In-Man Kang

List of Publications by Year
in descending order

164 papers	1,566 citations

361413
20 h-index

395702
33 g-index

164 all docs	164 docs citations

164 times ranked

1159 citing authors

#	Article	IF	Citations
1	Enhanced switching ratio of sol–gel-processed Y_2O_3 RRAM device by suppressing oxygen vacancy formation at high annealing temperatures. Semiconductor Science and Technology, 2022, 37, 015007.	2.0	10
2	Analysis for DC and RF Characteristics Recessed-Gate GaN MOSFET Using Stacked TiO2/Si3N4 Dual-Layer Insulator. Materials, 2022, 15, 819.	2.9	3
3	Environmentally and Electrically Stable Sol–Gel-Deposited SnO_2 Thin-Film Transistors with Controlled Passivation Layer Diffusion Penetration Depth That Minimizes Mobility Degradation. ACS Applied Materials & Interfaces, 2022, 14, 10558-10565.	8.0	9
4	Enhanced Switching Reliability of Sol–Gel-Processed Y2O3 RRAM Devices Based on Y2O3 Surface Roughness-Induced Local Electric Field. Materials, 2022, 15, 1943.	2.9	8
5	Flexible Sol-Gel–Processed Y2O3 RRAM Devices Obtained via UV/Ozone-Assisted Photochemical Annealing Process. Materials, 2022, 15, 1899.	2.9	8
6	Room-Temperature High-Detectivity Flexible Near-Infrared Photodetectors with Chalcogenide Silver Telluride Nanoparticles. ACS Omega, 2022, 7, 10262-10267.	3.5	4
7	Design optimization of GaN diode with p-GaN multi-well structure for high-efficiency betavoltaic cell. Nuclear Engineering and Technology, 2021, 53, 1284-1288.	2.3	3
8	Polycrystalline-Silicon-MOSFET-Based Capacitorless DRAM With Grain Boundaries and Its Performances. IEEE Access, 2021, 9, 50281-50290.	4.2	9
9	Influence of Active Channel Layer Thickness on SnO2 Thin-Film Transistor Performance. Electronics (Switzerland), 2021, 10, 200.	3.1	9
10	Single-event transient characteristics of vertical gate-all-around junctionless field-effect transistor on bulk substrate. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	3
11	Improving of Sensitivity of PbS Quantum Dot Based SWIR Photodetector Using P3HT. Materials, 2021, 14, 1488.	2.9	4
12	Experimental and simulation study of power performance improvement of GaN PIN betavoltaic cell. International Journal of Energy Research, 2021, 45, 17622-17630.	4.5	4
13	Effects of Proton Irradiation on the Current Characteristics of SiN-Passivated AlGaN/GaN MIS-HEMTs Using a TMAH-Based Surface Pre-Treatment. Micromachines, 2021, 12, 864.	2.9	2
14	Numerical Design of Carrier Transporting Layer in Top-Gate InGaZnO Thin-Film Transistors for Controlling Potential Energy. Journal of Nanoscience and Nanotechnology, 2021, 21, 3847-3852.	0.9	1
15	Improved Negative Bias Stress Stability of Sol–Gel-Processed Li-Doped SnO2 Thin-Film Transistors. Electronics (Switzerland), 2021, 10, 1629.	3.1	6
16	Design of a Capacitorless Dynamic Random Access Memory Based on Ultra-Thin Polycrystalline Silicon Junctionless Field-Effect Transistor with Dual-Gate. Journal of Nanoscience and Nanotechnology, 2021, 21, 4223-4229.	0.9	1
17	Analysis of Grain Boundary Dependent Memory Characteristics in Poly-Si One-Transistor Dynamic Random-Access Memory. Journal of Nanoscience and Nanotechnology, 2021, 21, 4216-4222.	0.9	1
18	The Effect of Grain Boundary on Electrical Characteristics in the Source and Drain Regions of Polycrystalline Silicon Based in One Transistor Dynamic Random Access Memory. Journal of Nanoscience and Nanotechnology, 2021, 21, 4258-4267.	0.9	0

