

M Jagadesh Kumar

List of Publications by Citations

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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.

201
papers

5,044
citations

37
h-index

64
g-index

250
ext. papers

6,109
ext. citations

2.2
avg, IF

6.59
L-index

#	Paper	IF	Citations
201	Doping-Less Tunnel Field Effect Transistor: Design and Investigation. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 3285-3290	2.9	376
200	Novel Attributes of a Dual Material Gate Nanoscale Tunnel Field-Effect Transistor. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 404-410	2.9	289
199	Controlling short-channel effects in deep-submicron SOI MOSFETs for improved reliability: a review. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004 , 4, 99-109	1.6	246
198	Two-dimensional analytical modeling of fully depleted DMG SOI MOSFET and evidence for diminished SCEs. <i>IEEE Transactions on Electron Devices</i> , 2004 , 51, 569-574	2.9	198
197	Controlling Ambipolar Current in Tunneling FETs Using Overlapping Gate-on-Drain. <i>IEEE Journal of the Electron Devices Society</i> , 2014 , 2, 187-190	2.3	193
196	A new dual-material double-gate (DMDG) nanoscale SOI MOSFET-two-dimensional analytical modeling and simulation. <i>IEEE Nanotechnology Magazine</i> , 2005 , 4, 260-268	2.6	158
195	Bipolar Charge-Plasma Transistor: A Novel Three Terminal Device. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 962-967	2.9	152
194	Investigation of the novel attributes of a fully depleted dual-material gate SOI MOSFET. <i>IEEE Transactions on Electron Devices</i> , 2004 , 51, 1463-1467	2.9	100
193	In-Built N+ Pocket p-n-p-n Tunnel Field-Effect Transistor. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1170-1174	2.4	95
192	Controlling the Drain Side Tunneling Width to Reduce Ambipolar Current in Tunnel FETs Using Heterodielectric BOX. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3882-3886	2.9	93
191	Impact of Strain on Drain Current and Threshold Voltage of Nanoscale Double Gate Tunnel Field Effect Transistor: Theoretical Investigation and Analysis. <i>Japanese Journal of Applied Physics</i> , 2009 , 48, 064503	1.4	93
190	Dielectric-Modulated Impact-Ionization MOS Transistor as a Label-Free Biosensor. <i>IEEE Electron Device Letters</i> , 2013 , 34, 1575-1577	4.4	87
189	Fundamentals of Tunnel Field-Effect Transistors		83
188	Compact Analytical Model of Dual Material Gate Tunneling Field-Effect Transistor Using Interband Tunneling and Channel Transport. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 1936-1942	2.9	81
187	Nanotube Junctionless FET: Proposal, Design, and Investigation. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1851-1856	2.9	76
186	Compact Analytical Drain Current Model of Gate-All-Around Nanowire Tunneling FET. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 2599-2603	2.9	72
185	Diameter Dependence of Leakage Current in Nanowire Junctionless Field Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1330-1335	2.9	67

