electronic properties and carrier transport properties of low-dimensional aluminium doped silicene nanostructure. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 116, 113731.	2.7	11
5	A review of the top of the barrier nanotransistor models for semiconductor nanomaterials. Superlattices and Microstructures, 2020, 140, 106429.	3.1	11
6	Explicit continuous models of drain current, terminal charges and intrinsic capacitance for a long-channel junctionless nanowire transistor. Physica Scripta, 2019, 94, 105813.	2.5	10
7	Electronic properties of graphene nanoribbons with line-edge roughness doped with nitrogen and boron. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113841.	2.7	9
8	Analytical Prediction of Highly Sensitive CNT-FET-Based Sensor Performance for Detection of Gas Molecules. IEEE Access, 2020, 8, 12655-12661.	4.2	9
9	Carrier transport of rough-edged doped GNRFETs with metal contacts at various channel widths. Superlattices and Microstructures, 2020, 143, 106548.	3.1	7
10	Impact of phonon scattering mechanisms on the performance of silicene nanoribbon field-effect transistors. Results in Physics, 2021, 29, 104714.	4.1	7
11	QUANTUM CAPACITANCE EFFECT ON ZIG-ZAG GRAPHENE NANOSCROLLS (ZGNS) (16, 0). Modern Physics Letters B, 2013, 27, 1350002.	1.9	4
12	An Analytical Conductance Model for Gas Detection Based on a Zigzag Carbon Nanotube Sensor. Sensors, 2020, 20, 357.	3.8	4
13	An Efficient March (5n) FSM-Based Memory Built-In Self Test (MBIST) Architecture. , 2021, , .		4
14	Explicit continuous charge-based compact model for long channel heavily doped surrounding-gate MOSFETs incorporating interface traps and quantum effects. Semiconductor Science and Technology, 2016, 31, 125020.	2.0	3
15	Modeling of lightly-doped drain and source contact with boron and nitrogen in graphene nanoribbon. Chinese Journal of Physics, 2019, 62, 258-273.	3.9	3
16	Design of 6T SRAM Cell Using Optimized 20 nm SOI Junctionless Transistor. , 2019, , .		3
17	Electrical characterization of n-type cylindrical gate all around nanowire junctionless transistor with SiO2 and high-k dielectrics. , 2020, , .		3
18	ASIC Implementation and Optimization of 16 Bit SDRAM Memory Controller. , 2020, , .		3

#	Article	IF	Citations
19	Device performance of silicene nanoribbon field-effect transistor under ballistic transport. , 2020, , .		3
20	Carrier statistics of highly doped armchair graphene nanoribbons with edge disorder. Superlattices and Microstructures, 2020, 139, 106404.	3.1	3
21	Electronic properties of silicene nanoribbons using tight-binding approach. , 2019, , .		2
22	Device performances analysis of p-type doped silicene-based field effect transistor using SPICE-compatible model. PLoS ONE, 2022, 17, e0264483.	2.5	2
23	Performance prediction of Graphene Nanoscroll and Carbon Nanotube transistors. , 2016, , .		1
24	Explicit continuous charge-based compact model of surrounding gate MOSFET (SRGMOSFET) with smooth transition between partially-depleted to fully-depleted operation. Semiconductor Science and Technology, 2020, 35, 045007.	2.0	1
25	Temperature effect on quantum capacitance zig-zag graphene nanoscrolls (ZGNS) (16,0). , 2012, , .		0
26	Graphene as Charge Storage Layer in Floating Gate Flash Memory with Highk Tunnel Barrier Engineering. , 2018, , .		0
27	Effect of low-k oxide thickness variation on gate-all-around floating gate with optimized SiO2/La2O3 tunnel barrier. Materials Research Express, 2019, 6, 1150c6.	1.6	0
28	Reliability Analysis Of Gate-All-Around Floating Gate (GAA-FG) With Variable Oxide Thickness For Flash Memory Cell. , 2020, , .		0
29	Semi-analytical modelling and evaluation of uniformly doped silicene nanotransistors for digital logic gates. PLoS ONE, 2021, 16, e0253289.	2.5	0
30	Performance Analysis of an Efficient Montgomery Multiplier using 7nm FinFET and Junctionless FinFET. , 2021, , .		0
31	A 2 Kbit Memory Array of Mixed-VT GC-eDRAM Implemented in 130nm Standard CMOS Technology. , 2021, , .		0
32	Design of Low Power Gain-Cell eDRAM for 4Kb Memory Array in 130nm CMOS. , 2021, , .		0