

Manoj Saxena

List of Publications by Year in descending order

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209
papers

2,523
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236833

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209
docs citations

209
times ranked

857
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Comparative Analysis of Dielectric-Modulated FET and TFET-Based Biosensor. IEEE Nanotechnology Magazine, 2015, 14, 427-435.	1.1	175
3	Dielectric Modulated Tunnel Field-Effect Transistor—A Biomolecule Sensor. IEEE Electron Device Letters, 2012, 33, 266-268.	2.2	123
4	Physics-based analytical modeling of potential and electrical field distribution in dual material gate (DMG)-MOSFET for improved hot electron effect and carrier transport efficiency. IEEE Transactions on Electron Devices, 2002, 49, 1928-1938.	1.6	89
5	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
6	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
7	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
8	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
9	Analytical Model of pH sensing Characteristics of Junctionless Silicon on Insulator ISFET. IEEE Transactions on Electron Devices, 2017, 64, 1742-1750.	1.6	58
10	Gate-All-Around Nanowire MOSFET With Catalytic Metal Gate For Gas Sensing Applications. IEEE Nanotechnology Magazine, 2013, 12, 939-944.	1.1	52
11	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
12	Effect of localised charges on nanoscale cylindrical surrounding gate MOSFET: Analog performance and linearity analysis. Microelectronics Reliability, 2012, 52, 989-994.	0.9	49
13	Drain current model for a gate all around (GAA) n tunnel FET. Microelectronics Journal, 2013, 44, 479-488.	1.1	49
14	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
15	Modeling and simulation of a nanoscale three-region tri-material gate stack (TRIMGAS) MOSFET for improved carrier transport efficiency and reduced hot-electron effects. IEEE Transactions on Electron Devices, 2006, 53, 1623-1633.	1.6	45
16	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
17	Dual Material Double-Layer Gate Stack SON MOSFET: A Novel Architecture for Enhanced Analog Performance—Part I: Impact of Gate Metal Workfunction Engineering. IEEE Transactions on Electron Devices, 2008, 55, 372-381.	1.6	37
18	Modeling of gate underlap junctionless double gate MOSFET as bio-sensor. Materials Science in Semiconductor Processing, 2017, 71, 240-251.	1.9	35

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19	TCAD Assessment of Gate Electrode Workfunction Engineered Recessed Channel (GEWE-RC) MOSFET and Its Multilayered Gate Architecture; Part I: Hot-Carrier-Reliability Evaluation. IEEE Transactions on Electron Devices, 2008, 55, 2602-2613.	1.6	34
20	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
21	Modeling and simulation of asymmetric gate stack (ASYMGAS)-MOSFET. Solid-State Electronics, 2003, 47, 2131-2134.	0.8	31
22	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
23	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
24	Intermodulation distortion and linearity performance assessment of 50-nm gate length L-DUMGAC MOSFET for RFIC design. Superlattices and Microstructures, 2008, 44, 143-152.	1.4	27
25	Modeling and simulation of Double Gate Junctionless Transistor considering fringing field effects. Solid-State Electronics, 2015, 107, 20-29.	0.8	27
26	Design considerations for novel device architecture: hetero-material double-gate (HEM-DG) MOSFET with sub-100 nm gate length. Solid-State Electronics, 2004, 48, 1169-1174.	0.8	25
27	Laterally amalgamated DUal Material Gate Concave (L-DUMGAC) MOSFET for ULSI. Microelectronic Engineering, 2008, 85, 566-576.	1.1	25
28	Model of GaSb-InAs p-i-n Gate All Around BioTunnel FET. IEEE Sensors Journal, 2019, 19, 2605-2612.	2.4	24
29	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
30	Empirical Model for Nonuniformly Doped Symmetric Double-Gate Junctionless Transistor. IEEE Transactions on Electron Devices, 2018, 65, 314-321.	1.6	23
31	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
32	Two-dimensional analytical threshold voltage model for DMG Epi-MOSFET. IEEE Transactions on Electron Devices, 2005, 52, 23-29.	1.6	19
33	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
34	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
35	Modeling and Simulation of Junctionless Double Gate Radiation Sensitive FET (RADFET) Dosimeter. IEEE Nanotechnology Magazine, 2018, 17, 49-55.	1.1	19
36	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