184	Insight into Lateral Band-to-Band-Tunneling in Nanowire Junctionless FETs. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 4138-4142	2.9	64
183	Dielectric modulated overlapping gate-on-drain tunnel-FET as a label-free biosensor. <i>Superlattices and Microstructures</i> , 2015 , 86, 198-202	2.8	58
182	New dual-material SG nanoscale MOSFET: analytical threshold-voltage model. <i>IEEE Transactions on Electron Devices</i> , 2006 , 53, 920-922	2.9	58
181	Realizing Efficient Volume Depletion in SOI Junctionless FETs. <i>IEEE Journal of the Electron Devices Society</i> , 2016 , 4, 110-115	2.3	55
180	Controlling L-BTBT and Volume Depletion in Nanowire JLFETs Using Core-Shell Architecture. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 3790-3794	2.9	53
179	A Pseudo-2-D-Analytical Model of Dual Material Gate All-Around Nanowire Tunneling FET. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 2264-2270	2.9	53
178	Extended- p^+ Stepped Gate LDMOS for Improved Performance. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 1719-1724	2.9	51
177	Two-dimensional analytical threshold voltage model of nanoscale fully depleted SOI MOSFET with electrically induced S/D extensions. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 1568-1575	2.9	51
176	Estimation and Compensation of Process-Induced Variations in Nanoscale Tunnel Field-Effect Transistors for Improved Reliability. <i>IEEE Transactions on Device and Materials Reliability</i> , 2010 , 10, 390-395	1.6	50
175	Controlling BTBT-Induced Parasitic BJT Action in Junctionless FETs Using a Hybrid Channel. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 3350-3353	2.9	47
174	Junctionless Impact Ionization MOS: Proposal and Investigation. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 4295-4298	2.9	44
173	New buried P ⁺ -grid polysilicon emitter bipolar power transistor. <i>Solid-State Electronics</i> , 1995 , 38, 1854-1856	1.56	44
172	The Ground Plane in Buried Oxide for Controlling Short-Channel Effects in Nanoscale SOI MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 1554-1557	2.9	43
171	Physical Insights Into the Nature of Gate-Induced Drain Leakage in Ultrashort Channel Nanowire FETs. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 2604-2610	2.9	41
170	Spacer Design Guidelines for Nanowire FETs From Gate-Induced Drain Leakage Perspective. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 3007-3015	2.9	40
169	A Novel Gate-Stack-Engineered Nanowire FET for Scaling to the Sub-10-nm Regime. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 5055-5059	2.9	39
168	Investigation of the novel attributes of a single-halo double gate SOI MOSFET: 2D simulation study. <i>Microelectronics Journal</i> , 2004 , 35, 761-765	1.8	39
167	2019,		38

166	Schottky Collector Bipolar Transistor Without Impurity Doped Emitter and Base: Design and Performance. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 2956-2959	2.9	37
165	. <i>IEEE Transactions on Electron Devices</i> , 2006 , 53, 2500-2506	2.9	37
164	An Accurate Compact Analytical Model for the Drain Current of a TFET From Subthreshold to Strong Inversion. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 478-484	2.9	36
163	. <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 554-562	2.9	35
162	2-D Analytical Model for the Threshold Voltage of a Tunneling FET With Localized Charges. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 3054-3059	2.9	34
161	Thin-Film Bipolar Transistors on Recrystallized Polycrystalline Silicon Without Impurity Doped Junctions: Proposal and Investigation. <i>Journal of Display Technology</i> , 2014 , 10, 590-594		34
160	. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 21-27	2.9	33
159	Nanotube Tunneling FET With a Core Source for Ultrasteep Subthreshold Swing: A Simulation Study. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 4425-4432	2.9	33
158	A Line Tunneling Field-Effect Transistor Based on Misaligned CoreShell Gate Architecture in Emerging Nanotube FETs. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2809-2816	2.9	32
157	Compact modeling of the effects of parasitic internal fringe capacitance on the threshold voltage of high-k gate-dielectric nanoscale SOI MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2006 , 53, 706-711	2.9	31
156	Leakage current reduction techniques in poly-Si TFTs for active matrix liquid crystal displays: a comprehensive study. <i>IEEE Transactions on Device and Materials Reliability</i> , 2006 , 6, 315-325	1.6	31
155	Dielectric-Modulated Field Effect Transistors for DNA Detection: Impact of DNA Orientation. <i>IEEE Electron Device Letters</i> , 2016 , 37, 1485-1488	4.4	31
154	Charge-Modulated Underlap I-MOS Transistor as a Label-Free Biosensor: A Simulation Study. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 2645-2651	2.9	30
153	Dual-Material-Gate Technique for Enhanced Transconductance and Breakdown Voltage of Trench Power MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2009 , 56, 517-522	2.9	30
152	A full-range dual material gate tunnel field effect transistor drain current model considering both source and drain depletion region band-to-band tunneling. <i>Journal of Computational Electronics</i> , 2015 , 14, 280-287	1.8	29
151	Impact of Strain or Ge Content on the Threshold Voltage of Nanoscale Strained-Si/SiGe Bulk MOSFETs. <i>IEEE Transactions on Device and Materials Reliability</i> , 2007 , 7, 181-187	1.6	29
150	Investigation of a new modified source/drain for diminished self-heating effects in nanoscale MOSFETs using computer simulation. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006 , 33, 134-138	3	29
149	Profile design considerations for minimizing base transit time in SiGe HBT's. <i>IEEE Transactions on Electron Devices</i> , 1998 , 45, 1725-1731	2.9	28

