In-Man Kang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

138
papers1,042
citations16
h-index27
g-index164
ext. papers1,337
ext. citations2.2
avg, IF4.4
L-index

#	Paper	IF	Citations
138	Flexible Sol-Gel-Processed YO RRAM Devices Obtained via UV/Ozone-Assisted Photochemical Annealing Process <i>Materials</i> , 2022 , 15,	3.5	1
137	Room-Temperature High-Detectivity Flexible Near-Infrared Photodetectors with Chalcogenide Silver Telluride Nanoparticles <i>ACS Omega</i> , 2022 , 7, 10262-10267	3.9	0
136	Design of Capacitorless DRAM Based on Polycrystalline Silicon Nanotube Structure. <i>IEEE Access</i> , 2021 , 9, 163675-163685	3.5	O
135	Improving of Sensitivity of PbS Quantum Dot Based SWIR Photodetector Using P3HT. <i>Materials</i> , 2021 , 14,	3.5	1
134	Experimental and simulation study of power performance improvement of GaN PIN betavoltaic cell. <i>International Journal of Energy Research</i> , 2021 , 45, 17622-17630	4.5	1
133	Effects of Proton Irradiation on the Current Characteristics of SiN-Passivated AlGaN/GaN MIS-HEMTs Using a TMAH-Based Surface Pre-Treatment. <i>Micromachines</i> , 2021 , 12,	3.3	2
132	Numerical Design of Carrier Transporting Layer in Top-Gate InGaZnO Thin-Film Transistors for Controlling Potential Energy. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 3847-3852	1.3	O
131	Improved Negative Bias Stress Stability of Sol G el-Processed Li-Doped SnO2 Thin-Film Transistors. <i>Electronics (Switzerland)</i> , 2021 , 10, 1629	2.6	1
130	Design optimization of GaN diode with p-GaN multi-well structure for high-efficiency betavoltaic cell. <i>Nuclear Engineering and Technology</i> , 2021 , 53, 1284-1288	2.6	2
129	Polycrystalline-Silicon-MOSFET-Based Capacitorless DRAM With Grain Boundaries and Its Performances. <i>IEEE Access</i> , 2021 , 1-1	3.5	1
128	Influence of Active Channel Layer Thickness on SnO2 Thin-Film Transistor Performance. <i>Electronics</i> (Switzerland), 2021 , 10, 200	2.6	3
127	Single-event transient characteristics of vertical gate-all-around junctionless field-effect transistor on bulk substrate. <i>Applied Physics A: Materials Science and Processing</i> , 2021 , 127, 1	2.6	3
126	Design of a Capacitorless Dynamic Random Access Memory Based on Ultra-Thin Polycrystalline Silicon Junctionless Field-Effect Transistor with Dual-Gate. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4223-4229	1.3	O
125	Analysis of Grain Boundary Dependent Memory Characteristics in Poly-Si One-Transistor Dynamic Random-Access Memory. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4216-4222	1.3	O
124	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. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4258-4267	1.3	
123	Design and Analysis of DC/DC Boost Converter Using Vertical GaN Power Device. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4320-4324	1.3	
122	Design of a Capacitorless Dynamic Random Access Memory Based on Junctionless Dual-Gate Field-Effect Transistor with a Silicon-Germanium/Silicon Nanotube. <i>Journal of Nanoscience and Nanotechnology</i> , 2021 , 21, 4235-4242	1.3	O

(2020-2021)