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19	Design and Analysis of DC/DC Boost Converter Using Vertical GaN Power Device. Journal of Nanoscience and Nanotechnology, 2021, 21, 4320-4324.	0.9	0
20	Design of a Capacitorless Dynamic Random Access Memory Based on Junctionless Dual-Gate Field-Effect Transistor with a Silicon-Germanium/Silicon Nanotube. Journal of Nanoscience and Nanotechnology, 2021, 21, 4235-4242.	0.9	1
21	Extremely bias stress stable enhancement mode sol–gel-processed SnO2 thin-film transistors with Y2O3 passivation layers. Applied Surface Science, 2021, 559, 149971.	6.1	20
22	Design and optimization of <scp>GaN</scp> –based betavoltaic cell for enhanced output power density. International Journal of Energy Research, 2021, 45, 799-806.	4.5	6
23	Design of Capacitorless DRAM Based on Polycrystalline Silicon Nanotube Structure. IEEE Access, 2021, 9, 163675-163685.	4.2	6
24	Design and Analysis of DC/DC Boost Converter Vertical GaN Power Device based on Epitaxially Grown GaN-on-sapphire. Journal of Semiconductor Technology and Science, 2021, 21, 390-397.	0.4	0
25	Effect of Work-function Variation on Transfer Characteristics and Memory Performances for Gate-all-around JLFET based Capacitorless DRAM. Journal of Semiconductor Technology and Science, 2021, 21, 381-389.	0.4	1
26	Fluoropolymer-based organic memristor with multifunctionality for flexible neural network system. Npj Flexible Electronics, 2021, 5, .	10.7	40
27	Contact line curvature-induced molecular misorientation of a surface energy patterned organic semiconductor in meniscus-guided coating. Applied Surface Science, 2020, 504, 144362.	6.1	10
28	Polycrystalline silicon metal-oxide-semiconductor field-effect transistor-based stacked multi-layer one-transistor dynamic random-access memory with double-gate structure for the embedded systems. Japanese Journal of Applied Physics, 2020, 59, SGGB01.	1.5	5
29	Control of silver nanowire-elastomer nanocomposite networks through elaborate direct printing for ultrathin and stretchable strain sensors. Composites Science and Technology, 2020, 200, 108471.	7.8	10
30	Simulation of capacitorless dynamic random access memory based on junctionless FinFETs using grain boundary of polycrystalline silicon. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	5
31	Fabrication of AlGaN/GaN Fin-Type HEMT Using a Novel T-Gate Process for Improved Radio-Frequency Performance. IEEE Access, 2020, 8, 139156-139160.	4.2	10
32	Gallium Nitride Normally Off MOSFET Using Dual-Metal-Gate Structure for the Improvement in Current Drivability. Electronics (Switzerland), 2020, 9, 1402.	3.1	6
33	Design and Analysis of Gallium Nitride-Based p-i-n Diode Structure for Betavoltaic Cell with Enhanced Output Power Density. Micromachines, 2020, 11, 1100.	2.9	3
34	One-Transistor Dynamic Random-Access Memory Based on Gate-All-Around Junction-Less Field-Effect Transistor with a Si/SiGe Heterostructure. Electronics (Switzerland), 2020, 9, 2134.	3.1	8
35	Effect of High-Speed Blade Coating on Electrical Characteristics in Polymer Based Transistors. Journal of Nanoscience and Nanotechnology, 2020, 20, 5486-5490.	0.9	3
36	Effect of Mg Doping on the Electrical Performance of a Sol-Gel-Processed SnO2 Thin-Film Transistor. Electronics (Switzerland), 2020, 9, 523.	3.1	16

