

Mohammad Kazem Anvarifard

List of Publications by Year in descending order

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273
citing authors

#	ARTICLE	IF	CITATIONS
1	Introduce of a New Double Hetero FinFET Based on Charge-Plasma Concept. Silicon, 2022, 14, 1775-1785.	3.3	1
2	A Ballistic Transport Nanodevice Based on Graphene Nanoribbon FET by Enhanced Productivity for Both Low-Voltage and Radio-Frequency Scopes. ECS Journal of Solid State Science and Technology, 2022, 11, 061008.	1.8	2
3	High Ability of a Reliable Novel TFET-Based Device in Detection of Biomolecule Specifitiesâ€™ A Comprehensive Analysis on Sensing Performance. IEEE Sensors Journal, 2021, 21, 6880-6887.	4.7	23
4	Graphene Nanoribbon FET Compact Model on the Basis of ANN Configuration Applicable in Different Spice Levels. ECS Journal of Solid State Science and Technology, 2021, 10, 031008.	1.8	5
5	Creation of Step-Shaped Energy Band in a Novel Double-Gate GNR-FET to Diminish Ambipolar Conduction. IEEE Transactions on Electron Devices, 2021, 68, 2549-2555.	3.0	5
6	Non-Linearity and RF Intermodulation Distortion Check of Ultrascale GNR-FET Device Using NEGF Technique to Achieve the Highest Reliable Performance. ECS Journal of Solid State Science and Technology, 2021, 10, 101002.	1.8	1
7	Energy Band Adjustment in a Reliable Novel Charge Plasma SiGe Source TFET to Intensify the BTBT Rate. IEEE Transactions on Electron Devices, 2021, 68, 5284-5290.	3.0	9
8	Proposal of an Embedded Nanogap Biosensor by a Graphene Nanoribbon Fieldâ€™Effect Transistor for Biological Samples Detection. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900879.	1.8	10
9	A Nanoscaleâ€™Modified band energy junctionless transistor with considerable progress on the electrical and frequency issue. Materials Science in Semiconductor Processing, 2020, 107, 104849.	4.0	34
10	Benefitting from High-Îº Spacer Engineering in Ballistic Triple-Gate Junctionless FinFET- a Full Quantum Study. Silicon, 2020, 12, 2221-2228.	3.3	14
11	Profound analysis on sensing performance of Nanogap SiGe source DM-TFET biosensor. Journal of Materials Science: Materials in Electronics, 2020, 31, 22699-22712.	2.2	22
12	Label-free detection of DNA by a dielectric modulated armchair-graphene nanoribbon FET based biosensor in a dual-nanogap setup. Materials Science and Engineering C, 2020, 117, 111293.	7.3	7
13	A Theoretical Study on Charge Transfer of Twisted T-Graphene Nanoribbon Surface. ECS Journal of Solid State Science and Technology, 2020, 9, 021001.	1.8	4
14	Single Gate Graphene Nanoribbon-on-Insulator (GNROI) FET as a Novel Strategy to Enhance Electrical Performance-Numerically RF and DC Characteristics Extraction. ECS Journal of Solid State Science and Technology, 2020, 9, 061025.	1.8	2
15	Improving the electrical characteristics of nanoscale triple-gate junctionless FinFET using gate oxide engineering. AEU - International Journal of Electronics and Communications, 2019, 108, 226-234.	2.9	53
16	Performance Improvement of SiGe Based Silicon-On-Insulator Transistor Using Vertically Graded Channel Approach. Silicon, 2019, 11, 3021-3030.	3.3	1
17	Junctionless Transistor with Pulsed Shaped Dielectric (PSD-JNL): An Absorbing Structure for Nanoscale Aims. ECS Journal of Solid State Science and Technology, 2019, 8, N5-N12.	1.8	2
18	A nanoscaleâ€™modified junctionless with considerable progress on the electrical and thermal issue. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2019, 32, e2537.	1.9	11