121	Extremely bias stress stable enhancement mode solgel-processed SnO2 thin-film transistors with Y2O3 passivation layers. <i>Applied Surface Science</i> , 2021 , 559, 149971	6.7	7
120	Design and optimization of GaN -based betavoltaic cell for enhanced output power density. International Journal of Energy Research, 2021, 45, 799-806	4.5	2
119	Fluoropolymer-based organic memristor with multifunctionality for flexible neural network system. <i>Npj Flexible Electronics</i> , 2021 , 5,	10.7	6
118	Effect of High-Speed Blade Coating on Electrical Characteristics in Polymer Based Transistors. Journal of Nanoscience and Nanotechnology, 2020 , 20, 5486-5490	1.3	2
117	Effect of Mg Doping on the Electrical Performance of a Sol-Gel-Processed SnO2 Thin-Film Transistor. <i>Electronics (Switzerland)</i> , 2020 , 9, 523	2.6	9
116	Fabrication of AlGaN/GaN MISHEMT with dual-metal gate electrode and its performances. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	6
115	Effects of Contact Potential and Sidewall Surface Plane on the Performance of GaN Vertical Nanowire MOSFETs for Low-Voltage Operation. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 1547-15	532	4
114	Enhancement Mode Flexible SnO2 Thin Film Transistors Via a UV/Ozone-Assisted Sol-Gel Approach. <i>IEEE Access</i> , 2020 , 8, 123013-123018	3.5	5
113	Recessed-Gate GaN Metal-Insulator-Semiconductor High-Electron-Mobility Transistor Using a Dual Gate-Insulator Employing TiO//SiN. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4678-4683	1.3	1
112	Analysis of Logic Inverter Based on Polycrystalline Silicon with Single Grain Boundary. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6616-6621	1.3	
111	Analysis of the Sensing Margin of Silicon and Poly-Si 1T-DRAM. <i>Micromachines</i> , 2020 , 11,	3.3	5
110	Sol-Gel Processed Yttrium-Doped SnO2 Thin Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 254	2.6	12
109	Numerical Analysis on Effective Mass and Traps Density Dependence of Electrical Characteristics of a-IGZO Thin-Film Transistors. <i>Electronics (Switzerland)</i> , 2020 , 9, 119	2.6	7
108	Application of Genetic Algorithm for More Efficient Multi-Layer Thickness Optimization in Solar Cells. <i>Energies</i> , 2020 , 13, 1726	3.1	5
107	Analysis of CMOS Logic Inverter Based on Gate-All-Around Field-Effect Transistors with the Strained-Silicon Layer for Improving the Switching Performances. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6632-6637	1.3	
106	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. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 6596-6602	1.3	
105	Charge Based Current-Voltage Model for the Silicon on Insulator Junctionless Field-Effect Transistor. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4920-4925	1.3	
104	Theoretical Analysis of Prospects of Organic Photovoltaics as a Multi-Functional Solar Cell and Laser Power Converter for Wireless Power Transfer. <i>Journal of Nanoscience and Nanotechnology</i> , 2020 , 20, 4878-4883	1.3	