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37	Fabrication of AlGaN/GaN MISHEMT with dual-metal gate electrode and its performances. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	9
38	Effects of Contact Potential and Sidewall Surface Plane on the Performance of GaN Vertical Nanowire MOSFETs for Low-Voltage Operation. IEEE Transactions on Electron Devices, 2020, 67, 1547-1552.	3.0	7
39	Enhancement Mode Flexible SnO_2 Thin Film Transistors Via a UV/Ozone-Assisted Sol-Gel Approach. IEEE Access, 2020, 8, 123013-123018.	4.2	10
40	Recessed-Gate GaN Metal-Insulator-Semiconductor High-Electron-Mobility Transistor Using a Dual Gate-Insulator Employing TiO2/SiN. Journal of Nanoscience and Nanotechnology, 2020, 20, 4678-4683.	0.9	2
41	Analysis of Logic Inverter Based on Polycrystalline Silicon with Single Grain Boundary. Journal of Nanoscience and Nanotechnology, 2020, 20, 6616-6621.	0.9	0
42	Analysis of the Sensing Margin of Silicon and Poly-Si 1T-DRAM. Micromachines, 2020, 11, 228.	2.9	10
43	Sol-Gel Processed Yttrium-Doped SnO2 Thin Film Transistors. Electronics (Switzerland), 2020, 9, 254.	3.1	29
44	Numerical Analysis on Effective Mass and Traps Density Dependence of Electrical Characteristics of a-IGZO Thin-Film Transistors. Electronics (Switzerland), 2020, 9, 119.	3.1	13
45	Application of Genetic Algorithm for More Efficient Multi-Layer Thickness Optimization in Solar Cells. Energies, 2020, 13, 1726.	3.1	13
46	Improved negative bias stability of sol–gel processed Ti-doped SnO_2 thin-film transistors. Semiconductor Science and Technology, 2020, 35, 115023.	2.0	9
47	Charge Based Current–Voltage Model for the Silicon on Insulator Junctionless Field-Effect Transistor. Journal of Nanoscience and Nanotechnology, 2020, 20, 4920-4925.	0.9	0
48	Theoretical Analysis of Prospects of Organic Photovoltaics as a Multi-Functional Solar Cell and Laser Power Converter for Wireless Power Transfer. Journal of Nanoscience and Nanotechnology, 2020, 20, 4878-4883.	0.9	1
49	Analysis of CMOS Logic Inverter Based on Gate-All-Around Field-Effect Transistors with the Strained-Silicon Layer for Improving the Switching Performances. Journal of Nanoscience and Nanotechnology, 2020, 20, 6632-6637.	0.9	0
50	Design and Analysis of Metal-Oxide-Semiconductor Field-Effect Transistor-Based Capacitorless One-Transistor Embedded Dynamic Random-Access Memory with Double-Polysilicon Layer Using Grain Boundary for Hole Storage. Journal of Nanoscience and Nanotechnology, 2020, 20, 6596-6602.	0.9	0
51	Analysis of operation characteristics of junctionless poly-Si 1T-DRAM in accumulation mode. Semiconductor Science and Technology, 2019, 34, 105007.	2.0	6
52	Importance of Blade-Coating Temperature for Diketopyrrolopyrrole-based Thin-Film Transistors. Crystals, 2019, 9, 346.	2.2	6
53	Simulation for Electrical Performances of the Capacitorless Dynamic Random Access Memory Based on Junctionless FinFETs. Journal of Nanoscience and Nanotechnology, 2019, 19, 6755-6761.	0.9	0
54	Effect of Annealing Ambient on SnO2 Thin Film Transistors Fabricated via An Ethanol-based Sol-gel Route. Electronics (Switzerland), 2019, 8, 955.	3.1	15

