

Florin Udrea

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.

297
papers

3,834
citations

31
h-index

48
g-index

339
ext. papers

4,751
ext. citations

3
avg, IF

5.63
L-index

#	Paper	IF	Citations
297	Miniaturized thermal acoustic gas sensor based on a CMOS microhotplate and MEMS microphone.. <i>Scientific Reports</i> , 2022 , 12, 1690	4.9	1
296	Analytic modeling of a hybrid power module based on diamond and SiC devices. <i>Diamond and Related Materials</i> , 2022 , 124, 108936	3.5	0
295	High-Voltage 3-D Partial SOI Technology Platform for Power Integrated Circuits. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6	2.9	1
294	The Effect of the Pillar Ripple on the Reverse Recovery in Superjunction MOSFETs 2022 , 2, 100009		
293	A highly stable, nanotube-enhanced, CMOS-MEMS thermal emitter for mid-IR gas sensing. <i>Scientific Reports</i> , 2021 , 11, 22915	4.9	2
292	Operation and performance of the 4H-SiC junctionless FinFET. <i>Engineering Research Express</i> , 2021 , 3, 035008	0.9	1
291	True Origin of Gate Ringing in Superjunction MOSFETs: Device View. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 5362-5370	7.2	2
290	On the Challenges of Reliable Threshold Voltage Measurement in Ohmic and Schottky Gate p-GaN HEMTs. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 9, 831-838	2.3	1
289	Light-Free Cross-Talk Analysis of a CMOS Infrared Detector Array. <i>Proceedings (mdpi)</i> , 2020 , 56, 10	0.3	
288	An advanced physical model for the Coulombic scattering mobility in 4H-SiC inversion layers. <i>Journal of Applied Physics</i> , 2020 , 127, 194504	2.5	4
287	Crosstalk Analysis of a CMOS Single Membrane Thermopile Detector Array. <i>Sensors</i> , 2020 , 20,	3.8	2
286	Dynamic CGD and dV/dt in Superjunction MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 1523-1529	3.1529	4
285	Machine-intelligent inkjet-printed $\text{Fe}_2\text{O}_3/\text{rGO}$ towards NO_2 quantification in ambient humidity. <i>Sensors and Actuators B: Chemical</i> , 2020 , 321, 128446	8.5	8
284	High temperature characterization of a CMOS based infra-red source using thermal-incandescence microscopy. <i>Solid-State Electronics</i> , 2020 , 166, 107773	1.7	0
283	Simultaneous Flow and Thermal Conductivity Sensing on a Single Chip Using Artificial Neural Networks. <i>IEEE Sensors Journal</i> , 2020 , 20, 4985-4991	4	0
282	Effect of Pillar Ripple on Static and Dynamic Trade-Offs in Superjunction MOSFETs. <i>IEEE Electron Device Letters</i> , 2020 , 41, 753-756	4.4	3
281	Mechanisms of Asymmetrical Turn-On and Turn-Off and the Origin of Dynamic CGD Hysteresis for Hard-Switching Superjunction MOSFETs. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 2478-2481	2.9	1

