

Giovanni Verzellesi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/368751/publications.pdf>

Version: 2024-02-01

170
papers

3,385
citations

257357

24
h-index

168321

53
g-index

171
all docs

171
docs citations

171
times ranked

2511
citing authors

#	ARTICLE	IF	CITATIONS
1	Reliability of GaN High-Electron-Mobility Transistors: State of the Art and Perspectives. IEEE Transactions on Device and Materials Reliability, 2008, 8, 332-343.	1.5	535
2	Efficiency droop in InGaN/GaN blue light-emitting diodes: Physical mechanisms and remedies. Journal of Applied Physics, 2013, 114, .	1.1	351
3	Surface-Related Drain Current Dispersion Effects in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2004, 51, 1554-1561.	1.6	255
4	GaN-based power devices: Physics, reliability, and perspectives. Journal of Applied Physics, 2021, 130, .	1.1	191
5	Current Collapse and High-Electric-Field Reliability of Unpassivated GaN/AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2006, 53, 2932-2941.	1.6	150
6	Investigation of High-Electric-Field Degradation Effects in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2008, 55, 1592-1602.	1.6	110
7	Radiation tolerance of epitaxial silicon carbide detectors for electrons, protons and gamma-rays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 505, 645-655.	0.7	100
8	Influence of Buffer Carbon Doping on Pulse and AC Behavior of Insulated-Gate Field-Plated Power AlGaIn/GaN HEMTs. IEEE Electron Device Letters, 2014, 35, 443-445.	2.2	90
9	Mechanisms of RF Current Collapse in AlGaIn/GaN High Electron Mobility Transistors. IEEE Transactions on Device and Materials Reliability, 2008, 8, 240-247.	1.5	83
10	Physics-based modeling and experimental implications of trap-assisted tunneling in InGaIn/GaN light-emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 947-953.	0.8	77
11	Experimental and Numerical Analysis of Hole Emission Process From Carbon-Related Traps in GaN Buffer Layers. IEEE Transactions on Electron Devices, 2016, 63, 3473-3478.	1.6	76
12	Radiation-hard semiconductor detectors for SuperLHC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 541, 189-201.	0.7	55
13	Impact of programming charge distribution on threshold voltage and subthreshold slope of NROM memory cells. IEEE Transactions on Electron Devices, 2002, 49, 1939-1946.	1.6	53
14	Study of breakdown effects in silicon multiguard structures. IEEE Transactions on Nuclear Science, 1999, 46, 1215-1223.	1.2	42
15	"Hole Redistribution" Model Explaining the Thermally Activated R_{ON} Stress/Recovery Transients in Carbon-Doped AlGaIn/GaN Power MIS-HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 697-703.	1.6	36
16	Semiclassical simulation of trap-assisted tunneling in GaN-based light-emitting diodes. Journal of Computational Electronics, 2015, 14, 444-455.	1.3	34
17	Extension of impact-ionization multiplication coefficient measurements to high electric fields in advanced Si BJT's. IEEE Electron Device Letters, 1993, 14, 69-71.	2.2	32
18	Investigation on the charge collection properties of a 4H-SiC Schottky diode detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 476, 717-721.	0.7	31