103	Improved negative bias stability of solgel processed Ti-doped SnO2 thin-film transistors. <i>Semiconductor Science and Technology</i> , 2020 , 35, 115023	1.8	5
102	Contact line curvature-induced molecular misorientation of a surface energy patterned organic semiconductor in meniscus-guided coating. <i>Applied Surface Science</i> , 2020 , 504, 144362	6.7	7
101	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. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, SGGB01	1.4	3
100	Control of silver nanowire-elastomer nanocomposite networks through elaborate direct printing for ultrathin and stretchable strain sensors. <i>Composites Science and Technology</i> , 2020 , 200, 108471	8.6	5
99	Simulation of capacitorless dynamic random access memory based on junctionless FinFETs using grain boundary of polycrystalline silicon. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	2
98	Fabrication of AlGaN/GaN Fin-Type HEMT Using a Novel T-Gate Process for Improved Radio-Frequency Performance. <i>IEEE Access</i> , 2020 , 8, 139156-139160	3.5	4
97	Gallium Nitride Normally Off MOSFET Using Dual-Metal-Gate Structure for the Improvement in Current Drivability. <i>Electronics (Switzerland)</i> , 2020 , 9, 1402	2.6	2
96	Design and Analysis of Gallium Nitride-Based p-i-n Diode Structure for Betavoltaic Cell with Enhanced Output Power Density. <i>Micromachines</i> , 2020 , 11,	3.3	2
95	One-Transistor Dynamic Random-Access Memory Based on Gate-All-Around Junction-Less Field-Effect Transistor with a Si/SiGe Heterostructure. <i>Electronics (Switzerland)</i> , 2020 , 9, 2134	2.6	2
94	The Crucial Role of Quaternary Mixtures of Active Layer in Organic Indoor Solar Cells. <i>Energies</i> , 2019 , 12, 1838	3.1	10
94		3.1	10
	2019, 12, 1838 A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable		
93	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. <i>Applied Physics Letters</i> , 2019 , 114, 183503 Analysis of Electrical Characteristics of InAlGaN/GaN-Based High Electron Mobility Transistors with AlGaN Back Barriers. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6008-6015 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. <i>Journal of Nanoscience and</i>	3.4	10
93	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. <i>Applied Physics Letters</i> , 2019 , 114, 183503 Analysis of Electrical Characteristics of InAlGaN/GaN-Based High Electron Mobility Transistors with AlGaN Back Barriers. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6008-6015 Capacitorless One-Transistor Dynamic Random-Access Memory Based on Double-Gate Metal-Oxide-Semiconductor Field-Effect Transistor with Si/SiGe Heterojunction and Underlap	3.4	10
93 92 91	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. <i>Applied Physics Letters</i> , 2019 , 114, 183503 Analysis of Electrical Characteristics of InAlGaN/GaN-Based High Electron Mobility Transistors with AlGaN Back Barriers. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6008-6015 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. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6023-6030 Design Optimization and Analysis of InGaAs/InGaAs Heterojunction-Based Electron Hole	3.4 1.3	10
93 92 91 90	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. Applied Physics Letters, 2019, 114, 183503 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 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 Design Optimization and Analysis of InGaAs/InAs/InGaAs Heterojunction-Based Electron Hole Bilayer Tunneling FETs. Journal of Nanoscience and Nanotechnology, 2019, 19, 6070-6076 Design Optimization of InGaAs/GaAsSb-Based -Type Gate-All-Around Arch-Shaped Tunneling	3.4 1.3 1.3	10 1 3 2
9392919089	A polycrystalline-silicon dual-gate MOSFET-based 1T-DRAM using grain boundary-induced variable resistance. Applied Physics Letters, 2019, 114, 183503 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 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 Design Optimization and Analysis of InGaAs/InAs/InGaAs Heterojunction-Based Electron Hole Bilayer Tunneling FETs. Journal of Nanoscience and Nanotechnology, 2019, 19, 6070-6076 Design Optimization of InGaAs/GaAsSb-Based -Type Gate-All-Around Arch-Shaped Tunneling Field-Effect Transistor. Journal of Nanoscience and Nanotechnology, 2019, 19, 6762-6766 Fabrication and Characterization of a Thin-Body Poly-Si 1T DRAM With Charge-Trap Effect. IEEE	3.4 1.3 1.3	10 1 3 2

85	Analysis of operation characteristics of junctionless poly-Si 1T-DRAM in accumulation mode. <i>Semiconductor Science and Technology</i> , 2019 , 34, 105007	1.8	4
84	Importance of Blade-Coating Temperature for Diketopyrrolopyrrole-based Thin-Film Transistors. <i>Crystals</i> , 2019 , 9, 346	2.3	4
83	Simulation for Electrical Performances of the Capacitorless Dynamic Random Access Memory Based on Junctionless FinFETs. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6755-6761	1.3	
82	Effect of Annealing Ambient on SnO2 Thin Film Transistors Fabricated via An Ethanol-based Sol-gel Route. <i>Electronics (Switzerland)</i> , 2019 , 8, 955	2.6	9
81	Design and Optimization of Germanium-Based Gate-Metal-Core Vertical Nanowire Tunnel FET. <i>Micromachines</i> , 2019 , 10,	3.3	5
80	Microwave analysis of SiGe heterojunction double-gate tunneling field-effect transistor through its small-signal equivalent circuit. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2019 , 29, e21678	1.5	2
79	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. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 04FG03	1.4	7
78	Performance comparison between pl and pl junction tunneling field-effect transistors. Japanese Journal of Applied Physics, 2018 , 57, 06HC01	1.4	2
77	Low voltage operation of GaN vertical nanowire MOSFET. Solid-State Electronics, 2018, 145, 1-7	1.7	19
76	A Novel Analysis of \${L}_{text{gd}}}\$ Dependent-1/ \${f}\$ Noise in In0.08Al0.92N/GaN. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1552-1555	4.4	3
75	Design Optimization of Ge/GaAs-Based Heterojunction Gate-All-Around (GAA) Arch-Shaped Tunneling Field-Effect Transistor (A-TFET). <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 6602-6	5 6 ₹5	
74	Normally-off AlGaN/GaN-based MOS-HEMT with self-terminating TMAH wet recess etching. <i>Solid-State Electronics</i> , 2018 , 141, 7-12	1.7	6
73	Simulation of One-Transistor Dynamic Random-Access Memory Based on Symmetric Double-Gate Si Junctionless Transistor. <i>Journal of Nanoscience and Nanotechnology</i> , 2018 , 18, 6593-6597	1.3	
72	Analysis of tunneling field-effect transistor with germanium source junction using small-signal equivalent circuit. <i>Microwave and Optical Technology Letters</i> , 2018 , 60, 2922-2927	1.2	1
71	1/f-Noise in AlGaN/GaN Nanowire Omega-FinFETs. IEEE Electron Device Letters, 2017, 38, 252-254	4.4	17
70	Electrical Performances of InN/GaN Tunneling Field-Effect Transistor. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 8355-8359	1.3	1
69	Performance enhancement of AlGaN/GaN nanochannel omega-FinFET. <i>Solid-State Electronics</i> , 2017 , 129, 196-199	1.7	4
68	Design Optimization and Analysis of InGaAs-Based Gate-All-Around (GAA) Junctionless Field-Effect Transistor (JLFET). <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 8350-8354	1.3	