280	A Novel MEMS-Based Probe for Unsteady Aerodynamic Measurements: A Proof-of-Concept Study. <i>Journal of the Global Power and Propulsion Society</i> , 2020 , 4, 145-160	0.4	1
279	Material selection for optimum design of MEMS pressure sensors. <i>Microsystem Technologies</i> , 2020 , 26, 2751-2766	1.7	1
278	Transient Performance of >10kV SiC IGBT with an Optimized Retrograde p-Well. <i>Materials Science Forum</i> , 2020 , 1004, 917-922	0.4	
277	Single and repetitive surge current events of 3.3 kV-20 A 4H-SiC JBS rectifiers: the impact of the anode layout 2020 ,		2
276	Enhanced Performance of 50 nm Ultra-Narrow-Body Silicon Carbide MOSFETs based on FinFET effect 2020 ,		2
275	Miniaturized Thermal Acoustic Gas Sensor Based on a CMOS Microhotplate and MEMS Microphone. <i>Proceedings (mdpi)</i> , 2020 , 56, 3	0.3	
274	Diamond power devices: state of the art, modelling, figures of merit and future perspective. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 093001	3	57
273	Operation of ultra-high voltage (>10kV) SiC IGBTs at elevated temperatures: benefits & constraints 2019 ,		2
272	On the Quasi-Saturation in State-of-the-Art Power MOSFETs. <i>IEEE Electron Device Letters</i> , 2019 , 40, 754-756	1.5	3
271	Suppression technique of vertical leakage current in GaN-on-Si power transistors. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SCCD12	1.4	3
270	Retrograde p-Well for 10-kV Class SiC IGBTs. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 3066-3072	2.9	8
269	Sensitivity Enhancement of Silicon-on-Insulator CMOS MEMS Thermal Hot-Film Flow Sensors by Minimizing Membrane Conductive Heat Losses. <i>Sensors</i> , 2019 , 19,	3.8	4
268	Towards Integrated Mid-Infrared Gas Sensors. <i>Sensors</i> , 2019 , 19,	3.8	80
267	. <i>IEEE Electron Device Letters</i> , 2019 , 40, 862-865	4.4	6
266	. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2686-2691	2.9	1
265	Analytic Model of Specific ON-State Resistance for Superjunction MOSFETs With an Oxide Pillar. <i>IEEE Electron Device Letters</i> , 2019 , 40, 761-764	4.4	6
264	Bonding Pad Over Active Area Layout for Lateral AlGaN/GaN Power HEMTs: A Critical View. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2301-2306	2.9	2
263	LoRaWAN Battery-Free Wireless Sensors Network Designed for Structural Health Monitoring in the Construction Domain. <i>Sensors</i> , 2019 , 19,	3.8	23

262	Static and Dynamic Figures of Merits (FOM) for Superjunction MOSFETs 2019 ,		5
261	. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1253-1256	4.4	36
260	Inkjet-printed CMOS-integrated graphene-metal oxide sensors for breath analysis. <i>Npj 2D Materials and Applications</i> , 2019 , 3,	8.8	20
259	Smart CMOS mid-infrared sensor array. <i>Optics Letters</i> , 2019 , 44, 4111-4114	3	10
258	Gate stress induced threshold voltage instability and its significance for reliable threshold voltage measurement in p-GaN HEMT 2019 ,		4
257	Theory of 3-D Superjunction MOSFET. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 5254-5259	2.9	8
256	On the robustness of ultra-high voltage 4H-SiC IGBTs with an optimized retrograde p-well 2019 ,		1
255	Performance Improvement of >10kV SiC IGBTs with Retrograde p-Well. <i>Materials Science Forum</i> , 2019 , 963, 639-642	0.4	2
254	Suppression of substrate coupling in GaN high electron mobility transistors (HEMTs) by hole injection from the p-GaN gate. <i>Applied Physics Letters</i> , 2019 , 115, 203502	3.4	3
253	Optimal edge termination for high oxide reliability aiming 10kV SiC n-IGBTs 2019 ,		2
252	. <i>IEEE Electron Device Letters</i> , 2019 , 40, 177-180	4.4	4
251	. <i>IEEE Sensors Journal</i> , 2019 , 19, 2991-2998	4	12
250	. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 219-231	2.9	15
249	Impact of underfill and other physical dimensions on Silicon Lateral IGBT package reliability using computer model with discrete and continuous design variables. <i>Microelectronics Reliability</i> , 2018 , 83, 146-156	1.2	0
248	True Material Limit of Power Devices Applied to 2-D Superjunction MOSFET. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 1432-1439	2.9	27
247	Gate Oxide Electrical Stability of p-type Diamond MOS Capacitors. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 3361-3364	2.9	8
246	Mechanical Modelling of High Power Lateral IGBT for LED Driver Applications 2018 ,		2
245	Optimal Gate Commutated Thyristor Design for Bi-Mode Gate Commutated Thyristors Underpinning High, Temperature Independent, Current Controllability. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1342-1345	4.4	

