

# Manoj Saxena

## List of Publications by Year in descending order

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209  
papers

2,523  
citations

236833

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209  
docs citations

209  
times ranked

857  
citing authors

#	ARTICLE	IF	CITATIONS
1	Emerging Device Architectures for Space Electronics. , 2023, , 181-208.		1
2	TCAD-Based Optimization of Field Plate Length & Passivation Layer of AlGaIn/GaN HEMT for Higher Cut-Off Frequency & Breakdown Voltage. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq0 0 0 rgBT /Overlok 10 Tf 5	0.8	2
3	Advances in DC/RF Performance of AlGaIn/GaN MIS-HEMT by Incorporating Dual Metal Gate Architecture. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq1 1 0.784314 rgBT /Overlok 10 Tf 5	1.0	2
4	Optimization of " Gate AlGaIn/AlN/GaN HEMTs for Low Noise and High Gain Applications. Silicon, 2022, 14, 393-404.	1.8	12
5	Modeling and Simulation-Based Investigation of 2-D Symmetric Double Gate Dopingless-TFET and Its Circuit Performance for Low-Power Applications. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq1 1 0.784314 rgBT /Overlok 10 Tf 5	1.0	2
6	Impact of Non-Uniform Doping on the Reliability of Double Gate Junctionless Transistor: A Numerical Investigation. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq0 0 0 rgBT /Overlok 10 Tf 5	0.8	2
7	Undoped Drain Graded Doping (UDGD) based TFET design: An innovative concept. Superlattices and Microstructures, 2022, 163, 107147.	1.4	2
8	Interplay Between "Ray Irradiation and 3DEG for Dosimeter Applications. IEEE Access, 2022, 10, 25811-25827.	2.6	2
9	Impact of Gamma Radiations on Static, Pulsed "V", and RF Performance Parameters of AlGaIn/GaN HEMT. IEEE Transactions on Electron Devices, 2022, 69, 2299-2306.	1.6	13
10	Investigation of proton irradiated dual field plate AlGaIn/GaN HEMTs: TCAD based assessment. Microelectronics Journal, 2022, 122, 105405.	1.1	4
11	Multilayer perceptron"random forest based hybrid machine learning"neural network model for GaN high electron mobility transistor's parameter estimations. International Journal of RF and Microwave Computer-Aided Engineering, 2022, 32, .	0.8	2
12	A "shaped p-GaN HEMT for reliable enhancement mode operation. Microelectronics Reliability, 2022, 133, 114544.	0.9	9
13	Ohmic contact morphology improvement with reduced resistance using Si/Au/Ti/Al/Ni/Au (AlGaIn) and Si/Au/Ti/Al/Ni/Au (InAlN) stack layers in III-Nitride HEMTs. Semiconductor Science and Technology, 2022, 37, 085006.	1.0	2
14	Single Event Transient Effect on Tapered Angle Hetero-junction Dopingless TFET for Radiation Sensitive Applications. , 2022, , .		1
15	Dependence of Gate Leakage Current on Efficacy of Gate Field Plate in AlGaIn/GaN HEMT. , 2022, , .		0
16	Optimized DL-TFET Design for Enhancing its Performance Parameters by Using Different Engineering Methods. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2021, 38, 429-437.	2.1	3
17	Sensitivity Assessment of RingFET Architecture for the Detection of Gas Molecules: Numerical Investigation. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq1 1 0.784314 rgBT /Overlok 10 Tf 5	1.0	2
18	TCAD-Based Assessment of Dual-Gate MISHEMT with Sapphire, SiC, and Silicon Substrate. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2021, 38, 197-205.	2.1	2