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55	Alternative approach to optimizing optical spacer layer thickness in solar cell using evolutionary algorithm. , 2019, , .		0
56	The Crucial Role of Quaternary Mixtures of Active Layer in Organic Indoor Solar Cells. Energies, 2019, 12, 1838.	3.1	12
57	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. Applied Physics Letters, 2019, 114, .	3.3	20
58	Analysis of Electrical Characteristics of InAlGaN/GaN-Based High Electron Mobility Transistors with AlGaN Back Barriers. Journal of Nanoscience and Nanotechnology, 2019, 19, 6008-6015.	0.9	2
59	Capacitorless One-Transistor Dynamic Random-Access Memory Based on Double-Gate Metal-Oxide-Semiconductor Field-Effect Transistor with Si/SiGe Heterojunction and Underlap Structure for Improvement of Sensing Margin and Retention Time. Journal of Nanoscience and Nanotechnology, 2019, 19, 6023-6030.	0.9	6
60	Design Optimization and Analysis of InGaAs/InAs/InGaAs Heterojunction-Based Electron Hole Bilayer Tunneling FETs. Journal of Nanoscience and Nanotechnology, 2019, 19, 6070-6076.	0.9	4
61	Design Optimization of InGaAs/GaAsSb-Based *P*-Type Gate-All-Around Arch-Shaped Tunneling Field-Effect Transistor. Journal of Nanoscience and Nanotechnology, 2019, 19, 6762-6766.	0.9	1
62	Fabrication and Characterization of a Thin-Body Poly-Si 1T DRAM With Charge-Trap Effect. IEEE Electron Device Letters, 2019, 40, 566-569.	3.9	27
63	Deep Sub-60 mV/decade Subthreshold Swing in AlGaN/GaN FinMISHFETs with M-Plane Sidewall Channel. IEEE Transactions on Electron Devices, 2019, 66, 1699-1703.	3.0	14
64	Design and analysis of logic inverter using antimonide-based compound semiconductor junctionless transistor. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	2
65	Optimization of GAA vertical nanowire performance for logic application. , 2019, , .		0
66	Design and Optimization of Germanium-Based Gate-Metal-Core Vertical Nanowire Tunnel FET. Micromachines, 2019, 10, 749.	2.9	6
67	Microwave analysis of SiGe heterojunction double‐gate tunneling field‐effect transistor through its small‐signal equivalent circuit. International Journal of RF and Microwave Computer-Aided Engineering, 2019, 29, e21678.	1.2	2
68	Capacitorless one-transistor dynamic random-access memory based on asymmetric double-gate Ge/GaAs-heterojunction tunneling field-effect transistor with n-doped boosting layer and drain-underlap structure. Japanese Journal of Applied Physics, 2018, 57, 04FG03.	1.5	13
69	Performance comparison between p‐i‐n and p‐n junction tunneling field-effect transistors. Japanese Journal of Applied Physics, 2018, 57, 06HC01.	1.5	2
70	Design optimization InGaAs/GaAsSb-based heterojunction Gate-all-around (GAA) arch-shaped tunneling field-effect transistor (A-TFET). , 2018, , .		2
71	Low voltage operation of GaN vertical nanowire MOSFET. Solid-State Electronics, 2018, 145, 1-7.	1.4	29
72	Normally-off AlGaN/GaN-based MOS-HEMT with self-terminating TMAH wet recess etching. Solid-State Electronics, 2018, 141, 7-12.	1.4	8