67	Effect of Electric Fringe-Field on Low-Power and Radio-Frequency Performances of Sub-10 nm Junctionless Transistors with Hetero-Dielectric Spacer Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 7140-7144	1.3	
66	Fully Coupled Finite-Element Analysis for Surface Discharge on Solid Insulation in Dielectric Liquid With Experimental Validation. <i>IEEE Transactions on Magnetics</i> , 2016 , 52, 1-4	2	7
65	Design Optimization of AlN/GaN-Based Double-Heterojunction Fin-Type High Electron Mobility Transistors for High On-State Current. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 10193-101	9 ⁸ 3	2
64	. IEEE Electron Device Letters, 2016 , 37, 855-858	4.4	25
63	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
62	DC and RF Analysis of Geometrical Parameter Changes in the Current Aperture Vertical Electron Transistor. <i>Journal of Electrical Engineering and Technology</i> , 2016 , 11, 1763-1768	1.4	
61	TMAH-based wet surface pre-treatment for reduction of leakage current in AlGaN/GaN MIS-HEMTs. <i>Solid-State Electronics</i> , 2016 , 124, 54-57	1.7	12
60	Design optimization of vertical nanowire tunneling field-effect transistor based on AlGaSb/InGaAs heterojunction layer. <i>Current Applied Physics</i> , 2016 , 16, 681-685	2.6	4
59	Effects of sidewall MOS channel on performance of AlGaN/GaN FinFET. <i>Microelectronic Engineering</i> , 2015 , 147, 155-158	2.5	17
58	AlGaN/GaN FinFET With Extremely Broad Transconductance by Side-Wall Wet Etch. <i>IEEE Electron Device Letters</i> , 2015 , 36, 1008-1010	4.4	45
57	Characteristics of temperature rise in variable inductor employing magnetorheological fluid driven by a high-frequency pulsed voltage source. <i>Journal of Applied Physics</i> , 2015 , 117, 17D508	2.5	1
56	Short-Channel Tunneling Field-Effect Transistor with Drain-Overlap and Dual-Metal Gate Structure for Low-Power and High-Speed Operations. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 7430	<u>-</u> 1 .3	5
55	Control of transconductance in high performance AlGaN/GaN FinFETs 2015,		4
54	First demonstration of GaN-based vertical nanowire FET with top-down approach 2015,		9
53	Design and analysis of Si-based arch-shaped gate-all-around (GAA) tunneling field-effect transistor (TFET). <i>Current Applied Physics</i> , 2015 , 15, 208-212	2.6	19
52	Design and Analysis of CMOS-Compatible III-V Compound Electron-Hole Bilayer Tunneling Field-Effect Transistor for Ultra-Low-Power Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 7486-92	1.3	2
51	Suppression of current collapse in AlGaN/GaN MISHFET with carbon- doped GaN/undoped GaN multi-layered buffer structure. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1116-1121	1.6	24
50	Analyses on RF Performances of Silicon-Compatible InGaAs-Based Planar-Type and Fin-Type Junctionless Field-Effect Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 7615-9	1.3	2

(2013-2015)