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19	Robust and Secure Digital Image Watermarking Technique Using Arnold Transform and Memristive Chaotic Oscillators. IEEE Access, 2021, 9, 72465-72483.	2.6	13
20	Enhancement in Electrical Characteristics of AlGaIn/GaN HEMT Using Gate Engineered Dielectric Pocket Dual-Metal Gate. Lecture Notes in Networks and Systems, 2021, , 369-374.	0.5	0
21	An Asymmetric $\delta$ -Gate MOSHEMT Architecture for High Frequency Applications. Lecture Notes in Networks and Systems, 2021, , 453-458.	0.5	0
22	Numerical Investigation of Gate Field Plate AlGaIn/GaN HEMT with Multi-recessed Buffer. Lecture Notes in Networks and Systems, 2021, , 519-524.	0.5	0
23	Comparative Study of AlGaIn/GaN HEMT and MOS-HEMT Under Positive Gate Bias-Induced Stress. Lecture Notes in Networks and Systems, 2021, , 506-512.	0.5	0
24	Gate stacked dual-gate MISHEMT with 39 THz $\Delta V$ Johnson's figure of merit for V-band applications. Journal of Computational Electronics, 2021, 20, 556-567.	1.3	2
25	Total ionizing dose effects in junctionless accumulation mode MOSFET. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
26	Proton irradiation effects on buffer-free gallium nitride on silicon carbide high electron mobility transistor-based radio frequency power amplifier. Semiconductor Science and Technology, 2021, 36, 045019.	1.0	10
27	Improvement in Schottky barrier inhomogeneities of Ni/AlGaIn/GaN Schottky diodes after cumulative $\gamma$ -ray irradiation. Semiconductor Science and Technology, 2021, 36, 065012.	1.0	4
28	TCAD-Based Investigation of Double Gate Junctionless Transistor for UV Photodetector. IEEE Transactions on Electron Devices, 2021, 68, 2841-2847.	1.6	14
29	Degradation Mechanisms in a Proton Irradiated HEMT with 3DEG Conduction and 3DHG as a Back Barrier. , 2021, , .		3
30	TCAD Based Investigation of Single Event Transient Effect in Double Channel AlGaIn/GaN HEMT. IEEE Transactions on Device and Materials Reliability, 2021, 21, 416-423.	1.5	11
31	Gate Leakage Current Assessment of AlGaIn/GaN HEMT with AlN Cap Layer. Lecture Notes in Networks and Systems, 2021, , 459-464.	0.5	0
32	A comparative study on the accuracy of small-signal equivalent circuit modeling for large gate periphery GaN HEMT with different source to drain length and gate width. Microelectronics Journal, 2021, 118, 105258.	1.1	8
33	E-mode All-GaN-Integrated cascode MISHEMT with GaN/InAlGaIn/GaN backbarrier for high power switching performance: Simulation study. Superlattices and Microstructures, 2021, , 107118.	1.4	2
34	Investigation of Single Event Transient Effects in Junctionless Accumulation Mode MOSFET. IEEE Transactions on Device and Materials Reliability, 2020, 20, 604-608.	1.5	9
35	Stepped Gate Profiles over DRE TFET: A Proposal to Improve Off-State Breakdown Voltage. , 2020, , .		1
36	TCAD Investigation of Gate - Lag Measurements on Conventional and $\delta$ - Gate AlGaIn/GaN HEMTs. , 2020, , .		6

#	ARTICLE	IF	CITATIONS
37	Assessment of Dual-Gate AlGaIn/GaN MISHEMT for high temperature DC to DC converter. Superlattices and Microstructures, 2020, 144, 106574.	1.4	1
38	Memristor Based Cryptographic Information Processing for Secured Communication Systems. , 2020, , .		3
39	Improvement in DC and pulse characteristics of AlGaIn/GaN HEMT by employing dual metal gate structure. Semiconductor Science and Technology, 2019, 34, 105013.	1.0	13
40	Investigation of total ionizing dose effect on SOI tunnel FET. Superlattices and Microstructures, 2019, 133, 106186.	1.4	16
41	Comparative study of InGaIn and InGaAs based dopingless TFET with different gate engineering techniques. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2019, 10, 035009.	0.7	6
42	Temperature based analysis of 3-step field plate AlGaIn/GaN HEMT using numerical simulation. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2019, 10, 045006.	0.7	1
43	Optimization of Asymmetric $\bar{\epsilon}$ Gate HEMT for Improved Reliability & Frequency Applications. , 2019, , .		7
44	Investigation of Sensitivity of Gate Underlap Junctionless DG MOSFET for Biomolecules. Springer Proceedings in Physics, 2019, , 717-724.	0.1	0
45	Floating Gate Junction-Less Double Gate Radiation Sensitive Field Effect Transistor (RADFET) Dosimeter: A Simulation Study. Springer Proceedings in Physics, 2019, , 571-576.	0.1	1
46	Study of Extended Back Gate Double Gate JunctionLess Transistor: Theoretical and Numerical Investigation. Springer Proceedings in Physics, 2019, , 633-642.	0.1	0
47	Analytical Model for Tapered Gate Electrode Double Gate MOSFET Incorporating Fringing Field Effects. Springer Proceedings in Physics, 2019, , 697-705.	0.1	1
48	Optically Controlled Silicon on Nothing MOSFET-Numerical Simulation. Springer Proceedings in Physics, 2019, , 1071-1076.	0.1	0
49	Analytical Modeling and Simulation Study of Homo and Hetero III-V Semiconductor Based Tunnel Field Effect Transistor (TFET). Springer Proceedings in Physics, 2019, , 1185-1194.	0.1	0
50	Threshold Voltage Investigation of Recessed Dual-Gate MISHEMT: Simulation Study. Communications in Computer and Information Science, 2019, , 380-393.	0.4	0
51	Breakdown voltage analysis of Dual-Gate MISHEMT: TCAD based assessment. , 2019, , .		1
52	Reliability Comparison of Conventional & Two Finger AlGaIn/GaN HEMT. , 2019, , .		0
53	Comparison of Linearity and Intermodulation Distortion Metrics for T - and Pi - Gate HEMT. , 2019, , .		6
54	Investigation of single-event-transient effect in floating-gate junctionless double-gate field-effect-transistor. , 2019, , .		0