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73	Simulation of One-Transistor Dynamic Random-Access Memory Based on Symmetric Double-Gate Si Junctionless Transistor. Journal of Nanoscience and Nanotechnology, 2018, 18, 6593-6597.	0.9	0
74	Analysis of SiGe Heterojunction Tunneling Field-Effect Transistor in the Microwave Regime Through Its Small-Signal Equivalent Circuit. , 2018, , .		0
75	Analysis of tunneling field‐effect transistor with germanium source junction using small‐signal equivalent circuit. Microwave and Optical Technology Letters, 2018, 60, 2922-2927.	1.4	1
76	A Novel Analysis of ${L}_{\text{gd}}$ Dependent-1/${f}$ Noise in In$_{0.08}$Al$_{0.92}$N/GaN. IEEE Electron Device Letters, 2018, 39, 1552-1555.	3.9	3
77	Design Optimization of Ge/GaAs-Based Heterojunction Gate-All-Around (GAA) Arch-Shaped Tunneling Field-Effect Transistor (A-TFET). Journal of Nanoscience and Nanotechnology, 2018, 18, 6602-6605.	0.9	0
78	1/f-Noise in AlGaN/GaN Nanowire Omega-FinFETs. IEEE Electron Device Letters, 2017, 38, 252-254.	3.9	23
79	Performance enhancement of AlGaN/GaN nanochannel omega-FinFET. Solid-State Electronics, 2017, 129, 196-199.	1.4	5
80	Electrical Performances of InN/GaN Tunneling Field-Effect Transistor. Journal of Nanoscience and Nanotechnology, 2017, 17, 8355-8359.	0.9	1
81	GaN-Based Junctionless Field-Effect Transistor with Hetero-Gate Dielectric for Enhancement of Direct Current and Radio Frequency Performance. Journal of Nanoelectronics and Optoelectronics, 2017, 12, 1114-1118.	0.5	1
82	Effect of Electric Fringe-Field on Low-Power and Radio-Frequency Performances of Sub-10 nm Junctionless Transistors with Hetero-Dielectric Spacer Structure. Journal of Nanoscience and Nanotechnology, 2017, 17, 7140-7144.	0.9	0
83	Design Optimization and Analysis of InGaAs-Based Gate-All-Around (GAA) Junctionless Field-Effect Transistor (JLFET). Journal of Nanoscience and Nanotechnology, 2017, 17, 8350-8354.	0.9	0
84	Analysis of Source-to-Drain Capacitance Components in Tunneling Field-Effect Transistors. Journal of Nanoelectronics and Optoelectronics, 2017, 12, 1280-1283.	0.5	0
85	TMAH-based wet surface pre-treatment for reduction of leakage current in AlGaN/GaN MIS-HEMTs. Solid-State Electronics, 2016, 124, 54-57.	1.4	23
86	Design Optimization of InAs-Based Gate-All-Around (GAA) Arch-Shaped Tunneling Field-Effect Transistor (TFET). Journal of Nanoscience and Nanotechnology, 2016, 16, 10199-10203.	0.9	2
87	Design optimization of vertical nanowire tunneling field-effect transistor based on AlGaSb/InGaAs heterojunction layer. Current Applied Physics, 2016, 16, 681-685.	2.4	7
88	Design Optimization and Analysis of InGaAs-Based Junctionless Fin Type Field-Effect Transistors (FinFETs) with <I>L</I>_G = 10 nm. Journal of Nanoscience and Nanotechnology, 2016, 16, 10187-10192.	0.9	0
89	Enhancement-Mode GaN-Based Junctionless Vertical Surrounding-Gate Transistor with Dual-Material Gate Structure for High-Frequency Applications. Journal of Nanoscience and Nanotechnology, 2016, 16, 10204-10209.	0.9	0
90	Design Optimization of AlN/GaN-Based Double-Heterojunction Fin-Type High Electron Mobility Transistors for High On-State Current. Journal of Nanoscience and Nanotechnology, 2016, 16, 10193-10198.	0.9	3

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91	Novel AlGaN/GaN omega-FinFETs with excellent device performances. , 2016, , .		0
92	Al(In)N/GaN Fin-Type HEMT With Very-Low Leakage Current and Enhanced <inline-formula> <tex-math notation="LaTeX">I </tex-math> </inline-formula>â€“<inline-formula> <tex-math notation="LaTeX">V </tex-math> </inline-formula> Characteristic for Switching Applications. IEEE Electron Device Letters, 2016, 37, 855-858.	3.9	30
93	Design optimization of Si/Ge-based heterojunction arch-shaped gate-all-around (GAA) tunneling field-effect transistor (TFET) which applicable for future mobile communication systems. , 2016, , .		1
94	Nonlinear Transport in Organic Thin Film Transistors with Soluble Small Molecule Semiconductor. Journal of Nanoscience and Nanotechnology, 2016, 16, 2779-2782.	0.9	0
95	Fully Coupled Finite-Element Analysis for Surface Discharge on Solid Insulation in Dielectric Liquid With Experimental Validation. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	10
96	DC and RF Analysis of Geometrical Parameter Changes in the Current Aperture Vertical Electron Transistor. Journal of Electrical Engineering and Technology, 2016, 11, 1763-1768.	2.0	0
97	Design and Analysis of CMOS-Compatible IIIâ€"V Compound Electronâ€"Hole Bilayer Tunneling Field-Effect Transistor for Ultra-Low-Power Applications. Journal of Nanoscience and Nanotechnology, 2015, 15, 7486-7492.	0.9	2
98	Suppression of current collapse in AlGaN/GaN MISHFET with carbonâ€•doped GaN/undoped GaN multiâ€•layered buffer structure. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1116-1121.	1.8	30
99	Analyses on RF Performances of Silicon-Compatible InGaAs-Based Planar-Type and Fin-Type Junctionless Field-Effect Transistors. Journal of Nanoscience and Nanotechnology, 2015, 15, 7615-7619.	0.9	2
100	Fabrication of high performance AlGaN/GaN FinFET by utilizing anisotropic wet etching in TMAH solution. , 2015, , .		3
101	Effects of sidewall MOS channel on performance of AlGaN/GaN FinFET. Microelectronic Engineering, 2015, 147, 155-158.	2.4	19
102	RF performance of InGaAs-based T-gate junctionless field-effect transistors which applicable for high frequency network systems. , 2015, , .		0
103	AlGaN/GaN FinFET With Extremely Broad Transconductance by Side-Wall Wet Etch. IEEE Electron Device Letters, 2015, 36, 1008-1010.	3.9	64
104	Characteristics of temperature rise in variable inductor employing magnetorheological fluid driven by a high-frequency pulsed voltage source. Journal of Applied Physics, 2015, 117, 17D508.	2.5	1
105	Short-Channel Tunneling Field-Effect Transistor with Drain-Overlap and Dual-Metal Gate Structure for Low-Power and High-Speed Operations. Journal of Nanoscience and Nanotechnology, 2015, 15, 7430-7435.	0.9	5
106	Control of transconductance in high performance AlGaN/GaN FinFETs. , 2015, , .		5
107	First demonstration of GaN-based vertical nanowire FET with top-down approach. , 2015, , .		13
108	Design and analysis of Si-based arch-shaped gate-all-around (GAA) tunneling field-effect transistor (TFET). Current Applied Physics, 2015, 15, 208-212.	2.4	24