#	ARTICLE	IF	CITATIONS
19	A review of failure modes and mechanisms of GaN-based HEMTs. , 2007, , .		31
20	Characterization and analysis of trap-related effects in AlGaIn/GaN HEMTs. Microelectronics Reliability, 2007, 47, 1639-1642.	0.9	31
21	Investigation of Efficiency-Droop Mechanisms in Multi-Quantum-Well InGaN/GaN Blue Light-Emitting Diodes. IEEE Transactions on Electron Devices, 2012, 59, 1402-1409.	1.6	30
22	Experimental and numerical assessment of gate-lag phenomena in AlGaAs-GaAs heterostructure field-effect transistors (FETs). IEEE Transactions on Electron Devices, 2003, 50, 1733-1740.	1.6	29
23	Correlating electroluminescence characterization and physics-based models of InGaN/GaN LEDs: Pitfalls and open issues. AIP Advances, 2014, 4, .	0.6	29
24	Errors Limiting Split-Substrate Mobility Extraction Accuracy in Buried-Channel InGaAs MOSFETs. IEEE Transactions on Electron Devices, 2012, 59, 1068-1075.	1.6	25
25	Partial Recovery of Dynamic ON Versus OFF-State Stress Voltage in p-GaN Gate AlGaIn/GaN Power HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 4862-4868.	1.6	24
26	Radiation effects on breakdown characteristics of multiguarded devices. IEEE Transactions on Nuclear Science, 1997, 44, 721-727.	1.2	23
27	Si-PIN X-ray detector technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 395, 344-348.	0.7	23
28	Analysis of current collapse effect in AlGaIn/GaN HEMT: Experiments and numerical simulations. Microelectronics Reliability, 2010, 50, 1520-1522.	0.9	23
29	Proposal of a data sparsification unit for a mixed-mode MAPS detector. , 2007, , .		22
30	Modeling the electrical characteristics of InGaN/GaN LED structures based on experimentally-measured defect characteristics. Journal Physics D: Applied Physics, 2021, 54, 425105.	1.3	21
31	Influence of impact-ionization-induced base current reversal on bipolar transistor parameters. IEEE Transactions on Electron Devices, 1995, 42, 1636-1646.	1.6	20
32	Prediction of impact-ionization-induced snap-back in advanced Si n-p-n BJT's by means of a nonlocal analytical model for the avalanche multiplication factor. IEEE Transactions on Electron Devices, 1993, 40, 2296-2300.	1.6	19
33	Physics-based explanation of kink dynamics in AlGaAs/GaAs HFETs. IEEE Electron Device Letters, 2002, 23, 383-385.	2.2	19
34	Silicon PIN radiation detectors with on-chip front-end junction field effect transistors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 417, 325-331.	0.7	16
35	Origin of hole-like peaks in current deep level transient spectroscopy of n-channel AlGaAs/GaAs heterostructure field-effect transistors. Journal of Applied Physics, 2003, 94, 5297.	1.1	16
36	A 4096-pixel MAPS device with on-chip data sparsification. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, 408-411.	0.7	16

#	ARTICLE	IF	CITATIONS
37	Design and Characterization of Current-Assisted Photonic Demodulators in 0.18- μm CMOS Technology. IEEE Transactions on Electron Devices, 2011, 58, 1702-1709.	1.6	16
38	Threshold voltage instabilities in D-mode GaN HEMTs for power switching applications. , 2014, , .		16
39	The effects of carbon on the bidirectional threshold voltage instabilities induced by negative gate bias stress in GaN MIS-HEMTs. Journal of Computational Electronics, 2020, 19, 1555-1563.	1.3	16
40	On the accuracy of generation lifetime measurement in high-resistivity silicon using PN gated diodes. IEEE Transactions on Electron Devices, 1999, 46, 817-820.	1.6	15
41	Trapping and high field related issues in GaN power HEMTs. , 2014, , .		15
42	Improvement in breakdown characteristics with multiguard structures in microstrip silicon detectors for CMS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 204-206.	0.7	14
43	The Role of Carbon Doping on Breakdown, Current Collapse, and Dynamic On-Resistance Recovery in AlGaIn/GaN High Electron Mobility Transistors on Semi-Insulating SiC Substrates. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900762.	0.8	14
44	Monolithic integration of Si-PIN diodes and n-channel double-gate JFET's for room temperature X-ray spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 458, 275-280.	0.7	13
45	The PixFEL project: development of advanced X-ray pixel detectors for application at future FEL facilities. Journal of Instrumentation, 2015, 10, C02024-C02024.	0.5	13
46	Electrical leakage phenomenon in heteroepitaxial cubic silicon carbide on silicon. Journal of Applied Physics, 2018, 123, .	1.1	13
47	Numerical analysis of ISFET and LAPS devices. Sensors and Actuators B: Chemical, 1997, 44, 402-408.	4.0	12
48	Charge preamplifier for hole collecting PIN diode and integrated tetrode N-JFET. IEEE Transactions on Nuclear Science, 2000, 47, 829-833.	1.2	12
49	Recent development on triple well 130 nm CMOS MAPS with in-pixel signal processing and data sparsification capability. , 2007, , .		12
50	Trap-assisted tunneling in InGaIn/GaN LEDs: Experiments and physics-based simulation. , 2014, , .		12
51	Correlation between dynamic $R_{ds(on)}$ transients and Carbon related buffer traps in AlGaIn/GaN HEMTs. , 2016, , .		12
52	The impact of interface and border traps on current-voltage, capacitance-voltage, and split-CV mobility measurements in InGaAs MOSFETs. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600592.	0.8	12
53	Threshold Voltage Statistical Variability and Its Sensitivity to Critical Geometrical Parameters in Ultrascaled InGaAs and Silicon FETs. IEEE Transactions on Electron Devices, 2017, 64, 4607-4614.	1.6	12
54	Extraction of DC base parasitic resistance of bipolar transistors based on impact-ionization-induced base current reversal. IEEE Electron Device Letters, 1993, 14, 431-434.	2.2	11

