

V Ramgopal Rao

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.

265
papers

3,746
citations

34
h-index

47
g-index

316
ext. papers

4,491
ext. citations

3.3
avg, IF

5.44
L-index

#	Paper	IF	Citations
265	Organic passivation of Al _{0.5} Ga _{0.5} N epilayers using self-assembled monolayer of Zn(II) porphyrin for improved solar-blind photodetector performance. <i>Semiconductor Science and Technology</i> , 2021 , 36, 055001	1.8	5
264	Impact of Thermal Effects on the Performance of the Power Gating Circuits Using NEMS, FinFETs, and NWFETs. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2618-2624	2.9	2
263	. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2944-2950	2.9	
262	Detection of the Chilli Leaf Curl Virus Using an Attenuated Total Reflection-Mediated Localized Surface-Plasmon-Resonance-Based Optical Platform. <i>ACS Omega</i> , 2021 , 6, 17413-17423	3.9	4
261	Nanophotonic Crystal Waveguide With Embedded Piezoresistor on MEMS Cantilever for Sensing Application. <i>IEEE Sensors Journal</i> , 2021 , 1-1	4	0
260	. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 746-752	2.9	4
259	Hybrid Pattern Recognition for Rapid Explosive Sensing With Comprehensive Analysis. <i>IEEE Sensors Journal</i> , 2021 , 21, 8011-8019	4	4
258	A Roadmap for Disruptive Applications and Heterogeneous Integration Using Two-Dimensional Materials: State-of-the-Art and Technological Challenges. <i>Nano Letters</i> , 2021 , 21, 6359-6381	11.5	6
257	Passivation of Solution-Processed a-IGZO Thin-Film Transistor by Solution Processable Zinc Porphyrin Self-Assembled Monolayer. <i>IEEE Transactions on Electron Devices</i> , 2021 , 1-5	2.9	2
256	. <i>IEEE Electron Device Letters</i> , 2020 , 41, 852-855	4.4	3
255	. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 3894-3897	2.9	9
254	A study of surface stress and flexural rigidity of symmetrically and asymmetrically biofunctionalized microcantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2020 , 30, 025009	2	0
253	A Passive Gamma Radiation Dosimeter Using Graphene Field Effect Transistor. <i>IEEE Sensors Journal</i> , 2020 , 20, 2938-2944	4	6
252	Ultra-sensitive gas phase detection of 2,4,6-trinitrotoluene by non-covalently functionalized graphene field effect transistors. <i>Analyst, The</i> , 2020 , 145, 917-928	5	9
251	E-Nose: Multichannel Analog Signal Conditioning Circuit With Pattern Recognition for Explosive Sensing. <i>IEEE Sensors Journal</i> , 2020 , 20, 1373-1382	4	13
250	Microcantilever Based Dual Mode Biosensor for Agricultural Applications. <i>IEEE Sensors Journal</i> , 2020 , 20, 6826-6832	4	5
249	Effect of Device Dimensions, Layout and Pre-Gate Carbon Implant on Hot Carrier Induced Degradation in HKMG nMOS Transistors. <i>IEEE Transactions on Device and Materials Reliability</i> , 2020 , 20, 555-561	1.6	3