244	Material Limit of Power Devices Applied to Asymmetric 2-D Superjunction MOSFET. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 3326-3332	2.9	13
243	Membrane Deflection and Stress in Thermal Flow Sensors. <i>Proceedings (mdpi)</i> , 2018 , 2, 1089	0.3	
242	On the Specific on-State Resistance of Superjunction MOSFETs With a Compensated Pillar. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1904-1907	4.4	4
241	High Pillar Doping Concentration for SiC Superjunction IGBTs 2018 ,		1
240	A CMOS-Based Thermopile Array Fabricated on a Single SiO ₂ Membrane. <i>Proceedings (mdpi)</i> , 2018 , 2, 878	0.3	10
239	Static and Dynamic Effects of the Incomplete Ionization in Superjunction Devices. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 4469-4475	2.9	9
238	Evaluation of thin film p-type single crystal silicon for use as a CMOS Resistance Temperature Detector (RTD). <i>Sensors and Actuators A: Physical</i> , 2018 , 283, 159-168	3.9	7
237	On-Chip Thermal Insulation Using Porous GaN. <i>Proceedings (mdpi)</i> , 2018 , 2, 776	0.3	2
236	Low-Loss 800-V Lateral IGBT in Bulk Si Technology Using a Floating Electrode. <i>IEEE Electron Device Letters</i> , 2018 , 39, 866-868	4.4	12
235	Superjunction Power Devices, History, Development, and Future Prospects. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 713-727	2.9	162
234	Guest Editorial Special Issue on Power Semiconductor Devices and Smart Power IC Technologies. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 654-658	2.9	
233	. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 1441-1448	2.9	10
232	Multiple-Wavelength Detection in SOI Lateral PIN Diodes With Backside Reflectors. <i>IEEE Transactions on Industrial Electronics</i> , 2017 , 64, 7368-7376	8.9	4
231	Substantiation of buried two dimensional hole gas (2DHG) existence in GaN-on-Si epitaxial heterostructure. <i>Applied Physics Letters</i> , 2017 , 110, 163506	3.4	8
230	On the physical operation and optimization of the p-GaN gate in normally-off GaN HEMT devices. <i>Applied Physics Letters</i> , 2017 , 110, 123502	3.4	58
229	In-situ thermal annealing of on-membrane silicon-on-insulator semiconductor-based devices after high gamma dose irradiation. <i>Nanotechnology</i> , 2017 , 28, 184001	3.4	7
228	Deep depletion concept for diamond MOSFET. <i>Applied Physics Letters</i> , 2017 , 111, 173503	3.4	33
227	On the Time-Dependent Transport Mechanism Between Surface Traps and the 2DEG in AlGa _N /Ga _N Devices. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4415-4423	2.9	5