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55	Comparative study of Au and Ni/Au gated AlGaIn/GaN high electron mobility transistors. AIP Advances, 2019, 9, .	0.6	17
56	Model of GaSb-InAs p-i-n Gate All Around BioTunnel FET. IEEE Sensors Journal, 2019, 19, 2605-2612.	2.4	24
57	Exploring the applicability of well optimized dielectric pocket tunnel transistor for future low power applications. Superlattices and Microstructures, 2019, 126, 8-16.	1.4	14
58	Simulation Study on Stability Aspect of Dual Metal Dual Dielectric Based TFET Architectures Against Temperature Variations. Springer Proceedings in Physics, 2019, , 649-655.	0.1	0
59	Empirical Model for Nonuniformly Doped Symmetric Double-Gate Junctionless Transistor. IEEE Transactions on Electron Devices, 2018, 65, 314-321.	1.6	23
60	Two-dimensional (2D) analytical investigation of an n-type junctionless gate-all-around tunnel field-effect transistor (JL GAA TFET). Journal of Computational Electronics, 2018, 17, 713-723.	1.3	6
61	Sub-threshold Drain Current model of Double Gate RingFET (DG-RingFET) Architecture: An Analog and Linearity Performance Investigation for RFIC Design. IETE Technical Review (Institution of Electronics) Tj ETQq1 1 0284314 r8BT /Overlo	1.1	19
62	Modeling and Simulation of Junctionless Double Gate Radiation Sensitive FET (RADFET) Dosimeter. IEEE Nanotechnology Magazine, 2018, 17, 49-55.	1.1	19
63	Study of Gaussian Doped Double Gate JunctionLess (GD-DG-JL) transistor including source drain depletion length: Model for sub-threshold behavior. Superlattices and Microstructures, 2018, 113, 57-70.	1.4	15
64	Reconnoiter the leavening of skin-deep insulated extension on analog performance of RingFET (SDIE-RingFET). AEU - International Journal of Electronics and Communications, 2018, 83, 67-72.	1.7	1
65	Impact of positions of sensing area in a channel of dielectric modulated MOSFET based biosensor. Integrated Ferroelectrics, 2018, 194, 63-71.	0.3	2
66	Simulation Based Breakdown Voltage Analysis Of 3-Step Field Plate AlGaIn/GaN HEMTs. , 2018, , .		3
67	Optimization of Gate Oxide of Dual-Gate MISHEMTs for Enhanced DC performance. , 2018, , .		2
68	Comparative Study of CMOS based Dosimeters for Gamma Radiation. , 2018, , .		4
69	Studying the Impact of Compound Semiconductor Material in Drain Region Extended Tunnel Transistor for SoC Applications. , 2018, , .		1
70	RingFET Architecture for High Frequency Applications: TCAD based Assessment. , 2018, , .		4
71	Breakdown Voltage Analysis of Different Field Plate AlGaIn/GaN HEMTs: TCAD based Assessment. , 2018, , .		1
72	Sub-Threshold Drain Current Model of Shell-Core Architecture Double Gate JunctionLess Transistor. , 2018, , .		1