148	PNPN tunnel FET with controllable drain side tunnel barrier width: Proposal and analysis. <i>Superlattices and Microstructures</i> , 2015 , 86, 121-125	2.8	27
147	Vertical bipolar charge plasma transistor with buried metal layer. <i>Scientific Reports</i> , 2015 , 5, 7860	4.9	27
146	A Stepped Oxide Hetero-Material Gate Trench Power MOSFET for Improved Performance. <i>IEEE Transactions on Electron Devices</i> , 2009 , 56, 1355-1359	2.9	27
145	Comprehensive Analysis of Gate-Induced Drain Leakage in Emerging FET Architectures: Nanotube FETs Versus Nanowire FETs. <i>IEEE Access</i> , 2017 , 5, 18918-18926	3.5	26
144	Shielded channel double-gate MOSFET: a novel device for reliable nanoscale CMOS applications. <i>IEEE Transactions on Device and Materials Reliability</i> , 2005 , 5, 509-514	1.6	26
143	Controlling L-BTBT in Emerging Nanotube FETs Using Dual-Material Gate. <i>IEEE Journal of the Electron Devices Society</i> , 2018 , 6, 611-621	2.3	25
142	A new 4H-SiC lateral merged double Schottky (LMDS) rectifier with excellent forward and reverse characteristics. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 2695-2700	2.9	23
141	. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4430-4434	2.9	21
140	A Compact Analytical Model for the Drain Current of Gate-All-Around Nanowire Tunnel FET Accurate From Sub-Threshold to ON-State. <i>IEEE Nanotechnology Magazine</i> , 2015 , 14, 358-362	2.6	21
139	. <i>IEEE Transactions on Electron Devices</i> , 1993 , 40, 1478-1483	2.9	21
138	Bipolar I-MOS An Impact-Ionization MOS With Reduced Operating Voltage Using the Open-Base BJT Configuration. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 4345-4348	2.9	20
137	Surface accumulation Layer transistor (SALTran): a new bipolar transistor for enhanced current gain and reduced hot-carrier degradation. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004 , 4, 509-515	1.6	20
136	2-D Threshold Voltage Model for the Double-Gate p-n-p-n TFET With Localized Charges. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 3663-3668	2.9	20
135	Compact Surface Potential Model for FD SOI MOSFET Considering Substrate Depletion Region. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 789-795	2.9	19
134	Molecular diodes and applications. <i>Recent Patents on Nanotechnology</i> , 2007 , 1, 51-7	1.2	19
133	Diminished Short Channel Effects in Nanoscale Double-Gate Silicon-on-Insulator Metal Oxide Semiconductor Field-Effect-Transistors due to Induced Back-Gate Step Potential. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 6508-6509	1.4	18
132	. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 738-744	2.9	17
131	1-T Capacitorless DRAM Using Bandgap-Engineered Silicon-Germanium Bipolar I-MOS. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1583-1590	2.9	16