#	ARTICLE	IF	CITATIONS
37	Comparative study of Au and Ni/Au gated AlGaIn/GaN high electron mobility transistors. AIP Advances, 2019, 9, .	0.6	17
38	Two-dimensional analytical model to characterize novel MOSFET architecture: insulated shallow extension MOSFET. Semiconductor Science and Technology, 2007, 22, 952-962.	1.0	16
39	Dual-Material Double-Layer Gate Stack SON MOSFET: A Novel Architecture for Enhanced Analog Performance—Part II: Impact of Gate-Dielectric Material Engineering. IEEE Transactions on Electron Devices, 2008, 55, 382-387.	1.6	16
40	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
41	Investigation of total ionizing dose effect on SOI tunnel FET. Superlattices and Microstructures, 2019, 133, 106186.	1.4	16
42	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
43	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
44	Nanoscale-RingFET: An Analytical Drain Current Model Including SCEs. IEEE Transactions on Electron Devices, 2015, 62, 3965-3972.	1.6	14
45	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
46	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
47	TCAD-Based Investigation of Double Gate JunctionLess Transistor for UV Photodetector. IEEE Transactions on Electron Devices, 2021, 68, 2841-2847.	1.6	14
48	Hot-Carrier Reliability and Analog Performance Investigation of DMG-ISEGaS MOSFET. IEEE Transactions on Electron Devices, 2007, 54, 2556-2561.	1.6	13
49	Simulation study for Dual Material Gate Hetero-Dielectric TFET: Static performance analysis for analog applications. , 2013, , .		13
50	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
51	Investigation of dielectric pocket induced variations in tunnel field effect transistor. Superlattices and Microstructures, 2016, 92, 380-390.	1.4	13
52	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
53	Robust and Secure Digital Image Watermarking Technique Using Arnold Transform and Memristive Chaotic Oscillators. IEEE Access, 2021, 9, 72465-72483.	2.6	13
54	Impact of Gamma Radiations on Static, Pulsed <i>V</i>, and RF Performance Parameters of AlGaIn/GaN HEMT. IEEE Transactions on Electron Devices, 2022, 69, 2299-2306.	1.6	13

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55	Physics-based modelling and simulation of dual material gate stack (DUMGAS) MOSFET. Electronics Letters, 2003, 39, 155.	0.5	12
56	Modeling and simulation of STacked Gate Oxide (STGO) architecture in Silicon-On-Nothing (SON) MOSFET. Solid-State Electronics, 2005, 49, 1639-1648.	0.8	12
57	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
58	Analysis of GaSb-InAs Gate all around (GAA) p-i-n tunnel FET (TFET) for application as a bio-sensor. , 2016, , .		12
59	Optimization of " Gate AlGaIn/AlN/GaN HEMTs for Low Noise and High Gain Applications. Silicon, 2022, 14, 393-404.	1.8	12
60	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
61	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
62	Investigation of Dielectric-Modulated Double-Gate Junctionless MOSFET for detection of biomolecules. , 2013, , .		10
63	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) Tj ETQq1 1 0.784314 rg30/Overl	1.4	10
64	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
65	Performance Investigation of 50-nm Insulated-Shallow-Extension Gate-Stack (ISEGaS) MOSFET for Mixed Mode Applications. IEEE Transactions on Electron Devices, 2007, 54, 365-368.	1.6	9
66	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
67	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
68	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
69	Ambipolar Behaviour of Tunnel Field Effect Transistor (TFET) as an Advantage for Biosensing Applications. Environmental Science and Engineering, 2014, , 171-174.	0.1	9
70	A Î-shaped p-GaN HEMT for reliable enhancement mode operation. Microelectronics Reliability, 2022, 133, 114544.	0.9	9
71	Two dimensional simulation and analytical modeling of a novel ISE MOSFET with gate stack configuration. Microelectronic Engineering, 2009, 86, 2005-2014.	1.1	8
72	Modeling and simulation of multi layer gate dielectric double gate tunnel field-effect transistor (DG-TFET). , 2011, , .		8

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73	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
74	Linearity and Analog Performance Realization of Energy-Efficient TFET-Based Architectures: An Optimization for RFIC Design. IETE Technical Review (Institution of Electronics and Telecommunication Engineers.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 69 78 Td (Teleco		
75	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
76	Simulation study of Insulated Shallow Extension Silicon On Nothing (ISESON) MOSFET for high temperature applications. Microelectronics Reliability, 2012, 52, 1610-1612.	0.9	7
77	Analysis of Cylindrical Gate Junctionless Tunnel Field Effect Transistor (CG-JL-TFET). , 2015, , .		7
78	Optimization of Asymmetric ĩ Gate HEMT for Improved Reliability & Frequency Applications. , 2019, , .		7
79	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/Overlock		
80	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) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		
81	Investigation of multi-layered gate electrode workfunction engineered recessed channel (MLGEWE) sub-50nm MOSFET: A novel design. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 259-278.	1.2	6
82	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
83	Underlapped FinFET on insulator: Quasi3D analytical model. Solid-State Electronics, 2017, 129, 138-149.	0.8	6
84	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
85	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 0.784314 rgBT /Over		
86	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
87	Comparison of Linearity and Intermodulation Distortion Metrics for T - and Pi - Gate HEMT. , 2019, , .		6
88	TCAD Investigation of Gate - Lag Measurements on Conventional and ĩ - Gate AlGaIn/GaN HEMTs. , 2020, , .		6
89	Unified model for physics-based modelling of a new device architecture: triple material gate oxide stack epitaxial channel profile (TRIMGAS Epi) MOSFET. Semiconductor Science and Technology, 2007, 22, 435-446.	1.0	5
90	Two-dimensional analytical sub-threshold model of multi-layered gate dielectric recessed channel (MLaG-RC) nanoscale MOSFET. Semiconductor Science and Technology, 2008, 23, 045006.	1.0	5