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73	Investigation of Gate All Around Junctionless Nanowire Transistor with Arbitrary Polygonal Cross Section. , 2018, , .		3
74	Investigation of Field Plate Misalignment on Electrical Characteristics of AlGaIn/ GaN HEMT. , 2018, , .		2
75	Novel junctionless electrolyte-insulator-semiconductor field-effect transistor (JL EISFET) and its application as pH/biosensor. Microsystem Technologies, 2017, 23, 3149-3159.	1.2	14
76	Drain Current Model for Double Gate (DG) p-n-i-n TFET: Accumulation to Inversion Region of Operation. Superlattices and Microstructures, 2017, 104, 78-92.	1.4	9
77	Analytical Model of pH sensing Characteristics of Junctionless Silicon on Insulator ISFET. IEEE Transactions on Electron Devices, 2017, 64, 1742-1750.	1.6	58
78	Modeling and Simulation Investigation of Sensitivity of Symmetric Split Gate Junctionless FET for Biosensing Application. IEEE Sensors Journal, 2017, 17, 4853-4861.	2.4	63
79	Analytical drain current model for Gate and Channel Engineered RingFET (GCE-RingFET). Superlattices and Microstructures, 2017, 111, 1113-1120.	1.4	3
80	Modeling of gate underlap junctionless double gate MOSFET as bio-sensor. Materials Science in Semiconductor Processing, 2017, 71, 240-251.	1.9	35
81	Underlapped FinFET on insulator: Quasi3D analytical model. Solid-State Electronics, 2017, 129, 138-149.	0.8	6
82	Modeling the impact of gate misalignment in tunnel field effect transistors. , 2017, , .		1
83	Variability Investigation of Double Gate Junctionless (DG-JL) Transistor for Circuit Design Perspective. Communications in Computer and Information Science, 2017, , 496-503.	0.4	2
84	Improved Gate Modulation in Tunnel Field Effect Transistors with Non-rectangular Tapered Y-Gate Geometry. Communications in Computer and Information Science, 2017, , 463-473.	0.4	0
85	Analysis of Electrolyte-Insulator-Semiconductor Tunnel Field-Effect Transistor as pH Sensor. Communications in Computer and Information Science, 2017, , 249-258.	0.4	0
86	Numerical Analysis of Variability Effects in Nanogap Embedded Dielectric Modulated Field Effect Transistor. Advanced Science, Engineering and Medicine, 2017, 9, 155-161.	0.3	0
87	Impact of dielectric material and temperature variations on the performance of TFET with dielectric pocket. , 2016, , .		2
88	Analytical model of gate underlap Double Gate Junctionless MOSFET as a bio-sensor. , 2016, , .		0
89	Sub-threshold drain current modeling of tri-gate dielectric pocket InGaAs-On-Nothing MOSFET. , 2016, , .		0
90	Analytical model of junctionless double gate radiation sensitive FET (RADFET) dosimeter. , 2016, , .		0

