

Saeed Mohammadi

List of Publications by Year in descending order

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times ranked

915
citing authors

#	ARTICLE	IF	CITATIONS
1	Recessed Gate Cylindrical Heterostructure TFET, a Device with Extremely Steep Subthreshold Swing. Transactions on Electrical and Electronic Materials, 2022, 23, 81-87.	1.9	1
2	Tunneling FET based on defect-free, vacancy-defected, and passivated monolayer PtSe ₂ channel: A first principles study. Materials Science in Semiconductor Processing, 2022, 138, 106258.	4.0	4
3	Vertical Cladding Layer-Based Doping-Less Tunneling Field Effect Transistor: A Novel Low-Power High-Performance Device. IEEE Transactions on Electron Devices, 2022, 69, 1474-1479.	3.0	19
4	Switching Performance Enhancement in Nanotube Double-Gate Tunneling Field-Effect Transistor With Germanium Source Regions. IEEE Transactions on Electron Devices, 2022, 69, 364-369.	3.0	12
5	Double quantum-well nanotube tunneling field-effect transistor. Materials Science in Semiconductor Processing, 2022, 142, 106514.	4.0	6
6	Cylindrical electron-hole bilayer TFET with a single surrounding gate and induced quantum confinement. Journal of Computational Electronics, 2022, 21, 235-242.	2.5	6
7	A Stacked Transistors CMOS SOI Power Amplifier For 5G Applications. , 2022, , .		1
8	Dielectric Modulated Doping-Less Tunnel Field-Effect Transistor, a Novel Biosensor Based on Cladding Layer Concept. IEEE Sensors Journal, 2022, 22, 10308-10314.	4.7	11
9	A 0.43 g Wireless Battery-Less Neural Recorder With On-Chip Microelectrode Array and Integrated Flexible Antenna. IEEE Microwave and Wireless Components Letters, 2022, 32, 772-775.	3.2	2
10	Vertical Tunneling Field-Effect Transistor With Germanium Source and T-Shaped Silicon Channel for Switching and Biosensing Applications: A Simulation Study. IEEE Transactions on Electron Devices, 2022, 69, 5170-5176.	3.0	14
11	Switching Performance Investigation of a Gate-All-Around Core-Source InGaAs/InP TFET. Transactions on Electrical and Electronic Materials, 2021, 22, 502-508.	1.9	7
12	A Circuit for Simultaneous Reception of Data and Power Using a Solar Cell. IEEE Transactions on Green Communications and Networking, 2021, 5, 2065-2075.	5.5	6
13	Enhanced on-state current and suppressed ambipolarity in germanium-source dual vertical-channel TFET. Semiconductor Science and Technology, 2021, 36, 045020.	2.0	12
14	Germanium-source L-shaped TFET with dual in-line tunneling junction. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	15
15	Analytical investigation on the electro-optical characteristics of white graphene. Journal of Computational Electronics, 2021, 20, 1860-1867.	2.5	1
16	Effect of Substrate Conductivity on Si Self-Assembled Field Emission Arrays. , 2021, , .		1
17	A Self-Assembled High Current Si Field Emitter Array. , 2021, , .		2
18	First principles characterization of defect-free and vacancy-defected monolayer PtSe ₂ gas sensors. Sensors and Actuators A: Physical, 2020, 313, 112209.	4.1	10