248	Switched-Capacitor-Assisted Power Gating for Ultra-Low Standby Power in CMOS Digital ICs. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 4281-4294	3.9	1
247	Fermi-Level Depinning in Germanium Using Black Phosphorus as an Interfacial Layer. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1678-1681	4.4	2
246	Lanthanide complexes as molecular dopants for realizing air-stable n-type graphene logic inverters with symmetric transconductance. <i>Materials Horizons</i> , 2019 , 6, 743-750	14.4	6
245	Enhanced Performance of MSM UV Photodetectors by Molecular Modification of Gallium Nitride Using Porphyrin Organic Molecules. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2036-2039	2.9	6
244	Sensitivity Improvement of Medical Dosimeters Using Solution Processed TIPS-Pentacene FETs. <i>IEEE Sensors Journal</i> , 2019 , 19, 4428-4434	4	6
243	Giant UV Photoresponse of GaN-Based Photodetectors by Surface Modification Using Phenol-Functionalized Porphyrin Organic Molecules. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 12017-12026	9.5	41
242	Microscopic Origin of Piezoelectricity in Lead-Free Halide Perovskite: Application in Nanogenerator Design. <i>ACS Energy Letters</i> , 2019 , 4, 1004-1011	20.1	36
241	Monitoring soil pH variation using Polyaniline/SU-8 composite film based conductometric microsensor. <i>Sensors and Actuators B: Chemical</i> , 2019 , 286, 583-590	8.5	14
240	Critical analysis of micro-thermogravimetry of CuSO ₄ ·5H ₂ O crystals using heatable microcantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2019 , 29, 105009	2	
239	Piezoresistance in ballistic graphene. <i>Physical Review Materials</i> , 2019 , 3,	3.2	4
238	Significant improvement in the electrical characteristics of Schottky barrier diodes on molecularly modified Gallium Nitride surfaces. <i>Applied Physics Letters</i> , 2018 , 112, 163502	3.4	19
237	Detection of heart-type fatty acid-binding protein (h-FABP) using piezoresistive polymer microcantilevers functionalized by a dry method. <i>Applied Nanoscience (Switzerland)</i> , 2018 , 8, 1031-1042	3.3	12
236	. <i>IEEE Sensors Journal</i> , 2018 , 18, 1364-1372	4	9
235	Theoretical and Experimental Analysis of Residual Stress Mitigation in Piezoresistive Silicon Nitride Cantilever. <i>Lecture Notes in Electrical Engineering</i> , 2018 , 229-235	0.2	2
234	Microcantilever Based Dual Mode Optical Biosensor for Agricultural Pathogen Detection 2018 ,		5
233	A Novel Method of Discrete-Time Signal Amplification Using NEMS Devices. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 5111-5117	2.9	1
232	Improvement in Self-Powered GaN-based Symmetric Metal-Semiconductor-Metal Ultraviolet Photodetectors by Using Phenol-Functionalized Porphyrin Organic Molecules 2018 ,		2
231	Low Cost, Large Area, Flexible Graphene Nanocomposite Films for Energy Harvesting Applications. <i>IEEE Nanotechnology Magazine</i> , 2017 , 16, 259-264	2.6	9