226	Design of a normally-off diamond JFET for high power integrated applications. <i>Diamond and Related Materials</i> , 2017 , 78, 73-82	3.5	9
225	On the Investigation of the Anode Side Super Junction IGBT Design Concept. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1063-1066	4.4	26
224	On the Seebeck Coefficient and Its Temperature Dependence for Standard CMOS Materials. <i>IEEE Sensors Journal</i> , 2017 , 17, 30-36	4	2
223	CMOS technology platform for ubiquitous microsensors 2017 ,		4
222	On the application of a numerical model to improve the accuracy of the seebeck coefficient in CMOS materials 2017 ,		2
221	Geometrical Optimisation of Diode-Based Calorimetric Thermal Flow Sensors through Multiphysics Finite Element Modelling. <i>Proceedings (mdpi)</i> , 2017 , 1, 280	0.3	3
220	On the Source of Oscillatory Behaviour during Switching of Power Enhancement Mode GaN HEMTs. <i>Energies</i> , 2017 , 10, 407	3.1	13
219	Temperature-modulated graphene oxide resistive humidity sensor for indoor air quality monitoring. <i>Nanoscale</i> , 2016 , 8, 4565-72	7.7	58
218	Silicon-on-Insulator Photodiode on Micro-Hotplate Platform With Improved Responsivity and High-Temperature Application. <i>IEEE Sensors Journal</i> , 2016 , 16, 3017-3024	4	11
217	Mask-less deposition of Au-SnO ₂ nanocomposites on CMOS MEMS platform for ethanol detection. <i>Nanotechnology</i> , 2016 , 27, 125502	3.4	36
216	Investigation into the capabilities of Hall cells integrated in a non-fully depleted SOI CMOS technological process. <i>Sensors and Actuators A: Physical</i> , 2016 , 242, 43-49	3.9	4
215	Towards a Graphene-Based Low Intensity Photon Counting Photodetector. <i>Sensors</i> , 2016 , 16,	3.8	3
214	An SOI CMOS-Based Multi-Sensor MEMS Chip for Fluidic Applications. <i>Sensors</i> , 2016 , 16,	3.8	15
213	MEMS Infrared Emitter and Detector for Capnography Applications. <i>Procedia Engineering</i> , 2016 , 168, 1204-1207		6
212	New Bi-Mode Gate-Commutated Thyristor Design Concept for High-Current Controllability and Low ON-State Voltage Drop. <i>IEEE Electron Device Letters</i> , 2016 , 37, 467-470	4.4	1
211	Zero reverse recovery in SiC and GaN Schottky diodes: A comparison 2016 ,		17
210	4.5 kV Bi-mode Gate Commutated Thyristor design with High Power Technology and shallow diode-anode 2016 ,		1
209	Novel Approach Toward Plasma Enhancement in Trench-Insulated Gate Bipolar Transistors. <i>IEEE Electron Device Letters</i> , 2015 , 36, 823-825	4.4	17

208	Enhanced spectroscopic gas sensors using in-situ grown carbon nanotubes. <i>Applied Physics Letters</i> , 2015 , 106, 194101	3.4	20
207	Silicon diode temperature sensors—A review of applications. <i>Sensors and Actuators A: Physical</i> , 2015 , 232, 63-74	3.9	70
206	High-Sensitivity Single Thermopile SOI CMOS MEMS Thermal Wall Shear Stress Sensor. <i>IEEE Sensors Journal</i> , 2015 , 15, 5561-5568	4	11
205	Experimental demonstration of the p-ring FS+ Trench IGBT concept: A new design for minimizing the conduction losses 2015 ,		7
204	An experimental demonstration of a 4.5 kV Bi-mode Gate Commutated Thyristor (BGCT) 2015 ,		6
203	Superjunction IGBT vs. FS IGBT for 200°C operation 2015 ,		7
202	The effect of the collector contact design on the performance and yield of 800V Lateral IGBTs for power ICs 2015 ,		2
201	A Low-Power, Low-Cost Infra-Red Emitter in CMOS Technology. <i>IEEE Sensors Journal</i> , 2015 , 15, 6775-6782	4	30
200	Experimental, analytical and numerical investigation of non-linearity of SOI diode temperature sensors at extreme temperatures. <i>Sensors and Actuators A: Physical</i> , 2015 , 222, 31-38	3.9	25
199	CMOS integration of inkjet-printed graphene for humidity sensing. <i>Scientific Reports</i> , 2015 , 5, 17374	4.9	104
198	A highly efficient CMOS nanoplasmonic crystal enhanced slow-wave thermal emitter improves infrared gas-sensing devices. <i>Scientific Reports</i> , 2015 , 5, 17451	4.9	25
197	A low-power and in situ annealing mitigation technique for fast neutrons irradiation of integrated temperature sensing diodes 2015 ,		2
196	Low Power Resistive Oxygen Sensor Based on Sonochemical SrTi _{0.6} Fe _{0.4} O _{2.8} (STFO40). <i>Sensors</i> , 2015 , 15, 17495-506	3.8	6
195	Dip pen nanolithography-deposited zinc oxide nanorods on a CMOS MEMS platform for ethanol sensing. <i>RSC Advances</i> , 2015 , 5, 47609-47616	3.7	35
194	Modelling of an AlGa _N /Ga _N Schottky diode and extraction of main parameters 2015 ,		3
193	SOI multidirectional thermoelectric flow sensor for harsh environment applications 2015 ,		4
192	On the models used for TCAD simulations of Diamond Schottky Barrier Diodes 2015 ,		5
191	Investigation of surface charges and traps in gallium nitride/aluminium gallium nitride/gallium nitride high-voltage transistors via measurements and technology computer-aided design simulations of transfer characteristics of metal/insulator/semiconductor field-effect transistors and high-electron-mobility transistors. <i>IEEE Power Electronics</i> , 2015 , 8, 2322-2328	2.2	2