#	ARTICLE	IF	CITATIONS
55	FOXFET biased microstrip detectors: an investigation of radiation sensitivity. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 342, 39-48.	0.7	11
56	Trap Dynamics Model Explaining the R _{ON} Stress/Recovery Behavior in Carbon-Doped Power AlGaIn/GaN MOS-HEMTs. , 2020, , .		11
57	Modeling of light-addressable potentiometric sensors. IEEE Transactions on Electron Devices, 1997, 44, 2083-2090.	1.6	10
58	PixFEL: developing a fine pitch, fast 2D X-ray imager for the next generation X-FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 796, 2-7.	0.7	10
59	Evaluation of VTH and RON Drifts during Switch-Mode Operation in Packaged SiC MOSFETs. Electronics (Switzerland), 2021, 10, 441.	1.8	10
60	Mechanisms Underlying the Bidirectional <i>V_T</i> Shift After Negative-Bias Temperature Instability Stress in Carbon-Doped Fully Recessed AlGaIn/GaN MIS-HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 2564-2567.	1.6	10
61	Radiation tolerance of the FOXFET biasing scheme for AC-coupled Si microstrip detectors. IEEE Transactions on Nuclear Science, 1993, 40, 1602-1609.	1.2	9
62	Performance evaluation of radiation sensors with internal signal amplification based on the BJT effect. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 568, 217-223.	0.7	9
63	Development of deep N-well monolithic active pixel sensors in a CMOS technology. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 277-280.	0.7	9
64	Modelling nanoscale n-MOSFETs with III-V compound semiconductor channels: From advanced models for band structures, electrostatics and transport to TCAD. , 2017, , .		9
65	Physical mechanisms limiting the performance and the reliability of GaN-based LEDs. , 2018, , 455-489.		9
66	Degradation of silicon AC-coupled microstrip detectors induced by radiation. IEEE Transactions on Nuclear Science, 1993, 40, 2001-2007.	1.2	8
67	On the Modeling of the Donor/Acceptor Compensation Ratio in Carbon-Doped GaN to Univocally Reproduce Breakdown Voltage and Current Collapse in Lateral GaN Power HEMTs. Micromachines, 2021, 12, 709.	1.4	8
68	Fabrication of a Hydrogenated Amorphous Silicon Detector in 3-D Geometry and Preliminary Test on Planar Prototypes. Instruments, 2021, 5, 32.	0.8	8
69	Physical investigation of trap-related effects in power HFETs and their reliability implications. IEEE Transactions on Device and Materials Reliability, 2002, 2, 65-71.	1.5	7
70	DC-to-RF dispersion effects in GaAs- and GaN-based heterostructure FETs: performance and reliability issues. Microelectronics Reliability, 2005, 45, 1585-1592.	0.9	7
71	Interface-Trap Effects in Inversion-Type Enhancement-Mode InGaAs/ZrO_2 N-Channel MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 107-114.	1.6	7
72	Breakdown investigation in GaN-based MIS-HEMT devices. , 2014, , .		7