230	Zinc oxide nanorods functionalized paper for protein preconcentration in biodiagnostics. <i>Scientific Reports</i> , 2017 , 7, 43905	4.9	26
229	A Novel TCAD-Based Thermal Extraction Approach for Nanoscale FinFETs. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1404-1407	2.9	21
228	Multi-Functional CMOS Compatible Nano-Electro-Mechanical Relays for Vapor Phase Explosive Detection. <i>Journal of Microelectromechanical Systems</i> , 2017 , 26, 616-623	2.5	2
227	A Novel PET-Based Piezoresistive MEMS Sensor Platform for Agricultural Applications. <i>Journal of Microelectromechanical Systems</i> , 2017 , 26, 746-748	2.5	8
226	. <i>IEEE Sensors Journal</i> , 2017 , 17, 4773-4780	4	2
225	A Nano-Electro-Mechanical Switch Based Power Gating for Effective Stand-by Power Reduction in FinFET Technologies. <i>IEEE Electron Device Letters</i> , 2017 , 38, 681-684	4.4	5
224	A novel piezoresistive polymer nanocomposite MEMS accelerometer. <i>Journal of Micromechanics and Microengineering</i> , 2017 , 27, 015014	2	12
223	A non-volatile resistive memory effect in 2,2',6,6'-tetraphenyl-dipyranylidene thin films as observed in field-effect transistors and by conductive atomic force microscopy. <i>RSC Advances</i> , 2017 , 7, 3336-3342	3.7	5
222	PBTI in HKMG nMOS Transistors Effect of Width, Layout, and Other Technological Parameters. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4018-4024	2.9	3
221	Piezoresistive microcantilever based lab-on-a-chip system for detection of macronutrients in the soil. <i>Solid-State Electronics</i> , 2017 , 138, 94-100	1.7	8
220	PVA modified ZnO nanowire based microsensors platform for relative humidity and soil moisture measurement. <i>Sensors and Actuators B: Chemical</i> , 2017 , 253, 1071-1078	8.5	21
219	One dimensional zinc oxide nanostructures assisted paper-based blood-plasma separation. <i>Vacuum</i> , 2017 , 146, 586-591	3.7	2
218	Thermal performance of nano-scale SOI and bulk FinFETs 2016 ,		2
217	Low cost fabrication of polymer composite (h-ZnO + PDMS) material for piezoelectric device application. <i>Materials Research Express</i> , 2016 , 3, 075702	1.7	12
216	On the Improved High-Frequency Linearity of Drain Extended MOS Devices. <i>IEEE Microwave and Wireless Components Letters</i> , 2016 , 26, 999-1001	2.6	2
215	Polymeric piezoresistive-microcantilever based label-free malachite green biosensor: In situ detection of G-Quadruplex formation 2016 ,		1
214	Vapor-phase self-assembled monolayer on SU-8 cantilever for explosive sensing 2016 ,		1
213	MEMS aptasensor for label-free detection of cancer cells 2016 ,		1

212	Porphyrin induced changes in charge transport of graphene FET 2016 ,		2
211	Low power, area efficient, and temperature-variation tolerant bidirectional current source for sensor applications. <i>Microelectronics Journal</i> , 2016 , 49, 29-35	1.8	1
210	A Vapor Phase Self-Assembly of Porphyrin Monolayer as a Copper Diffusion Barrier for Back-End-of-Line CMOS Technologies. <i>IEEE Transactions on Electron Devices</i> , 2016 , 63, 2009-2015	2.9	7
209	Asymmetric immobilization of antibodies on a piezo-resistive micro-cantilever surface. <i>RSC Advances</i> , 2016 , 6, 17606-17616	3.7	12
208	OFET based explosive sensors using diketopyrrolopyrrole and metal organic framework composite active channel material. <i>Sensors and Actuators B: Chemical</i> , 2016 , 223, 114-122	8.5	47
207	Anomalous diffusion mediated kinetic modelling of surface-stress sensors. <i>Sensors and Actuators B: Chemical</i> , 2016 , 222, 525-530	8.5	1
206	Width and layout dependence of HC and PBTI induced degradation in HKMG nMOS transistors 2016 ,		2
205	H2S detection using low-cost SnO2 nano-particle Bi-layer OFETs. <i>Sensors and Actuators B: Chemical</i> , 2016 , 235, 378-385	8.5	17
204	Fabrication, Characterization and Application of ZnO Nanostructure-Based Micro-Preconcentrator for TNT Sensing. <i>Journal of Microelectromechanical Systems</i> , 2016 , 25, 968-975	2.5	7
203	Piezoresponse force microscopy (PFM) characterization of GaN nanowires grown by Plasma assisted Molecular beam epitaxy (PA-MBE) 2016 ,		2
202	Insight into the charge transport and degradation mechanisms in organic transistors operating at elevated temperatures in air. <i>Organic Electronics</i> , 2015 , 22, 202-209	3.5	9
201	Spin-coatable, photopatternable magnetic nanocomposite thin films for MEMS device applications. <i>RSC Advances</i> , 2015 , 5, 85741-85747	3.7	6
200	Anomalous Width Dependence of Gate Current in High- κ Metal Gate nMOS Transistors. <i>IEEE Electron Device Letters</i> , 2015 , 36, 739-741	4.4	4
199	Part II: A Fully Integrated RF PA in 28-nm CMOS With Device Design for Optimized Performance and ESD Robustness. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3176-3183	2.9	3
198	Part I: High-Voltage MOS Device Design for Improved Static and RF Performance. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3168-3175	2.9	13
197	Parylene-C encapsulation for polymeric cantilever stability 2015 ,		2
196	Carbon black nanocomposite piezoresistive microcantilevers with reduced percolation threshold 2015 ,		2
195	Comparison of capacitive versus resistive mode of sensing for vapor phase explosive detection 2015 ,		1