130	Impact of gate leakage considerations in tunnel field effect transistor design. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 074201	1.4	16
129	Double gate symmetric tunnel FET: investigation and analysis. <i>IET Circuits, Devices and Systems</i> , 2017 , 11, 365-370	1.1	16
128	A New Strained-Silicon Channel Trench-Gate Power MOSFET: Design and Analysis. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 3299-3304	2.9	16
127	Nanoscale SOI MOSFETs with electrically induced source/drain extension: Novel attributes and design considerations for suppressed short-channel effects. <i>Superlattices and Microstructures</i> , 2006 , 39, 395-405	2.8	16
126	A new symmetrical double gate nanoscale MOSFET with asymmetrical side gates for electrically induced source/drain. <i>Microelectronic Engineering</i> , 2006 , 83, 409-414	2.5	16
125	Junctionless Biristor: A Bistable Resistor Without Chemically Doped P-N Junctions. <i>IEEE Journal of the Electron Devices Society</i> , 2015 , 3, 311-315	2.3	15
124	Improving the breakdown voltage, ON-resistance and gate-charge of InGaAs LDMOS power transistors. <i>Semiconductor Science and Technology</i> , 2012 , 27, 105030	1.8	15
123	QUANTUM CONFINEMENT EFFECTS IN STRAINED SILICON MOSFETS. <i>International Journal of Nanoscience</i> , 2008 , 07, 81-84	0.6	15
122	A Tunnel Dielectric-Based Junctionless Transistor With Reduced Parasitic BJT Action. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 3470-3475	2.9	14
121	Effect of the Ge mole fraction on the formation of a conduction path in cylindrical strained-silicon-on-SiGe MOSFETs. <i>Superlattices and Microstructures</i> , 2008 , 44, 79-85	2.8	14
120	The effects of collector lifetime on the characteristics of high-voltage power transistors operating in the quasi-saturation region. <i>IEEE Transactions on Electron Devices</i> , 1987 , 34, 1163-1169	2.9	14
119	Raised Source/Drain Dopingless Junctionless Accumulation Mode FET: Design and Analysis. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 4185-4190	2.9	14
118	A Silicon Biristor With Reduced Operating Voltage: Proposal and Analysis. <i>IEEE Journal of the Electron Devices Society</i> , 2015 , 3, 67-72	2.3	13
117	Schottky Biristor: A Metal-Semiconductor-Metal Bistable Resistor. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 2360-2363	2.9	13
116	Memristor - Why Do We Have to Know About It?. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2009 , 26, 3	1.5	13
115	Evaluating Scientists: Citations, Impact Factor, h-Index, Online Page Hits and What Else?. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2009 , 26, 165	1.5	13
114	Analytical drain current model for nanoscale strained-Si/SiGe MOSFETs. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2009 , 28, 353-371	0.7	13
113	A super beta bipolar transistor using SiGe-base surface accumulation layer transistor(SALTran) concept: a simulation study. <i>IEEE Transactions on Electron Devices</i> , 2006 , 53, 577-579	2.9	13

112	Study of the extended p/sup +/- dual source structure for eliminating bipolar induced breakdown in submicron SOI MOSFET's. <i>IEEE Transactions on Electron Devices</i> , 2000 , 47, 1678-1680	2.9	13
111	Reconfigurable FET Biosensor for a Wide Detection Range and Electrostatically Tunable Sensing Response. <i>IEEE Sensors Journal</i> , 2020 , 20, 2261-2269	4	13
110	. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 3209-3214	2.9	12
109	Linearity and speed optimization in SOI LDMOS using gate engineering. <i>Semiconductor Science and Technology</i> , 2010 , 25, 015006	1.8	12
108	A new lateral PNM Schottky collector bipolar transistor (SCBT) on SOI for nonsaturating VLSI logic design. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 1070-1072	2.9	12
107	Elimination of bipolar induced drain breakdown and single transistor latch in submicron PD SOI MOSFET. <i>IEEE Transactions on Reliability</i> , 2002 , 51, 367-370	4.6	12
106	A new high breakdown voltage lateral Schottky collector bipolar transistor on SOI: design and analysis. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 2496-2501	2.9	12
105	Innovation and Technology should Lead to Abundance not Scarcity. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 1-2	1.5	11
104	Comprehensive approach to modeling threshold voltage of nanoscale strained silicon SOI MOSFETs. <i>Journal of Computational Electronics</i> , 2007 , 6, 439-444	1.8	11
103	Evidence for suppressed short-channel effects in deep submicron dual-material gate (DMG) partially depleted SOI MOSFETs A two-dimensional analytical approach. <i>Microelectronic Engineering</i> , 2004 , 75, 367-374	2.5	11
102	A new poly-Si TG-TFT with diminished pseudosubthreshold region: theoretical investigation and analysis. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 1815-1820	2.9	11
101	Recessed source concept in nanoscale vertical surrounding gate (VSG) MOSFETs for controlling short-channel effects. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2009 , 41, 671-676	3	10
100	Modeling a Dual-Material-Gate Junctionless FET Under Full and Partial Depletion Conditions Using Finite-Differentiation Method. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 2282-2287	2.9	10
99	Investigation of laterally single-diffused metal oxide semiconductor (LSMOS) field effect transistor. <i>Current Applied Physics</i> , 2015 , 15, 1130-1133	2.6	9
98	GaAs Tunnel Diode With Electrostatically Doped n-Region: Proposal and Analysis. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3445-3448	2.9	9
97	The Charge Plasma n-p-n Impact Ionization MOS on FDSOI Technology: Proposal and Analysis. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 3-7	2.9	9
96	A pseudo 2-D surface potential model of a dual material double gate junctionless field effect transistor. <i>Journal of Computational Electronics</i> , 2015 , 14, 686-693	1.8	9
95	On the iterative schemes to obtain base doping profiles for reducing base transit time in a bipolar transistor. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 1222-1224	2.9	9