190	Improving Current Controllability in Bi-Mode Gate Commutated Thyristors. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 2263-2269	2.9	5
189	Impact of Donor Traps on the 2DEG and Electrical Behavior of AlGa _N /Ga _N MISFETs. <i>IEEE Electron Device Letters</i> , 2014 , 35, 27-29	4.4	31
188	SOI Hall cells design selection using three-dimensional physical simulations. <i>Journal of Magnetism and Magnetic Materials</i> , 2014 , 372, 141-146	2.8	8
187	The Stripe Fortified GCT: A new GCT design for maximizing the controllable current 2014 ,		3
186	Analysis on the off-state design and characterization of LIGBTs in partial SOI technology. <i>Solid-State Electronics</i> , 2014 , 96, 38-43	1.7	3
185	Thermo-optical characterization of fluorescent rhodamine B based temperature-sensitive nanosensors using a CMOS MEMS micro-hotplate. <i>Sensors and Actuators B: Chemical</i> , 2014 , 192, 126-133	8.5	42
184	Ambient Temperature Carbon Nanotube Ammonia Sensor on CMOS Platform. <i>Procedia Engineering</i> , 2014 , 87, 224-227		7
183	3D Multiphysics Modelling of an SOI CMOS MEMS Thermal Wall Shear Stress Sensor. <i>Procedia Engineering</i> , 2014 , 87, 628-631		0
182	SOI CMOS MEMS Infra-red Thermal Source with Carbon Nanotubes Coating. <i>Procedia Engineering</i> , 2014 , 87, 839-842		3
181	Parameters influencing the maximum controllable current in gate commutated thyristors. <i>IET Circuits, Devices and Systems</i> , 2014 , 8, 221-226	1.1	13
180	A tungsten based SOI CMOS MEMS wall shear stress sensor 2014 ,		4
179	The effect of the surface fixed charge and donor traps on the C(V) and transfer characteristics of a Ga _N MISFET [Experiment and TCAD simulations 2014 ,		4
178	Graphene-coated Rayleigh SAW Resonators for NO ₂ Detection. <i>Procedia Engineering</i> , 2014 , 87, 999-1002		18
177	A 3D FEM Model for Heat Transfer Mechanisms in Membrane Based Thermal Conductivity Sensors Developed Using SOI CMOS MEMS Technology. <i>Procedia Engineering</i> , 2014 , 87, 476-479		1
176	A CMOS-MEMS Thermopile with an Integrated Temperature Sensing Diode for Mid-IR Thermometry. <i>Procedia Engineering</i> , 2014 , 87, 1127-1130		15
175	The dynamics of surface donor traps in AlGa _N /Ga _N MISFETs using transient measurements and TCAD modelling 2014 ,		8
174	SOI CMOS integrated zinc oxide nanowire for toluene detection 2013 ,		3
173	Effect of Bandgap Narrowing on Performance of Modern Power Devices. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 4185-4190	2.9	2