#	ARTICLE	IF	CITATIONS
19	An accurate compact model to extract the important physical parameters of an experimental nanoscale short-channel SOI MOSFET. <i>Journal of Computational Electronics</i> , 2019, 18, 46-52.	2.5	5
20	Enhancement of a Nanoscale Novel Esaki Tunneling Diode Source TFET (ETDS-TFET) for Low-Voltage Operations. <i>Silicon</i> , 2019, 11, 2547-2556.	3.3	23
21	Proper Electrostatic Modulation of Electric Field in a Reliable Nano-SOI With a Developed Channel. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 1653-1657.	3.0	34
22	An impressive structure containing triple trenches for RF power performance (TT-SOI-MESFET). <i>Journal of Computational Electronics</i> , 2018, 17, 230-237.	2.5	20
23	Modeling a Double-Halo-Doping Carbon Nanotube FET in DC and AC Operations. <i>ECS Journal of Solid State Science and Technology</i> , 2018, 7, M209-M216.	1.8	13
24	Creation of a new high voltage device with capable of enhancing driving current and breakdown voltage. <i>Materials Science in Semiconductor Processing</i> , 2017, 60, 60-65.	4.0	21
25	A novel graphene nanoribbon FET with an extra peak electric field (EFP-GNRFET) for enhancing the electrical performances. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 1379-1385.	2.1	27
26	Stopping electric field extension in a modified nanostructure based on SOI technology - A comprehensive numerical study. <i>Superlattices and Microstructures</i> , 2017, 111, 206-220.	3.1	20
27	Symmetrical SOI MESFET with a dual cavity region (DCR-SOI MESFET) to promote high-voltage and radio-frequency performances. <i>Superlattices and Microstructures</i> , 2016, 98, 492-503.	3.1	13
28	Successfully Controlled Potential Distribution in a Novel High-Voltage and High-Frequency SOI MESFET. <i>IEEE Transactions on Device and Materials Reliability</i> , 2016, 16, 631-637.	2.0	28
29	A Guideline for Achieving the Best Electrical Performance with Strategy of Halo in Graphene Nanoribbon Field Effect Transistor. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, M141-M147.	1.8	20
30	Increase in the scattering of electric field lines in a new high voltage SOI MESFET. <i>Superlattices and Microstructures</i> , 2016, 97, 15-27.	3.1	20
31	Enhanced Critical Electrical Characteristics in a Nanoscale Low-Voltage SOI MOSFET With Dual Tunnel Diode. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 1672-1676.	3.0	22
32	A novel nanoscale SOI MOSFET with Si embedded layer as an effective heat sink. <i>International Journal of Electronics</i> , 2015, 102, 1394-1406.	1.4	19
33	A novel nanoscale low-voltage SOI MOSFET with dual tunnel diode (DTD-SOI): Investigation and fundamental physics. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 70, 101-107.	2.7	6
34	Accurate analytical drain current model for a nanoscale fully-depleted SOI MOSFET. <i>Solid-State Electronics</i> , 2015, 103, 154-161.	1.4	7
35	Evidence for Enhanced Reliability in a Novel Nanoscale Partially-Depleted SOI MOSFET. <i>IEEE Transactions on Device and Materials Reliability</i> , 2015, 15, 536-542.	2.0	18
36	A novel SOI MESFET by Si^{suppi} $\text{Si}^{\text{€}}$ -shaped gate for improving the driving current. <i>Journal of Computational Electronics</i> , 2014, 13, 562-568.	2.5	8

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37	Simulation analysis of a novel dual-trench structure for a high power silicon-on-insulator metal-oxide-semiconductor field effect transistor. <i>Materials Science in Semiconductor Processing</i> , 2014, 26, 506-511.	4.0	9
38	Novel reduced body charge technique in reliable nanoscale SOI MOSFETs for suppressing the kink effect. <i>Superlattices and Microstructures</i> , 2014, 72, 111-125.	3.1	19
39	Improvement of Electrical Properties in a Novel Partially Depleted SOI MOSFET With Emphasizing on the Hysteresis Effect. <i>IEEE Transactions on Electron Devices</i> , 2013, 60, 3310-3317.	3.0	16
40	SOI MOSFET with an insulator region (IR-SOI): A novel device for reliable nanoscale CMOS circuits. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013, 178, 431-437.	3.5	27
41	Voltage difference engineering in SOI MOSFETs: A novel side gate device with improved electrical performance. <i>Materials Science in Semiconductor Processing</i> , 2013, 16, 1672-1678.	4.0	7
42	Improvement of self-heating effect in a novel nanoscale SOI MOSFET with undoped region: A comprehensive investigation on DC and AC operations. <i>Superlattices and Microstructures</i> , 2013, 60, 561-579.	3.1	27
43	Impact of Split Gate in a Novel SOI MOSFET (SPG SOI) for Reduction of Short-Channel Effects: Analytical Modeling and Simulation. <i>Journal of Engineering (United States)</i> , 2013, 2013, 1-6.	1.0	2
44	Two-Dimensional Analytical Modeling of Fully Depleted Short-Channel DG SOI MOSFET. , 2009, , .		3
45	Two-Dimensional Analytical Modeling of Fully Depleted Short-Channel Dual-Gate Silicon-on-Insulator Metal Oxide Semiconductor Field Effect Transistor. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 104501.	1.5	3
46	Investigation of Gate Length Effect on SOI-MOSFET Operation. , 2009, , .		1