#	ARTICLE	IF	CITATIONS
73	Extraction of interface state density in oxide/III-V gate stacks. Semiconductor Science and Technology, 2015, 30, 065013.	1.0	7
74	Analysis of off-state leakage mechanisms in GaN-based MIS-HEMTs: Experimental data and numerical simulation. Solid-State Electronics, 2015, 113, 9-14.	0.8	7
75	High-voltage operation of silicon devices for LHC experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 409, 139-141.	0.7	6
76	A novel silicon microstrip termination structure with all p-type multiguard and scribe-line implants. IEEE Transactions on Nuclear Science, 2002, 49, 1712-1716.	1.2	6
77	Extraction of bulk generation lifetime and surface generation velocity in high-resistivity silicon by means of gated diodes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 477, 220-225.	0.7	6
78	The Impact of Light on Current DLTS and Gate-Lag Transients of AlGaAs/GaAs HFETs. IEEE Electron Device Letters, 2004, 25, 517-519.	2.2	6
79	Light Sensitivity of Current DLTS and Its Implications on the Physics of DC-to-RF Dispersion in AlGaAs/GaAs HFETs. IEEE Transactions on Electron Devices, 2005, 52, 594-602.	1.6	6
80	Development of 130nm CMOS Monolithic Active Pixels with In-pixel Signal Processing. , 2006, , .		6
81	False surface-trap signatures induced by buffer traps in AlGaN-GaN HEMTs. , 2009, , .		6
82	A 2D imager for X-ray FELs with a 65 nm CMOS readout based on per-pixel signal compression and 10 bit A/D conversion. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 831, 301-308.	0.7	6
83	Challenges towards the simulation of GaN-based LEDs beyond the semiclassical framework. Proceedings of SPIE, 2016, , .	0.8	6
84	Design and TCAD simulation of planar p-on-n active-edge pixel sensors for the next generation of FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 384-385.	0.7	6
85	Modeling a Thick Hydrogenated Amorphous Silicon Substrate for Ionizing Radiation Detectors. Frontiers in Physics, 2020, 8, .	1.0	6
86	Failure Physics and Reliability of GaN-Based HEMTs for Microwave and Millimeter-Wave Applications: A Review of Consolidated Data and Recent Results. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	6
87	Experimental and numerical investigation of Poole-Frenkel effect on dynamic R_{ON} transients in C-doped p-GaN HEMTs. Semiconductor Science and Technology, 2022, 37, 025006.	1.0	6
88	Development of a detector-compatible JFET technology on high-resistivity silicon. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 409, 346-350.	0.7	5
89	Application of the BJT detector for simple, low-cost, and low-power alpha-particle detection systems. , 2007, , .		5
90	Monolithic integration of detectors and transistors on high-resistivity silicon. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 658-663.	0.7	5

#	ARTICLE	IF	CITATIONS
91	Alpha-particle detection based on the BJT detector and simple, IC-based readout electronics. Journal of Instrumentation, 2009, 4, P11010-P11010.	0.5	5
92	Laser and alpha particle characterization of floating-base BJT detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 617, 593-595.	0.7	5
93	BJT detector with FPGA-based read-out for alpha particle monitoring. Journal of Instrumentation, 2011, 6, C01051-C01051.	0.5	5
94	Engineering Barrier and Buffer Layers in InGaAs Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2012, 59, 3651-3654.	1.6	5
95	Recent developments on CMOS MAPS for the SuperB Silicon Vertex Tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 283-287.	0.7	5
96	Design of an n-channel JFET on high-resistivity silicon for radiation-detector on-chip front-end electronics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 365, 473-479.	0.7	4
97	Forward and reverse characteristics of irradiated MOSFETs. IEEE Transactions on Nuclear Science, 1996, 43, 797-804.	1.2	4
98	Optimization of TMAH etching for MEMS. , 1999, 3680, 969.		4
99	Trap characterization in buried-gate n-channel 6H-SiC JFETs. IEEE Electron Device Letters, 2001, 22, 432-434.	2.2	4
100	Surface effects on turn-off characteristics of AlGaAs/GaAs HFETs. Electronics Letters, 2001, 37, 719.	0.5	4
101	Impact of temperature on surface-trap-induced gate-lag effects in GaAs heterostructure FETs. Electronics Letters, 2003, 39, 810.	0.5	4
102	BJT-based detector on high-resistivity silicon with integrated biasing structure. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 567, 285-289.	0.7	4
103	Design and TCAD simulations of planar active-edge pixel sensors for future XFEL applications. , 2014, , .		4
104	Off-state breakdown characteristics of AlGaIn/GaN MIS-HEMTs for switching power applications. , 2015, , .		4
105	In-pixel conversion with a 10 bit SAR ADC for next generation X-ray FELs. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 313-315.	0.7	4
106	Comprehensive Capacitanceâ€“Voltage Simulation and Extraction Tool Including Quantum Effects for High- k on SixGe1 \hat{a} ^x and InxGa1 \hat{a} ^xAs: Part IIâ€“Fits and Extraction From Experimental Data. IEEE Transactions on Electron Devices, 2017, 64, 3794-3801.	1.6	4
107	Combined variability/sensitivity analysis in III-V and silicon FETs for future technological nodes. , 2017, , .		4
108	Hydrogenated amorphous silicon detectors for particle detection, beam flux monitoring and dosimetry in high-dose radiation environment. Journal of Instrumentation, 2020, 15, C04005-C04005.	0.5	4