194	A highly sensitive piezoresistive cantilever based sensor platform for detection of macronutrients in soil 2015 ,		4
193	Illumination effect on electrical characteristics of pristine PVA based broadband photodetector 2015 ,		1
192	. <i>Journal of Microelectromechanical Systems</i> , 2015 , 24, 1111-1116	2.5	21
191	An ultra-sensitive piezoresistive polymer nano-composite microcantilever sensor electronic nose platform for explosive vapor detection. <i>Sensors and Actuators B: Chemical</i> , 2014 , 192, 444-451	8.5	58
190	Morphology and Curie temperature engineering in crystalline La _{0.7} Sr _{0.3} MnO ₃ films on Si by pulsed laser deposition. <i>Journal of Applied Physics</i> , 2014 , 115, 033518	2.5	12
189	An ultra-sensitive piezoresistive polymer nano-composite microcantilever platform for humidity and soil moisture detection. <i>Sensors and Actuators B: Chemical</i> , 2014 , 203, 165-173	8.5	29
188	Polymer MEMS Sensors 2014 , 305-342		1
187	Plastic Deformation Study of Vertical Zinc Oxide Nanowires for Polymer Cantilever-Based Sensor Applications. <i>IEEE Nanotechnology Magazine</i> , 2014 , 13, 630-633	2.6	4
186	Role of Injection Barrier in Capacitance-Voltage Measurements of Organic Devices. <i>IEEE Electron Device Letters</i> , 2014 , 35, 581-583	4.4	10
185	Grain boundary engineering of La _{0.7} Sr _{0.3} MnO ₃ films on silicon substrate: Scanning Tunneling Microscopy-Spectroscopy study. <i>Physica B: Condensed Matter</i> , 2014 , 448, 85-89	2.8	1
184	Negative differential conductivity and carrier heating in gate-all-around Si nanowire FETs and its impact on CMOS logic circuits. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 04EC16	1.4	12
183	Development of graphene nanoplatelet embedded polymer microcantilever for vapour phase explosive detection applications. <i>Journal of Applied Physics</i> , 2014 , 116, 124902	2.5	17
182	Polymer-Based Micro/Nano Cantilever Electro-Mechanical Sensor Systems for Bio/Chemical Sensing Applications. <i>Springer Tracts in Mechanical Engineering</i> , 2014 , 403-422	0.3	5
181	ZnO Nanowire Embedded Strain Sensing Cantilever: A New Ultra-Sensitive Technology Platform. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 995-997	2.5	13
180	ZnO nanorods based ultra sensitive and selective explosive sensor 2013 ,		1
179	Part II: Investigation of Subthreshold Swing in Line Tunnel FETs Using Bias Stress Measurements. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 4065-4072	2.9	20
178	Copper(II) phthalocyanine based organic electronic devices for ionizing radiation dosimetry applications. <i>Organic Electronics</i> , 2013 , 14, 1281-1290	3.5	12
177	Investigation of effects of ionizing radiation exposure on material properties of organic semiconducting oligomer [Pentacene. <i>Organic Electronics</i> , 2013 , 14, 1467-1476	3.5	15