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91	Analysis of GaSb-InAs Gate all around (GAA) p-i-n tunnel FET (TFET) for application as a bio-sensor. , 2016, , .		12
92	Impact of Interfacial Fixed Charges on the Electrical Characteristics of Pocket-Doped Double-Gate Tunnel FET. IEEE Transactions on Device and Materials Reliability, 2016, 16, 117-122.	1.5	8
93	Investigation of dielectric pocket induced variations in tunnel field effect transistor. Superlattices and Microstructures, 2016, 92, 380-390.	1.4	13
94	Nanoscale T-shaped Double Gate DG MOSFET: Numerical Investigation for Analog/RF and Digital Performance. Superlattices and Microstructures, 2016, 89, 97-111.	1.4	1
95	Linearity and Analog Performance Realization of Energy-Efficient TFET-Based Architectures: An Optimization for RFIC Design. IETE Technical Review (Institution of Electronics and) Tj ETQq1 1 0.784314 rgBT /Overclock 10 T 50 577		
96	pH Sensing Characteristics of Silicon on Insulator (SOI) Junctionless (JL) Ion-Sensitive Field-Effect Transistor. Advanced Science, Engineering and Medicine, 2016, 8, 960-967.	0.3	1
97	Merits of designing Tunnel Field Effect Transistors with underlap near drain region. , 2015, , .		0
98	Analysis of Cylindrical Gate Junctionless Tunnel Field Effect Transistor (CG-JL-TFET). , 2015, , .		7
99	Modeling and simulation study of short gate TFET architecture considering the impact of mobile charge carriers. , 2015, , .		0
100	Investigation of IIIâ€V compound semiconductor materials on analog performance of Nanoscale RingFET. , 2015, , .		0
101	Theoretical Investigation of Dual Material Junctionless Double Gate Transistor for Analog and Digital Performance. IEEE Transactions on Electron Devices, 2015, 62, 2098-2105.	1.6	30
102	Nanoscale-RingFET: An Analytical Drain Current Model Including SCEs. IEEE Transactions on Electron Devices, 2015, 62, 3965-3972.	1.6	14
103	Drain Current Model for Hetero-Dielectric Based TFET Architectures: Accumulation to Inversion Mode Analysis. Journal of Nano Research, 2015, 36, 31-43.	0.8	0
104	Impact of dry and watery environment on the sensitivity of split gate metal oxide field effect transistor for biosensing application. , 2015, , .		1
105	Comparative Analysis of Dielectric-Modulated FET and TFET-Based Biosensor. IEEE Nanotechnology Magazine, 2015, 14, 427-435.	1.1	175
106	Investigation of dielectric modulated (DM) double gate (DG) junctionless MOSFETs for application as a biosensors. Superlattices and Microstructures, 2015, 85, 557-572.	1.4	78
107	Drain Current Model of a Four-Gate Dielectric Modulated MOSFET for Application as a Biosensor. IEEE Transactions on Electron Devices, 2015, 62, 2636-2644.	1.6	23
108	Modeling and simulation of Double Gate Junctionless Transistor considering fringing field effects. Solid-State Electronics, 2015, 107, 20-29.	0.8	27

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109	Polarity and ambipolarity controllable (PAC) tunnel field effect transistor. , 2015, , .		2
110	Influence of dielectric pocket on electrical characteristics of tunnel field effect transistor: A study to optimize the device efficiency. , 2015, , .		4
111	Modeling and TCAD Assessment for Gate Material and Gate Dielectric Engineered TFET Architectures: Circuit-Level Investigation for Digital Applications. IEEE Transactions on Electron Devices, 2015, 62, 3348-3356.	1.6	39
112	Modeling and Simulation of Nanoscale Lateral Gaussian Doped Channel Asymmetric Double Gate MOSFET. Journal of Nano Research, 2015, 36, 51-63.	0.8	4
113	Analysis of gate underlap channel double gate MOS transistor for electrical detection of bio-molecules. Superlattices and Microstructures, 2015, 88, 225-243.	1.4	11
114	Charge-based modeling of channel material-engineered P-type double gate MOSFET. , 2014, , .		4
115	Analytical modeling of a split-gate dielectric modulated metal-oxide-semiconductor field-effect transistor for application as a biosensor. , 2014, , .		4
116	Switching performance analyses of gate material and gate dielectric engineered TFET architectures and impact of interface oxide charges. , 2014, , .		3
117	Temperature dependent subthreshold model of long channel GAA MOSFET including localized charges to study variations in its temperature sensitivity. Microelectronics Reliability, 2014, 54, 37-43.	0.9	13
118	Analytical Modeling of Dielectric Pocket Double-Gate MOSFET Incorporating Hot-Carrier-Induced Interface Charges. IEEE Transactions on Device and Materials Reliability, 2014, 14, 390-399.	1.5	12
119	Investigation of Electrostatic Integrity of Nanoscale Dual Material Gate Dielectric Pocket Silicon-on-Void (DMGDPSOV) MOSFET for Improved Device Scalability. IEEE Nanotechnology Magazine, 2014, 13, 667-675.	1.1	6
120	TCAD assessment of dual material gate nanoscale RingFET (DMG-RingFET) for analog and digital applications. , 2014, , .		3
121	Ambipolar Behaviour of Tunnel Field Effect Transistor (TFET) as an Advantage for Biosensing Applications. Environmental Science and Engineering, 2014, , 171-174.	0.1	9
122	Surface Potential Based Analytical Model for Hetero-Dielectric p-n-i-n Double-Gate Tunnel-FET. Environmental Science and Engineering, 2014, , 295-298.	0.1	1
123	Numerical analysis of localised charges impact on static and dynamic performance of nanoscale cylindrical surrounding gate MOSFET based CMOS inverter. Microelectronics Reliability, 2013, 53, 236-244.	0.9	9
124	Comparative Study of Silicon-on-Nothing and IIIâ€šV-on-Nothing Architecture for High Speed and Low Power Analog and RF/Digital Applications. IEEE Nanotechnology Magazine, 2013, 12, 978-984.	1.1	5
125	Gate-All-Around Nanowire MOSFET With Catalytic Metal Gate For Gas Sensing Applications. IEEE Nanotechnology Magazine, 2013, 12, 939-944.	1.1	52
126	Hot-Carrier Reliability of Gate-All-Around MOSFET for RF/Microwave Applications. IEEE Transactions on Device and Materials Reliability, 2013, 13, 245-251.	1.5	19