49	Fabrication of high performance AlGaN/GaN FinFET by utilizing anisotropic wet etching in TMAH solution 2015 ,		3
48	Electrical Characteristics of Enhancement-Mode n-Channel Vertical GaN MOSFETs and the Effects of Sidewall Slope. <i>Journal of Electrical Engineering and Technology</i> , 2015 , 10, 1131-1137	1.4	4
47	Electrohydrodynamic Analysis of Dielectric Guide Flow Due to Surface Charge Density Effects in Breakdown Region. <i>Journal of Electrical Engineering and Technology</i> , 2015 , 10, 647-652	1.4	1
46	GaN junctionless trigate field-effect transistor with deep-submicron gate length: Characterization and modeling in RF regime. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 118001	1.4	7
45	Dependence of device performances on fin dimensions in AlGaN/GaN recessed-gate nanoscale FinFET 2014 ,		1
44	Highly enhanced charge injection and bulk transport in organic gap-type diodes via one-pot treatment process: experiment and simulation. <i>Micro and Nano Letters</i> , 2014 , 9, 887-890	0.9	
43	Heteromaterial gate tunneling field-effect transistor for high-speed and radio-frequency applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 8136-40	1.3	3
42	Design of a recessed-gate GaN-based MOSFET using a dual gate dielectric for high-power applications. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 1579-1584	0.6	2
41	Improvement of Current Efficiency at High Field Regime Via Description of Roll-off Characteristic in Model Device of OLEDs. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 79-85	0.5	2
40	Fabrication and Characterization of GaN-based Light-emitting Diode (LED) with Triangle-type Structure. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 163-169	0.5	1
39	Investigation of InAs/InGaAs/InP Heterojunction Tunneling Field-Effect Transistors. <i>Journal of Electrical Engineering and Technology</i> , 2014 , 9, 1654-1659	1.4	3
38	Evaluation of Radio-Frequency Performance of Gate-All-Around Ge/GaAs Heterojunction Tunneling Field-Effect Transistor with Hetero-Gate-Dielectric by Mixed-Mode Simulation. <i>Journal of Electrical Engineering and Technology</i> , 2014 , 9, 2070-2078	1.4	1
37	More Accurate and Reliable Extraction of Tunneling Resistance in Tunneling FET and Verification in Small-Signal Circuit Operation. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 3318-3324	2.9	8
36	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]	2.6	8
35	Highly sensitive ion sensor based on the MOSFETBJT hybrid mode of a gated lateral BJT. <i>Sensors and Actuators B: Chemical</i> , 2013 , 181, 44-49	8.5	5
34	Simulation study on effect of drain underlap in gate-all-around tunneling field-effect transistors. <i>Current Applied Physics</i> , 2013 , 13, 1143-1149	2.6	32
33	Mixed-Mode Simulation of Nanowire Ge/GaAs Heterojunction Tunneling Field-Effect Transistor for Circuit Applications. <i>IEEE Journal of the Electron Devices Society</i> , 2013 , 1, 48-53	2.3	7
32	Compound Semiconductor Tunneling Field-Effect Transistor Based on Ge/GaAs Heterojunction with Tunneling-Boost Layer for High-Performance Operation. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 04CC04	1.4	3