#	ARTICLE	IF	CITATIONS
19	An Analytical Drain Current Model for the Cylindrical Channel Gate-All-Around Heterojunction Tunnel FETs. IEEE Transactions on Electron Devices, 2019, 66, 3646-3651.	3.0	18
20	A Universal Analytical Potential Model for Double-Gate Heterostructure Tunnel FETs. IEEE Transactions on Electron Devices, 2019, 66, 1605-1612.	3.0	7
21	All-optical photonic crystal memory cells based on cavities with a dual-argument hysteresis feature. Optics Communications, 2019, 430, 323-335.	2.1	45
22	Physical and analytical modeling of drain current of double-gate heterostructure tunnel FETs. Semiconductor Science and Technology, 2019, 34, 015009.	2.0	2
23	A simulation study to improve the efficiency of ZnO _{1-x} S _x /Cu ₂ ZnSn (S _y , Se _{1-y}) ₄ solar cells by composition-ratio control. Optical Materials, 2018, 78, 259-265.	3.6	14
24	Photonic crystal double-coupled cavity waveguides and their application in design of slow-light delay lines. Photonics and Nanostructures - Fundamentals and Applications, 2018, 28, 61-69.	2.0	45
25	A Highly Sensitive Microwave Biosensor for Single Biological Cell Characterization. , 2018, , .		0
26	A Vacuum Multi-Finger Transistor in CMOS Technology. , 2018, , .		2
27	A Highly Sensitive RF Biosensor Based on Splitter/Combiner Configuration for Single-Cell Characterization. , 2018, , .		0
28	An Analytical Model for Double-Gate Tunnel FETs Considering the Junctions Depletion Regions and the Channel Mobile Charge Carriers. IEEE Transactions on Electron Devices, 2017, 64, 1276-1284.	3.0	25
29	Trap studies in silicon nanowire junctionless transistors using low-frequency noise. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2016, 34, 011804.	1.2	4
30	Potential and Drain Current Modeling of Gate-All-Around Tunnel FETs Considering the Junctions Depletion Regions and the Channel Mobile Charge Carriers. IEEE Transactions on Electron Devices, 2016, 63, 5021-5029.	3.0	31
31	High-Efficiency Microwave and mm-Wave Stacked Cell CMOS SOI Power Amplifiers. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 2025-2038.	4.6	48
32	Flexible strain sensors based on electrostatically actuated graphene flakes. Journal of Micromechanics and Microengineering, 2015, 25, 075016.	2.6	8
33	Characterization and Physical Modeling of Turn-On Voltage, Saturation Voltage and Transition Slope in Graphene Barristors. IEEE Nanotechnology Magazine, 2015, 14, 673-680.	2.0	0
34	Small-signal modeling of graphene barristors. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 72, 95-100.	2.7	1
35	Simulation analysis of a novel fully depleted SOI MOSFET: Electrical and thermal performance improvement through trapezoidally doped channel and silicon nitride buried insulator. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 69, 27-33.	2.7	10
36	Electromechanical resonators based on electrospun ZnO nanofibers. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2014, 13, 043011.	0.9	1

#	ARTICLE	IF	CITATIONS
37	A Wideband Power Amplifier in 45 nm CMOS SOI Technology for X Band Applications. IEEE Microwave and Wireless Components Letters, 2013, 23, 587-589.	3.2	23
38	A fully-integrated K_a-band stacked power amplifier in 45nm CMOS SOI technology. , 2013, , .		1
39	Electromechanical resonator based on electrostatically actuated graphene-doped PVP nanofibers. Nanotechnology, 2013, 24, 135201.	2.6	5
40	A Broadband Stacked Power Amplifier in 45-nm CMOS SOI Technology. IEEE Journal of Solid-State Circuits, 2013, 48, 2775-2784.	5.4	45
41	Performance Improvement of Partially Silicon-on-Insulator Lateral Double-Diffused Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors Using Doping-Engineered Drift Region. Japanese Journal of Applied Physics, 2012, 51, 101201.	1.5	0
42	A RESURF LDMOSFET with a dummy gate on partial SOI. Journal of the Korean Physical Society, 2012, 60, 842-848.	0.7	3
43	Tunable, Dual-Gate, Silicon-on-Insulator (SOI) Nanoelectromechanical Resonators. IEEE Nanotechnology Magazine, 2012, 11, 1093-1099.	2.0	16
44	A Wideband RF Power Amplifier in 45-nm CMOS SOI Technology With Substrate Transferred to AlN. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 4089-4096.	4.6	18
45	Ground plane fin-shaped field effect transistor (GP-FinFET): A FinFET for low leakage power circuits. Microelectronic Engineering, 2012, 95, 74-82.	2.4	111
46	Compact modeling of short-channel effects in symmetric and asymmetric 3-T/4-T double gate MOSFETs. Microelectronics Reliability, 2011, 51, 543-549.	1.7	5
47	Drain current model for strained-Si/Si_{1-x}Ge_x/strained-Si double-gate MOSFETs including quantum effects. Semiconductor Science and Technology, 2011, 26, 095022.	2.0	4
48	Modeling of drain current, capacitance and transconductance in thin film undoped symmetric DG MOSFETs including quantum effects. Microelectronics Reliability, 2010, 50, 338-345.	1.7	6
49	3-D CMOS Circuits Based on Low-Loss Vertical Interconnects on Parylene-N. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 48-56.	4.6	8
50	An Efficient Quantum-Based Model for the Threshold Voltage of Thin Film Double Gate/Silicon on Insulator Silicon Metal Oxide Semiconductor Field Effect Transistors. Japanese Journal of Applied Physics, 2010, 49, 024304.	1.5	1
51	An Integration Technology for RF and Microwave Circuits Based on Interconnect Programming. IEEE Transactions on Advanced Packaging, 2010, 33, 362-369.	1.6	2
52	Shot Noise Thermometry for Thermal Characterization of Templated Carbon Nanotubes. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 178-183.	1.3	7
53	Mask Programmable CMOS Transistor Arrays for Wideband RF Integrated Circuits. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 1439-1446.	4.6	3
54	Reconfigurable CMOS Tuners for Software-Defined Radio. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 2768-2774.	4.6	8