176	Comparison among different algorithms in classifying explosives using OFETs. <i>Sensors and Actuators B: Chemical</i> , 2013 , 176, 46-51	8.5	9
175	Vibrational energy harvesting using photo-patternable piezoelectric nanocomposite cantilevers. <i>Nano Energy</i> , 2013 , 2, 923-932	17.1	24
174	Fluorescence and piezoresistive cantilever sensing of trinitrotoluene by an upper-rim tetrabenzimidazole conjugate of calix[4]arene and delineation of the features of the complex by molecular dynamics. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 13448-56	9.5	54
173	Al-doped ZnO thin-film transistor embedded micro-cantilever as a piezoresistive sensor. <i>Applied Physics Letters</i> , 2013 , 102, 064101	3.4	31
172	Sub 0.5 V Operation of Performance Driven Mobile Systems Based on Area Scaled Tunnel FET Devices. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 2626-2633	2.9	18
171	Towards Drain Extended FinFETs for SoC Applications. <i>Lecture Notes in Nanoscale Science and Technology</i> , 2013 , 247-262	0.3	1
170	Solution processed photopatternable high-k nanocomposite gate dielectric for low voltage organic field effect transistors. <i>Microelectronic Engineering</i> , 2012 , 96, 92-95	2.5	7
169	Organic CantiFETs Nanomechanical Polymer Cantilever Sensor With Integrated OFET. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 294-301	2.5	18
168	A Novel Photoplastic Piezoelectric Nanocomposite for MEMS Applications. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 259-261	2.5	39
167	. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1353-1363	2.9	72
166	Current Excitation Method for ΔR Measurement in Piezo-Resistive Sensors With a 0.3-ppm Resolution. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2012 , 61, 767-774	5.2	14
165	. <i>IEEE Nanotechnology Magazine</i> , 2012 , 11, 701-706	2.6	25
164	Fabrication of unipolar graphene field-effect transistors by modifying source and drain electrode interfaces with zinc porphyrin. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 1434-9	9.5	10
163	Porphyrin Self-Assembled Monolayer as a Copper Diffusion Barrier for Advanced CMOS Technologies. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1963-1969	2.9	12
162	DC Compact Model for SOI Tunnel Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 2635-2642	2.9	66
161	A Novel Drain-Extended FinFET Device for High-Voltage High-Speed Applications. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1432-1434	4.4	23
160	Facile fabrication of graphene devices through metalloporphyrin induced photocatalytic reduction. <i>RSC Advances</i> , 2012 , 2, 4120	3.7	19
159	Photopatternable nano-composite (SU-8/ZnO) thin films for piezo-electric applications. <i>Applied Physics Letters</i> , 2012 , 101, 104102	3.4	49

158	Local piezoelectric response of ZnO nanoparticles embedded in a photosensitive polymer. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012 , 6, 77-79	2.5	15
157	Mobility enhancement of solution-processed Poly(3-Hexylthiophene) based organic transistor using zinc oxide nanostructures. <i>Composites Part B: Engineering</i> , 2012 , 43, 1645-1648	10	12
156	Electrical actuation and readout in a nanoelectromechanical resonator based on a laterally suspended zinc oxide nanowire. <i>Nanotechnology</i> , 2012 , 23, 025501	3.4	16
155	Strain induced anisotropic effect on electron mobility in C60 based organic field effect transistors. <i>Applied Physics Letters</i> , 2012 , 101, 083305	3.4	37
154	Copper (II) Phthalocyanine Based Field Effect Transistors as Total Dose Sensors for Determining Ionizing Radiation Dose. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1383, 75		1
153	OFET Sensors with Poly 3-hexylthiophene and Pentacene as Channel Materials for Ionizing Radiation. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1383, 81		0
152	A Low-Power Instrumentation System for Nano-Electro-Mechanical-Sensors for Environmental and Healthcare Applications. <i>Journal of Low Power Electronics</i> , 2012 , 8, 346-352	1.2	3
151	Piezoresistive 6-MNA coated microcantilevers with signal conditioning circuits for electronic nose 2011 ,		4
150	Poly(3-hexylthiophene) and hexafluoro-2-propanol-substituted polysiloxane based OFETs as a sensor for explosive vapor detection. <i>Sensors and Actuators A: Physical</i> , 2011 , 171, 12-18	3.9	10
149	Insights Into the Design and Optimization of Tunnel-FET Devices and Circuits. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 1045-1053	2.9	74
148	. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 1597-1607	2.9	33
147	. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 1855-1863	2.9	110
146	Fabrication of $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{Si}$ Heterojunctions Using a CMOS-Compatible Citric Acid Etch Process. <i>IEEE Electron Device Letters</i> , 2011 , 32, 402-404	4.4	3
145	A low-cost, ultra sensitive hand-held system for explosive detection using piezo-resistive micro-cantilevers 2011 ,		3
144	Highly Sensitive R/R Measurement System for Nano-electro-Mechanical Cantilever Based Bio-sensors 2011 ,		2
143	Polymer nanocomposite nanomechanical cantilever sensors: material characterization, device development and application in explosive vapour detection. <i>Nanotechnology</i> , 2011 , 22, 295501	3.4	90
142	A novel architecture for improving slew rate in FinFET-based op-amps and OTAs. <i>Microelectronics Journal</i> , 2011 , 42, 758-765	1.8	14
141	On the thermal failure in nanoscale devices: Insight towards heat transport including critical BEOL and design guidelines for robust thermal management & EOS/ESD reliability 2011 ,		5