172	The Destruction Mechanism in GCTs. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 819-826	2.9	22
171	200 V Superjunction N-Type Lateral Insulated-Gate Bipolar Transistor With Improved Latch-Up Characteristics. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 1412-1415	2.9	12
170	Gate Commutated Thyristor With Voltage Independent Maximum Controllable Current. <i>IEEE Electron Device Letters</i> , 2013 , 34, 954-956	4.4	5
169	A thermopile based SOI CMOS MEMS wall shear stress sensor 2013 ,		5
168	200V superjunction lateral IGBT fabricated on partial SOI 2013 ,		6
167	A dual mode SOI CMOS MEMS based thermal conductivity and IR absorption gas sensor 2013 ,		2
166	In-Situ grown carbon nanotubes for enhanced CO2 detection in non-dispersive-infra-red system 2013 ,		2
165	Enhanced infra-red emission from sub-millimeter microelectromechanical systems micro hotplates via inkjet deposited carbon nanoparticles and fullerenes. <i>Journal of Applied Physics</i> , 2013 , 113, 214907	2.5	18
164	A high temperature and low power SOI CMOS MEMS based thermal conductivity gas sensor 2013 ,		1
163	Point injection in trench insulated gate bipolar transistor for ultra low losses 2012 ,		11
162	700V Smart Trench IGBT with monolithic over-voltage and over-current protecting functions 2012 ,		2
161	Compact three-dimensional silicon termination solutions for high voltage SOI SuperJunction 2012 ,		2
160	200-V Lateral Superjunction LIGBT on Partial SOI. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1291-1293	4.4	20
159	Modelling 2DEG charges in AlGa _N /Ga _N heterostructures 2012 ,		5
158	Experimentally validated three dimensional GCT wafer level simulations 2012 ,		9
157	. <i>IEEE Electron Device Letters</i> , 2012 , 33, 1288-1290	4.4	17
156	Deposition of Carbon Nanotubes on CMOS. <i>IEEE Nanotechnology Magazine</i> , 2012 , 11, 215-219	2.6	3
155	The lateral superjunction PSOI LIGBT and LDMOSFET 2012 ,		2

154	SuperJunction IGBTs: An evolutionary step of silicon power devices with high impact potential 2012,		1
153	High Temperature Robust SOI Ethanol Sensor. <i>Procedia Engineering</i> , 2011 , 25, 1317-1320		1
152	Zinc Oxide Nanowire Based Hydrogen Sensor On SOI CMOS Platform. <i>Procedia Engineering</i> , 2011 , 25, 1473-1476		7
151	Ultralow Specific On-Resistance High-Voltage SOI Lateral MOSFET. <i>IEEE Electron Device Letters</i> , 2011 , 32, 185-187	4.4	61
150	. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 769-775	2.9	34
149	Innovative designs enable 300-V TMBS \square with ultra-low on-state voltage and fast switching speed 2011,		5
148	Towards Achieving the Soft-Punch-Through Superjunction Insulated-Gate Bipolar Transistor Breakdown Capability. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1275-1277	4.4	7
147	Interface charge trapping and hot carrier reliability in high voltage SOI SJ LDMOSFET 2011,		4
146	Design and optimization of a 250nm SOI LDMOSFET 2011,		1
145	Turn-off failure mechanism in large area IGCTs 2011,		4
144	Gate driver for SiC JFETs with protection against normally-on behaviour induced fault. <i>Electronics Letters</i> , 2011 , 47, 375	1.1	15
143	A novel partial silicon on insulator high voltage LDMOS with low-k dielectric buried layer. <i>Chinese Physics B</i> , 2010 , 19, 077306	1.2	15
142	High sensitive NO ₂ gas sensor with low power consumption using selectively grown ZnO nanorods. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 3385-8	1.3	8
141	. <i>IEEE Sensors Journal</i> , 2010 , 10, 1833-1848	4	132
140	. <i>IEEE Electron Device Letters</i> , 2010 , 31, 591-593	4.4	26
139	Silicon on Insulator Diode Temperature SensorA Detailed Analysis for Ultra-High Temperature Operation. <i>IEEE Sensors Journal</i> , 2010 , 10, 997-1003	4	31
138	Post-CMOS wafer level growth of carbon nanotubes for low-cost microsensors--a proof of concept. <i>Nanotechnology</i> , 2010 , 21, 485301	3.4	25
137	Low power consumption and high sensitivity carbon monoxide gas sensor using indium oxide nanowire. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 3189-92	1.3	11