94	Novel Ge-profile design for high-speed SiGe HBTs: modelling and analysis. <i>IET Circuits, Devices and Systems</i> , 1999 , 146, 291		9
93	Schottky Barrier FET Biosensor for Dual Polarity Detection: A Simulation Study. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1594-1597	4.4	8
92	. <i>IEEE Transactions on Electron Devices</i> , 1989 , 36, 1803-1810	2.9	8
91	A New On-Chip ESD Strategy Using TFETs-TCAD Based Device and Network Simulations. <i>IEEE Journal of the Electron Devices Society</i> , 2018 , 6, 298-308	2.3	7
90	Expanding the Boundaries of Your Research Using Social Media: Stand-Up and Be Counted. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2014 , 31, 255-257	1.5	7
89	. <i>IEEE Transactions on Device and Materials Reliability</i> , 2006 , 6, 306-314	1.6	7
88	Realising wide bandgap P-SiC-emitter lateral heterojunction bipolar transistors with low collector-emitter offset voltage and high current gain: a novel proposal using numerical simulation. <i>IET Circuits, Devices and Systems</i> , 2004 , 151, 399		7
87	ShOC rectifier: a new metal-semiconductor device with excellent forward and reverse characteristics. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 130-132	2.9	7
86	Selective reactive ion etching of PECVD silicon nitride over amorphous silicon in and nitrogen containing plasma gas mixtures. <i>Solid-State Electronics</i> , 1996 , 39, 33-37	1.7	7
85	Sub-10 nm Scalability of Junctionless FETs Using a Ground Plane in High-K BOX: A Simulation Study. <i>IEEE Access</i> , 2020 , 8, 137540-137548	3.5	7
84	Investigation of the Scalability of Emerging Nanotube Junctionless FETs Using an Intrinsic Pocket. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 888-896	2.3	6
83	Drain current model for SOI TFET considering source and drain side tunneling 2014 ,		6
82	. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 3485-3493	2.9	6
81	2011 ,		6
80	A New Buried-Oxide-In-Drift-Region Trench MOSFET With Improved Breakdown Voltage. <i>IEEE Electron Device Letters</i> , 2009 , 30, 990-992	4.4	6
79	. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 2813-2819	2.9	6
78	A new low-loss lateral trench sidewall Schottky (LTSS) rectifier on SOI with high and sharp breakdown voltage. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 1316-1319	2.9	6
77	Realizing high-voltage thin film lateral bipolar transistors on SOI with a collector-tub. <i>Microelectronics International</i> , 2005 , 22, 3-9	0.8	6