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91	On-state and RF performance investigation of sub-50 nm L-DUMGAC MOSFET design for high-speed logic and switching applications. Semiconductor Science and Technology, 2008, 23, 095009.	1.0	5
92	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
93	Immunity against temperature variability and bias point invariability in double gate tunnel field effect transistor. Microelectronics Reliability, 2012, 52, 1617-1620.	0.9	5
94	Comparative Study of Silicon-on-Nothing and III-V-on-Nothing Architecture for High Speed and Low Power Analog and RF/Digital Applications. IEEE Nanotechnology Magazine, 2013, 12, 978-984.	1.1	5
95	Impact of heavy ion particle strike induced single event transients on conventional and "Gate AlGaIn/GaN HEMTs. Semiconductor Science and Technology, 0, , .	1.0	5
96	Total ionizing dose effects in junctionless accumulation mode MOSFET. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
97	Unified Subthreshold Model for Channel-Engineered Sub-100-nm Advanced MOSFET Structures. IEEE Transactions on Electron Devices, 2007, 54, 2475-2486.	1.6	4
98	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
99	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
100	High Sensitivity Photodetector Using Si-Ge-GaAs Metal Semiconductor Field Effect Transistor (MESFET). , 2011, , .		4
101	Charge-based modeling of channel material-engineered P-type double gate MOSFET. , 2014, , .		4
102	Analytical modeling of a split-gate dielectric modulated metal-oxide-semiconductor field-effect transistor for application as a biosensor. , 2014, , .		4
103	Influence of dielectric pocket on electrical characteristics of tunnel field effect transistor: A study to optimize the device efficiency. , 2015, , .		4
104	Modeling and Simulation of Nanoscale Lateral Gaussian Doped Channel Asymmetric Double Gate MOSFET. Journal of Nano Research, 2015, 36, 51-63.	0.8	4
105	Comparative Study of CMOS based Dosimeters for Gamma Radiation. , 2018, , .		4
106	RingFET Architecture for High Frequency Applications: TCAD based Assessment. , 2018, , .		4
107	Improvement in Schottky barrier inhomogeneities of Ni/AlGaIn/GaN Schottky diodes after cumulative β -ray irradiation. Semiconductor Science and Technology, 2021, 36, 065012.	1.0	4
108	Investigation of proton irradiated dual field plate AlGaIn/GaN HEMTs: TCAD based assessment. Microelectronics Journal, 2022, 122, 105405.	1.1	4

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109	Temperature dependent model for Dielectric Pocket Double Gate (DPDG) MOSFET: A novel device architecture. , 2012, , .		3
110	Analytical model for a dielectric modulated double gate FET (DM-DG-FET) biosensor. , 2012, , .		3
111	Switching performance analyses of gate material and gate dielectric engineered TFET architectures and impact of interface oxide charges. , 2014, , .		3
112	TCAD assessment of dual material gate nanoscale RingFET (DMG-RingFET) for analog and digital applications. , 2014, , .		3
113	Analytical drain current model for Gate and Channel Engineered RingFET (GCE-RingFET). Superlattices and Microstructures, 2017, 111, 1113-1120.	1.4	3
114	Simulation Based Breakdown Voltage Analysis Of 3-Step Field Plate AlGaIn/GaN HEMTs. , 2018, , .		3
115	Investigation of Gate All Around Junctionless Nanowire Transistor with Arbitrary Polygonal Cross Section. , 2018, , .		3
116	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
117	Memristor Based Cryptographic Information Processing for Secured Communication Systems. , 2020, , .		3
118	Sensitivity Assessment of RingFET Architecture for the Detection of Gas Molecules: Numerical Investigation. IETE Technical Review (Institution of Electronics and Telecommunication Engineers,) Tj ETQq0 0 0 rgBTi/Overlook 10 Tf 50		3
119	Degradation Mechanisms in a Proton Irradiated HEMT with 3DEG Conduction and 3DHG as a Back Barrier. , 2021, , .		3
120	TWO-DIMENSIONAL ANALYTICAL MODELING AND SIMULATION OF RETROGRADE DOPED HMG MOSFET. International Journal of High Speed Electronics and Systems, 2004, 14, 676-683.	0.3	2
121	Physics Based Modeling and Simulation of HeteroMaterial Asymmetric Gate Stack Epi (HEMAGASE)-MOSFET. , 0, , .		2
122	Lateral channel engineered hetero material insulated shallow extension gate stack (HMISEGAS) MOSFET structure: high performance RF solution for MOS technology. Semiconductor Science and Technology, 2007, 22, 1097-1103.	1.0	2
123	Nanoscale insulated shallow extension MOSFET with Dual Material Gate for high performance analog operations. , 2007, , .		2
124	TCAD performance investigation of a novel MOSFET architecture of dual material gate insulated shallow extension silicon on nothing (DMG ISE SON) MOSFET for ULSI era. , 2008, , .		2
125	Asymmetric gate oxide Tunnel Field Effect Transistor for improved circuit performance. , 2012, , .		2
126	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