31	Simulation for silicon-compatible InGaAs-based junctionless field-effect transistor using InP buffer layer. <i>Semiconductor Science and Technology</i> , 2013 , 28, 105007	1.8	3
30	Analysis on RF parameters of nanoscale tunneling field-effect transistor based on InAs/InGaAs/InP heterojunctions. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 8133-6	1.3	1
29	Silicon-compatible high-hole-mobility transistor with an undoped germanium channel for low-power application. <i>Applied Physics Letters</i> , 2013 , 103, 222102	3.4	6
28	Rigorous Design and Analysis of Tunneling Field-Effect Transistor with Hetero-Gate-Dielectric and Tunneling-Boost n-Layer. <i>IEICE Transactions on Electronics</i> , 2013 , E96.C, 644-648	0.4	1
27	Design Optimization of Silicon-based Junctionless Fin-type Field-Effect Transistors for Low Standby Power Technology. <i>Journal of Electrical Engineering and Technology</i> , 2013 , 8, 1497-1502	1.4	2
26	Simulation study on scaling limit of silicon tunneling field-effect transistor under tunneling-predominance. <i>IEICE Electronics Express</i> , 2012 , 9, 828-833	0.5	2
25	Design optimization of vertical double-gate tunneling field-effect transistors. <i>Journal of the Korean Physical Society</i> , 2012 , 61, 1679-1682	0.6	3
24	Design optimization of tunneling field-effect transistor based on silicon nanowire PNPN structure and its radio frequency characteristics. <i>Current Applied Physics</i> , 2012 , 12, 673-677	2.6	18
23	Performance of Gate-All-Around Tunneling Field-Effect Transistors Based on Si1-x Gex Layer. <i>IEICE Transactions on Electronics</i> , 2012 , E95.C, 814-819	0.4	4
22	Fabrication and Characterization of a GaN Light-emitting Diode (LED) with a Centered Island Cathode. <i>Journal of the Optical Society of Korea</i> , 2012 , 16, 349-353		3
21	Extraction of T-Type Substrate Resistance Components for Radio-Frequency Metal®xideBemiconductor Field-Effect Transistors Based on Two-PortS-Parameter Measurement. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 111201	1.4	
20	Silicon-compatible compound semiconductor tunneling field-effect transistor for high performance and low standby power operation. <i>Applied Physics Letters</i> , 2011 , 99, 243505	3.4	30
19	. IEEE Transactions on Electron Devices, 2011 , 58, 1388-1396	2.9	124
18	. IEEE Transactions on Electron Devices, 2011 , 58, 4164-4171	2.9	65
17	Compact modeling of silicon nanowire MOSFET for radio frequency applications. <i>Microwave and Optical Technology Letters</i> , 2011 , 53, 471-473	1.2	1
16	Radio Frequency Performance of Hetero-Gate-Dielectric Tunneling Field-Effect Transistors. Japanese Journal of Applied Physics, 2011 , 50, 124301	1.4	9
15	Non-Quasi-Static Modeling of Silicon Nanowire Metal®xideBemiconductor Field-Effect Transistor and Its Model Verification up to 1 THz. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 110206	1.4	5
14	Investigation of source-to-drain capacitance by DIBL effect of silicon nanowire MOSFETs. <i>IEICE Electronics Express</i> , 2010 , 7, 1499-1503	0.5	3

LIST OF PUBLICATIONS

13	RF Model of BEOL Vertical Natural Capacitor (VNCAP) Fabricated by 45-nm RF CMOS Technology and Its Verification. <i>IEEE Electron Device Letters</i> , 2009 , 30, 538-540	4.4	7	
12	Five-Step (PadPad ShortPad OpenBhortOpen) De-Embedding Method and Its Verification. <i>IEEE Electron Device Letters</i> , 2009 , 30, 398-400	4.4	24	
11	. IEEE Electron Device Letters, 2009 , 30, 404-406	4.4	11	
10	Extraction of \$pi\$-Type Substrate Resistance Based on Three-Port Measurement and the Model Verification up to 110 GHz. <i>IEEE Electron Device Letters</i> , 2007 , 28, 425-427	4.4	7	
9	A New Noise Parameter Model of Short-Channel MOSFETs. <i>Radio Frequency Integrated Circuits</i> (RFIC) Symposium, IEEE, 2007 ,		8	
8	Separate Extraction of Gate Resistance Components in RF MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 1459-1463	2.9	21	
7	2.4 GHz ISM-Band Receiver Design in a 0.18 \$mu{hbox{m}}\$ Mixed Signal CMOS Process. <i>IEEE Microwave and Wireless Components Letters</i> , 2007 , 17, 736-738	2.6	5	
6	Active and Passive RF Device Compact Modeling in CMOS Technoloies 2006,		2	
5	Non-quasi-static small-signal modeling and analytical parameter extraction of SOI FinFETs. <i>IEEE Nanotechnology Magazine</i> , 2006 , 5, 205-210	2.6	63	
4	Extraction and modeling of gate electrode resistance in rf MOSFETs 2005,		1	
3	The analysis of dark signals in the CMOS APS imagers from the characterization of test structures. <i>IEEE Transactions on Electron Devices</i> , 2004 , 51, 178-184	2.9	84	
2	Effects of electrical stress on mid-gap interface trap density and capture cross sections in n-MOSFETs characterized by pulsed interface probing measurements. <i>Microelectronics Reliability</i> , 2004 , 44, 47-51	1.2		
1	Enhanced switching ratio of solgel-processed Y2O3 RRAM device by suppressing oxygen-vacancy formation at high annealing temperature. Semiconductor Science and Technology,	1.8	2	