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109	Electrical Characteristics of Enhancement-Mode n-Channel Vertical GaN MOSFETs and the Effects of Sidewall Slope. Journal of Electrical Engineering and Technology, 2015, 10, 1131-1137.	2.0	5
110	Electrohydrodynamic Analysis of Dielectric Guide Flow Due to Surface Charge Density Effects in Breakdown Region. Journal of Electrical Engineering and Technology, 2015, 10, 647-652.	2.0	1
111	Design of a recessed-gate GaN-based MOSFET using a dual gate dielectric for high-power applications. Journal of the Korean Physical Society, 2014, 65, 1579-1584.	0.7	2
112	Improvement of Current Efficiency at High Field Regime Via Description of Roll-off Characteristic in Model Device of OLEDs. Molecular Crystals and Liquid Crystals, 2014, 599, 79-85.	0.9	2
113	Fabrication and Characterization of GaN-based Light-emitting Diode (LED) with Triangle-type Structure. Molecular Crystals and Liquid Crystals, 2014, 599, 163-169.	0.9	1
114	GaN junctionless trigate field-effect transistor with deep-submicron gate length: Characterization and modeling in RF regime. Japanese Journal of Applied Physics, 2014, 53, 118001.	1.5	9
115	Analysis of Radio Frequency Performance on GaAs/InGaAs Heterojunction Tunneling Field-Effect Transistor which Applicable for Green Energy System Applications. , 2014, , .		2
116	Dependence of device performances on fin dimensions in AlGaN/GaN recessed-gate nanoscale FinFET. , 2014, , .		1
117	A Reliable Extraction Method for Source and Drain Series Resistances in Silicon Nanowire Metal-Oxide-Semiconductor Field-Effect-Transistors (MOSFETs) Based on Radio-Frequency Analysis. Journal of Nanoscience and Nanotechnology, 2014, 14, 8219-8224.	0.9	0
118	Highly enhanced charge injection and bulk transport in organic gap–type diodes via one–pot treatment process: experiment and simulation. Micro and Nano Letters, 2014, 9, 887-890.	1.3	0
119	Heteromaterial Gate Tunneling Field-Effect Transistor for High-Speed and Radio-Frequency Applications. Journal of Nanoscience and Nanotechnology, 2014, 14, 8136-8140.	0.9	3
120	Organic Diodes with Highly Improved Charge Injection and Transport via One-Pot Treatment Process. Science of Advanced Materials, 2014, 6, 2483-2486.	0.7	1
121	Investigation of InAs/InGaAs/InP Heterojunction Tunneling Field-Effect Transistors. Journal of Electrical Engineering and Technology, 2014, 9, 1654-1659.	2.0	3
122	Evaluation of Radio-Frequency Performance of Gate-All-Around Ge/GaAs Heterojunction Tunneling Field-Effect Transistor with Hetero-Gate-Dielectric by Mixed-Mode Simulation. Journal of Electrical Engineering and Technology, 2014, 9, 2070-2078.	2.0	1
123	Design and analysis of vertical-channel gallium nitride (GaN) junctionless nanowire transistors (JNT). Journal of Nanoscience and Nanotechnology, 2014, 14, 8130-5.	0.9	1
124	More Accurate and Reliable Extraction of Tunneling Resistance in Tunneling FET and Verification in Small-Signal Circuit Operation. IEEE Transactions on Electron Devices, 2013, 60, 3318-3324.	3.0	12
125	InGaAs/InP heterojunction-channel tunneling field-effect transistor for ultra-low operating and standby power application below supply voltage of 0.5 V. Current Applied Physics, 2013, 13, 2051-2054.	2.4	9
126	Highly sensitive ion sensor based on the MOSFET–BJT hybrid mode of a gated lateral BJT. Sensors and Actuators B: Chemical, 2013, 181, 44-49.	7.8	7