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127	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
128	Polarity and ambipolarity controllable (PAC) tunnel field effect transistor. , 2015, , .		2
129	Impact of dielectric material and temperature variations on the performance of TFET with dielectric pocket. , 2016, , .		2
130	Impact of positions of sensing area in a channel of dielectric modulated MOSFET based biosensor. Integrated Ferroelectrics, 2018, 194, 63-71.	0.3	2
131	Optimization of Gate Oxide of Dual-Gate MISHEMTs for Enhanced DC performance. , 2018, , .		2
132	Investigation of Field Plate Misalignment on Electrical Characteristics of AlGaIn/ GaN HEMT. , 2018, , .		2
133	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
134	Gate stacked dual-gate MISHEMT with 39 THzÅ·V Johnsonâ€™s figure of merit for V-band applications. Journal of Computational Electronics, 2021, 20, 556-567.	1.3	2
135	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 ETQq1 1 0.784314 rgBÛ/Overlo		2
136	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
137	Performance Investigation of Insulated Shallow Extension Silicon On Nothing (ISE-SON) MOSFET for Low Volatge Digital Applications. Journal of Semiconductor Technology and Science, 2013, 13, 622-634.	0.1	2
138	Undoped Drain Graded Doping (UDGD) based TFET design: An innovative concept. Superlattices and Microstructures, 2022, 163, 107147.	1.4	2
139	Interplay Between <i>Î³</i>â€™Ray Irradiation and 3DEG for Dosimeter Applications. IEEE Access, 2022, 10, 25811-25827.	2.6	2
140	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
141	Multilayer perceptronâ€™random forest based hybrid machine learningâ€™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
142	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
143	Linearity Assessment in DMG ISEGaS MOSFET for RFIC Design. , 2007, , .		1
144	A 2-D analytical subthreshold model for gate misalignment effects on graded channel DG FD SOI n-MOSFET. , 2007, , .		1

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145	GEWE-RC MOSFET: A solution to CMOS technology for RFIC design based on the concept of intercept point. , 2008, , .		1
146	GEWE-RC MOSFET: High performance RF solution to CMOS technology. , 2008, , .		1
147	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
148	Analysis and simulation of Si/GaAs/GaN MESFET to study the impact of localised charges on device performance. , 2011, , .		1
149	Impact of dry and watery environment on the sensitivity of split gate metal oxide field effect transistor for biosensing application. , 2015, , .		1
150	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
151	Modeling the impact of gate misalignment in tunnel field effect transistors. , 2017, , .		1
152	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
153	Studying the Impact of Compound Semiconductor Material in Drain Region Extended Tunnel Transistor for SoC Applications. , 2018, , .		1
154	Breakdown Voltage Analysis of Different Field Plate AlGaIn/GaN HEMTs: TCAD based Assessment. , 2018, , .		1
155	Sub-Threshold Drain Current Model of Shell-Core Architecture Double Gate JunctionLess Transistor. , 2018, , .		1
156	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
157	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
158	Analytical Model for Tapered Gate Electrode Double Gate MOSFET Incorporating Fringing Field Effects. Springer Proceedings in Physics, 2019, , 697-705.	0.1	1
159	Breakdown voltage analysis of Dual-Gate MISHEMT: TCAD based assessment. , 2019, , .		1
160	Stepped Gate Profiles over DRE TFET: A Proposal to Improve Off-State Breakdown Voltage. , 2020, , .		1
161	Assessment of Dual-Gate AlGaIn/GaN MISHEMT for high temperature DC to DC converter. Superlattices and Microstructures, 2020, 144, 106574.	1.4	1
162	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

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163	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
164	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
165	Modelling and Simulation of Ge Absorber-based Tunnel Field-Effect Phototransistor at 1550nm. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 0, , 1-12.	2.1	1
166	Emerging Device Architectures for Space Electronics. , 2023, , 181-208.		1
167	Single Event Transient Effect on Tapered Angle Hetero-junction Dopingless TFET for Radiation Sensitive Applications. , 2022, , .		1
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