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127	Simulation study for Dual Material Gate Hetero-Dielectric TFET: Static performance analysis for analog applications. , 2013, , .		13
128	Investigation of Dielectric-Modulated Double-Gate Junctionless MOSFET for detection of biomolecules. , 2013, , .		10
129	Drain current model for a gate all around (GAA) p <sup>n</sup> -n tunnel FET. Microelectronics Journal, 2013, 44, 479-488.	1.1	49
130	Gate All Around MOSFET With Vacuum Gate Dielectric for Improved Hot Carrier Reliability and RF Performance. IEEE Transactions on Electron Devices, 2013, 60, 1820-1827.	1.6	48
131	Circuit level implementation for insulated shallow extension silicon on nothing (ISE-SON) MOSFET: A novel device architecture. IETE Journal of Research, 2013, 59, 404.	1.8	0
132	Impact of Temperature Variations on the Device and Circuit Performance of Tunnel FET: A Simulation Study. IEEE Nanotechnology Magazine, 2013, 12, 951-957.	1.1	77
133	Analytical Model for Double-Gate Tunneling Field-Effect Transistor (DG-TFET) Using Carrier Concentration Approach. Journal of Computational and Theoretical Nanoscience, 2013, 10, 1202-1208.	0.4	2
134	Analog and Digital Performance Assessment of Empty Space in Double Gate (ESDG) MOSFET: A Novel Device Architecture. Journal of Computational and Theoretical Nanoscience, 2013, 10, 389-398.	0.4	2
135	Investigation of Empty Space in Nanoscale Double Gate (ESDG) MOSFET for High Speed Digital Circuit Applications. Journal of Semiconductor Technology and Science, 2013, 13, 127-138.	0.1	1
136	Device and Circuit Level Performance Comparison of Tunnel FET Architectures and Impact of Heterogeneous Gate Dielectric. Journal of Semiconductor Technology and Science, 2013, 13, 224-236.	0.1	33
137	Analytical Model of Double Gate MOSFET for High Sensitivity Low Power Photosensor. Journal of Semiconductor Technology and Science, 2013, 13, 500-510.	0.1	16
138	Performance Investigation of Insulated Shallow Extension Silicon On Nothing (ISE-SON) MOSFET for Low Voltage Digital Applications. Journal of Semiconductor Technology and Science, 2013, 13, 622-634.	0.1	2
139	Asymmetric gate oxide Tunnel Field Effect Transistor for improved circuit performance. , 2012, , .		2
140	Theoretical investigation of back gate bias effect on the electrostatic integrity of Insulated Shallow Extension Silicon On Void (ISESOV) MOSFET. , 2012, , .		0
141	Two Dimensional Analytical Subthreshold Model of Nanoscale Cylindrical Surrounding Gate MOSFET Including Impact of Localised Charges. Journal of Computational and Theoretical Nanoscience, 2012, 9, 602-610.	0.4	18
142	Stability study on ceramic mercuric iodide (red) x-ray sensor. , 2012, , .		0
143	Digital circuit analysis of insulated shallow extension silicon on void (ISESOV) FET for low voltage applications. , 2012, , .		0
144	Impact of localised charges present in the interfacial layer of the schottky contact in SOI MESFET. , 2012, , .		0