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55	A dual-mode programmable distributed amplifier/mixer. , 2009, , .		0
56	Transparent driving thin-film transistor circuits based on uniformly grown single-walled carbon nanotubes network. , 2009, , .		0
57	Design and implementation of a novel three dimensional CMOS low noise amplifier with transmission lines on parylene-N. , 2009, , .		2
58	A reconfigurable MEMS-less CMOS tuner for software defined radio. , 2008, , .		5
59	Aligned single-walled carbon nanotube thin-film transistor arrays for transparent electronics. , 2008, , .		0
60	1 \hat{a} noise of SnO ₂ nanowire transistors. Applied Physics Letters, 2008, 92, 243120.	3.3	53
61	High-Q micromachined three-dimensional integrated inductors for high-frequency applications. Journal of Vacuum Science & Technology B, 2007, 25, 264.	1.3	12
62	High Performance 3-D Helical RF Transformers. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	5
63	A 500 $\hat{m}W$ 2.4GHz CMOS Subthreshold Mixer for Ultra Low Power Applications. , 2007, , .		18
64	Heterogeneously Integrated 10Gb/s CMOS Optoelectronic Receiver for Long Haul Telecommunication. , 2007, , .		2
65	The study of low frequency noise of single-walled carbon nanotube transistors. Device Research Conference, IEEE Annual, 2007, , .	0.0	0
66	A Subthreshold Low Phase Noise CMOS LC VCO for Ultra Low Power Applications. IEEE Microwave and Wireless Components Letters, 2007, 17, 796-798.	3.2	43
67	1.3 \hat{a} 1.55- μm CMOS/InP Optoelectronic Receiver Using a Self-Aligned Wafer Level Integration Technology. IEEE Photonics Technology Letters, 2007, 19, 1066-1068.	2.5	2
68	3-D Integration of 10-GHz Filter and CMOS Receiver Front-End. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 2298-2305.	4.6	4
69	Compact Models Based on Transmission-Line Concept for Integrated Capacitors and Inductors. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 4141-4148.	4.6	61
70	Nanotechnology and Active Thin Films for Compact RF Components and Agile Systems. Ferroelectrics, 2006, 342, 163-182.	0.6	5
71	Design of high-Q 3-D integrated inductors for high frequency applications. Analog Integrated Circuits and Signal Processing, 2006, 50, 89-93.	1.4	2
72	Single-Walled Carbon Nanotube Mixers. , 2006, , .		2

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73	3-D Integrated Inductors and Transformers on Liquid Crystal Polymer Substrate. , 2006, , .		2
74	High performance micro-machined inductors on CMOS substrate. , 2005, , .		11
75	The Effect of Low-K Dielectrics on RFIC Inductors. , 2003, , .		3
76	High-Q Differential Inductors for RFIC Design. , 2003, , .		5