140	Modeling, Simulation, and Design Guidelines for Piezoresistive Affinity Cantilevers. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 774-784	2.5	14
139	Analysis of Threshold Voltage Variations in Fin Field Effect Transistors. <i>Key Engineering Materials</i> , 2011 , 470, 194-200	0.4	
138	Ionizing Radiation Total Dose Detectors Using Oligomer Organic Semiconductor Material and Devices. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1312, 1		2
137	PERFORMANCE ENHANCEMENT OF p-TYPE ORGANIC THIN FILM TRANSISTORS USING ZINC OXIDE NANOSTRUCTURES. <i>International Journal of Nanoscience</i> , 2011 , 10, 761-764	0.6	2
136	PHOTOPLASTIC MICROCANTILEVER SENSOR PLATFORM FOR EXPLOSIVE DETECTION. <i>International Journal of Nanoscience</i> , 2011 , 10, 739-743	0.6	5
135	Bottom-up method for work function tuning in high-k/metal gate stacks in advanced CMOS technologies 2011 ,		1
134	AN ORGANIC FIELD EFFECT TRANSISTORS-BASED SENSING PLATFORM FOR ENVIRONMENTAL/SECURITY APPLICATIONS. <i>International Journal of Nanoscience</i> , 2011 , 10, 891-898	0.6	2
133	NANOMECHANICAL CHARACTERIZATION OF MULTIFERROIC THIN FILMS FOR MICRO-ELECTROMECHANICAL SYSTEMS. <i>International Journal of Nanoscience</i> , 2011 , 10, 1039-1043	0.6	8
132	Organic Sensor Platforms for Environmental and Security Applications. <i>ECS Transactions</i> , 2011 , 35, 67-77		3
131	Variable Interface Dipoles of Metallated Porphyrin Self-Assembled Monolayers for Metal-Gate Work Function Tuning in Advanced CMOS Technologies. <i>IEEE Nanotechnology Magazine</i> , 2010 , 9, 335-337	2.6	11
130	A Binary Tunnel Field Effect Transistor with a Steep Sub-threshold Swing and Increased ON Current. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 120203	1.4	24
129	Complementary Organic Circuits Using Evaporated CuPc and Inkjet Printing of PQT. <i>IEEE Electron Device Letters</i> , 2010 ,	4.4	1
128	A novel technique for microfabrication of ultra-thin affinity cantilevers for characterization with an AFM. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 125007	2	8
127	Analysis of Threshold Voltage Variation in Fin Field Effect Transistors: Separation of Short Channel Effects. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 044201	1.4	1
126	Low-Operating-Voltage Operation and Improvement in Sensitivity With Passivated OFET Sensors for Determining Total Dose Radiation. <i>IEEE Electron Device Letters</i> , 2010 , 31, 1482-1484	4.4	12
125	3D TCAD based approach for the evaluation of nanoscale devices during ESD failure 2010 ,		3
124	Fabrication and characterization of novel polymer composite microcantilever sensors for explosive detection 2010 ,		9
123	On the failure mechanism and current instabilities in RESURF type DeNMOS device under ESD conditions 2010 ,		9