76	An Impact Ionization MOSFET With Reduced Breakdown Voltage Based on Back-Gate Misalignment. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 868-875	2.9	6
75	Making Your Research Paper Discoverable: Title Plays the Winning Trick. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2013 , 30, 361	1.5	5
74	Lateral thin-film Schottky (LTFS) rectifier on SOI: a device with higher than plane parallel breakdown voltage. <i>IEEE Transactions on Electron Devices</i> , 2002 , 49, 181-184	2.9	5
73	Enhanced current gain in SiC power BJTs using a novel surface accumulation layer transistor concept. <i>Microelectronic Engineering</i> , 2005 , 81, 90-95	2.5	5
72	Novel lateral merged double Schottky (LMDS) rectifier: proposal and design. <i>IET Circuits, Devices and Systems</i> , 2001 , 148, 165		5
71	. <i>IEEE Transactions on Electron Devices</i> , 1994 , 41, 2471-2473	2.9	5
70	Smart Cities with Massive Data Centric Living are Hard to Build Without 5G Networks. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 237-239	1.5	4
69	1-T Capacitorless DRAM Using Laterally Bandgap Engineered Si-Si:C Heterostructure Bipolar I-MOS for Improved Sensing Margin and Retention Time. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 543-551	2.6	4
68	In _{0.53} Ga _{0.47} As/InP Trench-Gate Power MOSFET Based on Impact Ionization for Improved Performance: Design and Analysis. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4561-4567	2.9	4
67	Proposal and design of a new SiC-emitter lateral NPM Schottky collector bipolar transistor on SOI for VLSI applications. <i>IET Circuits, Devices and Systems</i> , 2004 , 151, 63		4
66	A new, high-voltage 4H-SiC lateral dual sidewall Schottky (LDSS) rectifier: theoretical investigation and analysis. <i>IEEE Transactions on Electron Devices</i> , 2003 , 50, 1690-1693	2.9	4
65	2D-simulation and analysis of lateral SiC N-emitter SiGe P-base Schottky metal-collector (NPM) HBT on SOI. <i>Microelectronics Reliability</i> , 2003 , 43, 1145-1149	1.2	4
64	On the parasitic gate capacitance of small-geometry MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 1676-1677	2.9	4
63	. <i>IEEE Transactions on Electron Devices</i> , 1990 , 37, 2395-2398	2.9	4
62	On the dominant recombination level of platinum in silicon. <i>Physica Status Solidi A</i> , 1985 , 87, 651-655		4
61	. <i>IEEE Transactions on Device and Materials Reliability</i> , 2016 , 16, 200-207	1.6	4
60	Schottky bipolar I-MOS: An I-MOS with Schottky electrodes and an open-base BJT configuration for reduced operating voltage. <i>Superlattices and Microstructures</i> , 2017 , 104, 422-427	2.8	3
59	Junctionless Devices Without Any Chemical Doping 2019 , 281-325		3

58	Modeling Junctionless Field-Effect Transistors 2019 , 327-384		3
57	Honestly speaking about academic dishonesty. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2012 , 29, 357	1.5	3
56	A New Hetero-material Stepped Gate (HSG) SOI LDMOS for RF Power Amplifier Applications 2010 ,		3
55	Analytical Drain Current Model of Nanoscale Strained-Si/SiGe MOSFETs for Analog Circuit Simulation 2007 ,		3
54	The Simulation of a new asymmetrical double-gate poly-Si TFT with modified channel conduction mechanism for highly reduced OFF-state leakage current. <i>IEEE Transactions on Device and Materials Reliability</i> , 2005 , 5, 675-682	1.6	3
53	Realising high-current gain p-n-p transistors using a novel surface accumulation layer transistor (SALTran) concept. <i>IET Circuits, Devices and Systems</i> , 2005 , 152, 178		3
52	. <i>IEEE Transactions on Electron Devices</i> , 1994 , 41, 398-402	2.9	3
51	Controlling the ON-resistance in SOI LDMOS using parasitic bipolar junction transistor. <i>Journal of Computational Electronics</i> , 2014 , 13, 857-861	1.8	2
50	A dc model for partially depleted SOI laterally diffused MOSFETs utilizing the HiSIM-HV compact model. <i>Journal of Computational Electronics</i> , 2013 , 12, 460-468	1.8	2
49	Face Recognition by Machines: Is It an Effective Surveillance Tactic?. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2013 , 30, 93	1.5	2
48	Global University Rankings: What should India do?. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2015 , 32, 81-83	1.5	2
47	The Malady of Technology in Our Lives: Is Anyone Listening?. <i>IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India)</i> , 2013 , 30, 3	1.5	2
46	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 7-11	2.9	2
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