136	ZnO nanowires grown on SOI CMOS substrate for ethanol sensing. <i>Sensors and Actuators B: Chemical</i> , 2010 , 146, 559-565	8.5	87
135	The Superjunction Insulated Gate Bipolar Transistor Optimization and Modeling. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 594-600	2.9	50
134	. <i>IEEE Transactions on Electron Devices</i> , 2010 , 57, 3033-3043	2.9	11
133	Ultra-high temperature (>300°C) suspended thermodiode in SOI CMOS technology. <i>Microelectronics Journal</i> , 2010 , 41, 540-546	1.8	17
132	Robustness of SuperJunction structures against cosmic ray induced breakdown. <i>Solid-State Electronics</i> , 2010 , 54, 385-391	1.7	5
131	Dynamic body potential variation in FD SOI MOSFETs operated in deep non-equilibrium regime: Model and applications. <i>Solid-State Electronics</i> , 2010 , 54, 104-114	1.7	17
130	DRAM concept based on the hole gas transient effect in a AlGaN/GaN HEMT. <i>Solid-State Electronics</i> , 2010 , 54, 616-620	1.7	10
129	On the static performance of the RESURF LDMOSFETS for power ICs. <i>Power Semiconductor Devices & IChs, 2009 ISPSD 2009 21st International Symposium on</i> , 2009 ,		52
128	A novel double-gate Trench Insulated Gate Bipolar transistor with ultra-low on-state voltage. <i>Power Semiconductor Devices & IChs, 2009 ISPSD 2009 21st International Symposium on</i> , 2009 ,		1
127	CMOS Alcohol Sensor Employing ZnO Nanowire Sensing Films 2009 ,		3
126	Breakdown Voltage for Superjunction Power Devices With Charge Imbalance: An Analytical Model Valid for Both Punch Through and Non Punch Through Devices. <i>IEEE Transactions on Electron Devices</i> , 2009 , 56, 3175-3183	2.9	50
125	Identification and quantification of different vapours using a single polymer chemoresistor and the novel dual transient temperature modulation technique. <i>Sensors and Actuators B: Chemical</i> , 2009 , 141, 370-380	8.5	11
124	High frequency 700V PowerBrane LIGBTs in 0.35µm bulk CMOS technology. <i>Power Semiconductor Devices & IChs, 2009 ISPSD 2009 21st International Symposium on</i> , 2009 ,		1
123	The Nanoscale Silicon Accumulation-Mode MOSFET: A Comprehensive Numerical Study. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 2946-2959	2.9	17
122	SOI diode temperature sensor operated at ultra high temperatures - a critical analysis 2008 ,		8
121	CMOS temperature sensors - concepts, state-of-the-art and prospects 2008 ,		14
120	Tungsten-Based SOI Microhotplates for Smart Gas Sensors. <i>Journal of Microelectromechanical Systems</i> , 2008 , 17, 1408-1417	2.5	104
119	On-state behaviour of diamond Schottky diodes. <i>Diamond and Related Materials</i> , 2008 , 17, 736-740	3.5	11

118	The Effect of Charge Imbalance on Superjunction Power Devices: An Exact Analytical Solution. <i>IEEE Electron Device Letters</i> , 2008 , 29, 249-251	4.4	35
117	CMOS micro-hotplate array design for nanomaterial-based gas sensors 2008 ,		1
116	Growth of carbon nanotubes on fully processed silicon-on-insulator CMOS substrates. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 5667-72	1.3	1
115	Highly sensitive NO ₂ sensor array based on undecorated single-walled carbon nanotube monolayer junctions. <i>Applied Physics Letters</i> , 2008 , 93, 113111	3.4	17
114	Laminar to turbulent flow transition measurements using an array of SOI-CMOS MEMS wall shear stress sensors 2008 ,		3
113	SOI CMOS-Based Smart Gas Sensor System for Ubiquitous Sensor Networks. <i>ETRI Journal</i> , 2008 , 30, 516-525		20
112	The Current Sharing Optimization of Paralleled IGBTs in a Power Module Tile Using a PSpice Frequency Dependent Impedance Model. <i>IEEE Transactions on Power Electronics</i> , 2008 , 23, 206-217	7.2	26
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