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127	Simulation study on effect of drain underlap in gate-all-around tunneling field-effect transistors. Current Applied Physics, 2013, 13, 1143-1149.	2.4	40
128	Mixed-Mode Simulation of Nanowire Ge/GaAs Heterojunction Tunneling Field-Effect Transistor for Circuit Applications. IEEE Journal of the Electron Devices Society, 2013, 1, 48-53.	2.1	9
129	Compound Semiconductor Tunneling Field-Effect Transistor Based on Ge/GaAs Heterojunction with Tunneling-Boost Layer for High-Performance Operation. Japanese Journal of Applied Physics, 2013, 52, 04CC04.	1.5	5
130	Simulation for silicon-compatible InGaAs-based junctionless field-effect transistor using InP buffer layer. Semiconductor Science and Technology, 2013, 28, 105007.	2.0	5
131	Analysis on RF Parameters of Nanoscale Tunneling Field-Effect Transistor Based on InAs/InGaAs/InP Heterojunctions. Journal of Nanoscience and Nanotechnology, 2013, 13, 8133-8136.	0.9	1
132	Silicon-compatible high-hole-mobility transistor with an undoped germanium channel for low-power application. Applied Physics Letters, 2013, 103, 222102.	3.3	7
133	Rigorous Design and Analysis of Tunneling Field-Effect Transistor with Hetero-Gate-Dielectric and Tunneling-Boost n-Layer. IEICE Transactions on Electronics, 2013, E96.C, 644-648.	0.6	1
134	Design Optimization of Silicon-based Junctionless Fin-type Field-Effect Transistors for Low Standby Power Technology. Journal of Electrical Engineering and Technology, 2013, 8, 1497-1502.	2.0	4
135	Performance of Gate-All-Around Tunneling Field-Effect Transistors Based on Si$_{1-x}$Ge$_x$ Layer. IEICE Transactions on Electronics, 2012, E95.C, 814-819.	0.6	4
136	Simulation study on scaling limit of silicon tunneling field-effect transistor under tunneling-predominance. IEICE Electronics Express, 2012, 9, 828-833.	0.8	2
137	Design optimization of vertical double-gate tunneling field-effect transistors. Journal of the Korean Physical Society, 2012, 61, 1679-1682.	0.7	5
138	Design optimization of tunneling field-effect transistor based on silicon nanowire PNPN structure and its radio frequency characteristics. Current Applied Physics, 2012, 12, 673-677.	2.4	22
139	Fabrication and Characterization of a GaN Light-emitting Diode (LED) with a Centered Island Cathode. Journal of the Optical Society of Korea, 2012, 16, 349-353.	0.6	3
140	Extraction of T-Type Substrate Resistance Components for Radio-Frequency Metal–Oxide–Semiconductor Field-Effect Transistors Based on Two-Port S-Parameter Measurement. Japanese Journal of Applied Physics, 2012, 51, 111201.	1.5	0
141	Silicon-compatible compound semiconductor tunneling field-effect transistor for high performance and low standby power operation. Applied Physics Letters, 2011, 99, .	3.3	36
142	RF Performance and Small-Signal Parameter Extraction of Junctionless Silicon Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 1388-1396.	3.0	170
143	Analyses on Small-Signal Parameters and Radio-Frequency Modeling of Gate-All-Around Tunneling Field-Effect Transistors. IEEE Transactions on Electron Devices, 2011, 58, 4164-4171.	3.0	82
144	Compact modeling of silicon nanowire MOSFET for radio frequency applications. Microwave and Optical Technology Letters, 2011, 53, 471-473.	1.4	2