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145	Numerical Model of Gate-All-Around MOSFET With Vacuum Gate Dielectric for Biomolecule Detection. IEEE Electron Device Letters, 2012, 33, 1756-1758.	2.2	50
146	Temperature dependent model for Dielectric Pocket Double Gate (DPDG) MOSFET: A novel device architecture. , 2012, , .		3
147	Analytical model for a dielectric modulated double gate FET (DM-DG-FET) biosensor. , 2012, , .		3
148	Two-Dimensional Analytical Drain Current Model for Double-Gate MOSFET Incorporating Dielectric Pocket. IEEE Transactions on Electron Devices, 2012, 59, 2567-2574.	1.6	31
149	Dielectric Modulated Tunnel Field-Effect Transistorâ€”A Biomolecule Sensor. IEEE Electron Device Letters, 2012, 33, 266-268.	2.2	123
150	Simulation study of Insulated Shallow Extension Silicon On Nothing (ISESON) MOSFET for high temperature applications. Microelectronics Reliability, 2012, 52, 1610-1612.	0.9	7
151	Immunity against temperature variability and bias point invariability in double gate tunnel field effect transistor. Microelectronics Reliability, 2012, 52, 1617-1620.	0.9	5
152	An analytical modeling approach for a gate all around (GAA) tunnel field effect transistor (TFET). , 2012, , .		0
153	A Dielectric-Modulated Tunnel-FET-Based Biosensor for Label-Free Detection: Analytical Modeling Study and Sensitivity Analysis. IEEE Transactions on Electron Devices, 2012, 59, 2809-2817.	1.6	190
154	Laterally-asymmetric-channel-insulated-shallow-extension-silicon-on-nothing LAC-ISE-SON MOSFET for improved reliability and digital circuit simulation. , 2012, , .		0
155	Effect of localised charges on nanoscale cylindrical surrounding gate MOSFET: Analog performance and linearity analysis. Microelectronics Reliability, 2012, 52, 989-994.	0.9	49
156	Temperature dependent drain current model for Gate Stack Insulated Shallow Extension Silicon On Nothing (ISESON) MOSFET for wide operating temperature range. Microelectronics Reliability, 2012, 52, 974-983.	0.9	16
157	Assessment of Ambipolar Behavior of a Tunnel FET and Influence of Structural Modifications. Journal of Semiconductor Technology and Science, 2012, 12, 482-491.	0.1	79
158	Mixedmode circuit simulation of silicon and germanium nanowire MOSFETs - A comparative study. , 2011, , .		0
159	Effect of Temperature and Gate Stack on the Linearity and Analog Performance of Double Gate Tunnel FET. Communications in Computer and Information Science, 2011, , 466-475.	0.4	4
160	Modeling and simulation of multi layer gate dielectric double gate tunnel field-effect transistor (DG-TFET). , 2011, , .		8
161	Simulation Study of Stack Gate Insulated Shallow Extension Silicon On Nothing ISE-SON MOSFET for RFICs Design. , 2011, , .		0
162	High Sensitivity Photodetector Using Siâ€•Geâ€•GaAs Metal Semiconductor Field Effect Transistor (MESFET). , 2011, , .		4

#	ARTICLE	IF	CITATIONS
163	Linearity and Analog Performance Analysis of Double Gate Tunnel FET: Effect of Temperature and Gate Stack. International Journal of VLSI Design & Communication Systems, 2011, 2, 185-200.	0.2	19
164	Analysis and simulation of Si/GaAs/GaN MESFET to study the impact of localised charges on device performance. , 2011, , .		1
165	Channel Material Engineered Nanoscale Cylindrical Surrounding Gate MOSFET with Interface Fixed Charges. Communications in Computer and Information Science, 2011, , 476-485.	0.4	0
166	Hot-carrier reliability monitoring of DMG ISE SON MOSFET for improved analog performance. Microwave and Optical Technology Letters, 2010, 52, 770-775.	0.9	5
167	Design considerations and impact of technological parametric variations on RF/microwave performance of GEWE-RC MOSFET. Microwave and Optical Technology Letters, 2010, 52, 652-657.	0.9	1
168	Two-dimensional threshold voltage model and design considerations for gate electrode work function engineered recessed channel nanoscale MOSFET: I. Semiconductor Science and Technology, 2009, 24, 065005.	1.0	4
169	Investigation of multi-layered gate electrode workfunction engineered recessed channel (MLGEWE-RC) sub-50nm MOSFET: A novel design. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 259-278.	1.2	6
170	Two dimensional simulation and analytical modeling of a novel ISE MOSFET with gate stack configuration. Microelectronic Engineering, 2009, 86, 2005-2014.	1.1	8
171	TCAD assessment of Gate Electrode Workfunction Engineered Recessed Channel (GEWE-RC) MOSFET and its multi-layered gate architecture, Part II: Analog and large signal performance evaluation. Superlattices and Microstructures, 2009, 46, 645-655.	1.4	20
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