122	On the differences between 3D filamentation and failure of N & P type drain extended MOS devices under ESD condition 2010 ,		3
121	On the Transient behavior of various drain extended MOS devices under the ESD stress condition 2010 ,		1
120	Impact of Fringe Capacitance on the Performance of Nanoscale FinFETs. <i>IEEE Electron Device Letters</i> , 2010 , 31, 83-85	4.4	21
119	Analysis of dependence of short-channel effects in double-gate MOSFETs on channel thickness. <i>Microelectronics Reliability</i> , 2010 , 50, 332-337	1.2	5
118	Vocal Melody Extraction in the Presence of Pitched Accompaniment in Polyphonic Music. <i>IEEE Transactions on Audio Speech and Language Processing</i> , 2010 , 18, 2145-2154		38
117	Part I: Mixed-Signal Performance of Various High-Voltage Drain-Extended MOS Devices. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 448-457	2.9	32
116	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 458-465	2.9	11
115	A Novel Bottom Spacer FinFET Structure for Improved Short-Channel, Power-Delay, and Thermal Performance. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 1287-1294	2.9	26
114	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 2235-2242	2.9	14
113	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 2243-2250	2.9	19
112	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 3536-3539	2.9	3
111	Implications of fin width scaling on variability and reliability of high-k metal gate FinFETs. <i>Microelectronic Engineering</i> , 2010 , 87, 1963-1967	2.5	12
110	Polymer composite-based OFET sensor with improved sensitivity towards nitro based explosive vapors. <i>Sensors and Actuators B: Chemical</i> , 2010 , 148, 158-165	8.5	43
109	Chemical Vapor Deposition Precursors for High Dielectric Oxides: Zirconium and Hafnium Oxide. <i>Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry</i> , 2009 , 39, 331-340		1
108	Solution-Processed Bootstrapped Organic Inverters Based on P3HT With a High- ϵ_k Gate Dielectric Material. <i>IEEE Electron Device Letters</i> , 2009 , 30, 484-486	4.4	32
107	Determining ionizing radiation using sensors based on organic semiconducting material. <i>Applied Physics Letters</i> , 2009 , 94, 123304	3.4	32
106	A new physical insight and 3D device modeling of STI type denmos device failure under ESD conditions 2009 ,		9
105	An ultra-sensitive DeltaR/R measurement system for biochemical sensors using piezoresistive micro-cantilevers. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 3794-7	0.9	2

104	Filament study of STI type drain extended NMOS device using transient interferometric mapping 2009 ,		5
103	Highly robust nanoscale planar double-gate MOSFET device and SRAM cell immune to gate-misalignment and process variations 2009 ,		2
102	Automated design and optimization of circuits in emerging technologies 2009 ,		3
101	Highly resistive body STI NDeMOS: An optimized DeMOS device to achieve moving current filaments for robust ESD protection 2009 ,		8
100	Optimum Body Bias Constraints for Leakage Reduction in High-kComplementary MetalOxideSemiconductor Circuits. <i>Japanese Journal of Applied Physics</i> , 2009 , 48, 054501	1.4	
99	Polymer microcantilever biochemical sensors with integrated polymer composites for electrical detection. <i>Solid State Sciences</i> , 2009 , 11, 1606-1611	3.4	50
98	. <i>IEEE Transactions on Electron Devices</i> , 2009 , 56, 529-532	2.9	
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