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145	Radio Frequency Performance of Hetero-Gate-Dielectric Tunneling Field-Effect Transistors. Japanese Journal of Applied Physics, 2011, 50, 124301.	1.5	10
146	Investigation of source-to-drain capacitance by DIBL effect of silicon nanowire MOSFETs. IEICE Electronics Express, 2010, 7, 1499-1503.	0.8	3
147	Non-Quasi-Static Modeling of Silicon Nanowire Metal–Oxide–Semiconductor Field-Effect Transistor and Its Model Verification up to 1 THz. Japanese Journal of Applied Physics, 2010, 49, 110206.	1.5	8
148	Modeling and RF analysis of silicon inter-band tunnel diode with THz cut-off frequency. , 2010, , .		0
149	RF Model of BEOL Vertical Natural Capacitor (VNCAP) Fabricated by 45-nm RF CMOS Technology and Its Verification. IEEE Electron Device Letters, 2009, 30, 538-540.	3.9	13
150	Five-Step (Pad–Pad Short–Pad Open–Short–Open) De-Embedding Method and Its Verification. IEEE Electron Device Letters, 2009, 30, 398-400.	3.9	34
151	Scalable Model of Substrate Resistance Components in RF MOSFETs With Bar-Type Body Contact Considered Layout Dimensions. IEEE Electron Device Letters, 2009, 30, 404-406.	3.9	12
152	2.4 GHz ISM-Band Receiver Design in a 0.18 $mu{hbox{m}}$ Mixed Signal CMOS Process. IEEE Microwave and Wireless Components Letters, 2007, 17, 736-738.	3.2	6
153	Extraction of pi-Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. IEEE Electron Device Letters, 2007, 28, 425-427.	3.9	9
154	A New Noise Parameter Model of Short-Channel MOSFETs. Radio Frequency Integrated Circuits (RFIC) Symposium, IEEE, 2007, , .	0.0	9
155	Separate Extraction of Gate Resistance Components in RF MOSFETs. IEEE Transactions on Electron Devices, 2007, 54, 1459-1463.	3.0	23
156	Non-quasi-static small-signal modeling and analytical parameter extraction of SOI FinFETs. IEEE Nanotechnology Magazine, 2006, 5, 205-210.	2.0	80
157	Complete Quasi-Static Modeling of 130nm RF MOSFETs. , 2006, , .		0
158	A new non-quasi-static small signal model of SOI FinFETs. , 2006, , .		0
159	Active and Passive RF Device Compact Modeling in CMOS Technoloies. , 2006, , .		2
160	Extraction and modeling of gate electrode resistance in rf MOSFETs. , 2005, , .		1
161	The Analysis of Dark Signals in the CMOS APS Imagers From the Characterization of Test Structures. IEEE Transactions on Electron Devices, 2004, 51, 178-184.	3.0	103
162	Effects of electrical stress on mid-gap interface trap density and capture cross sections in n-MOSFETs characterized by pulsed interface probing measurements. Microelectronics Reliability, 2004, 44, 47-51.	1.7	0

#	Article	IF	Citations
163	Analytical thermal noise model suitable for circuit design using short-channel MOSFETs. , 0, , .		2
164	Analysis and Optimization for Characteristics of Vertical GaN Junctionless MOSFETs Depending on Specifications of GaN Substrates. Journal of Electrical Engineering and Technology, 0, , .	2.0	0