#	ARTICLE	IF	CITATIONS
109	Two-dimensional numerical simulation of edge-generated currents in type-inverted, p/sup +/-n single-sided silicon microstrip detectors. IEEE Transactions on Nuclear Science, 1999, 46, 1253-1257.	1.2	3
110	Analytical model for the ohmic-side interstrip resistance of double-sided silicon microstrip detectors. IEEE Transactions on Nuclear Science, 2001, 48, 972-976.	1.2	3
111	Physical Investigation of High-Field Degradation Mechanisms in GaN/AlGaIn/GaN HEMTs. , 2006, , .		3
112	Functional test of a Radon sensor based on a high-resistivity-silicon BJT detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 302-304.	0.7	3
113	The front-end chip of the SuperB SVT detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 180-183.	0.7	3
114	ESD degradation and robustness of RGB LEDs and modules: An investigation based on combined electrical and optical measurements. Microelectronics Reliability, 2014, 54, 1143-1149.	0.9	3
115	Modeling challenges for high-efficiency visible light-emitting diodes. , 2015, , .		3
116	Comprehensive Capacitanceâ€“Voltage Simulation and Extraction Tool Including Quantum Effects for High-k on Si<italix>/italix>Ge1âˆ“<italix>/italix> and In<italix>/italix>Ga1âˆ“<italix>/italix>As: Part Iâ€“Model Description and Validation. IEEE Transactions on Electron Devices, 2017, 64, 3786-3793.	1.6	3
117	Effects of mole fraction variations and scaling on total variability in InGaAs MOSFETs. Solid-State Electronics, 2019, 159, 135-141.	0.8	3
118	Testing of planar hydrogenated amorphous silicon sensors with charge selective contacts for the construction of 3D-detectors. Journal of Instrumentation, 2022, 17, C03033.	0.5	3
119	Punch-through characteristics of FOXFET biased detectors. IEEE Transactions on Nuclear Science, 1994, 41, 804-810.	1.2	2
120	Design and optimization of an npn silicon bipolar phototransistor for optical position encoders. Microelectronics Journal, 1998, 29, 49-58.	1.1	2
121	Energetic and spatial localisation of deep-level traps responsible for DC-to-RF dispersion effects in AlGaAsâ€“GaAs HFETs. Electronics Letters, 2003, 39, 1548.	0.5	2
122	Study on the origin of dc-to-RF dispersion effects in GaAs- and GaN-based heterostructure FETs. , 2003, , .		2
123	Fabrication, Characterization and Numerical Simulation of High Breakdown Voltage pHEMTs. , 2006, , .		2
124	Radon alpha-ray detector based on a high-resistivity-silicon BJT and a low-cost readout electronics. , 2008, , .		2
125	On-Chip Fast Data Sparsification for a Monolithic 4096-Pixel Device. IEEE Transactions on Nuclear Science, 2009, 56, 1159-1162.	1.2	2
126	A 2.4-GHz wireless alpha-ray sensor for remote monitoring and spectroscopy. , 2010, , .		2

#	ARTICLE	IF	CITATIONS
127	BJT detector for α -particle and Radon detection and monitoring. , 2011, , .		2
128	Performance of a radon sensor based on a BJT detector on high-resistivity silicon. , 2012, , .		2
129	Study of dosimetric observables to be used in Active Pixel Sensor based devices for Interventional Radiology applications. , 2013, , .		2
130	PixFEL: Enabling technologies, building blocks and architectures for advanced X-ray pixel cameras at the next generation FELs. , 2014, , .		2
131	Trap-assisted tunneling contributions to subthreshold forward current in InGaN/GaN light-emitting diodes. , 2015, , .		2
132	Modelling of GaN HEMTs: From Device-Level Simulation to Virtual Prototyping. Power Electronics and Power Systems, 2017, , 165-196.	0.6	2
133	On the impact of channel compositional variations on total threshold voltage variability in nanoscale InGaAs MOSFETs. , 2018, , .		2
134	Systematic Modeling of Electrostatics, Transport, and Statistical Variability Effects of Interface Traps in End-of-the-Roadmap III-V MOSFETs. IEEE Transactions on Electron Devices, 2020, 67, 1560-1566.	1.6	2
135	A pixelated x-ray detector for diffraction imaging at next-generation high-rate FEL sources. , 2017, , .		2
136	Development of silicon microheaters for chemoresistive gas sensors. , 1999, 3680, 964.		1
137	Trap energetic and spatial localization in buried-gate 6H-SiC JFETs by means of numerical device simulation. IEEE Electron Device Letters, 2001, 22, 579-581.	2.2	1
138	Experimental and numerical analysis of gate- and drain-lag phenomena in AlGaAs/InGaAs PHEMTs. , 0, , .		1
139	N α - β bipolar-junction-transistor detector with integrated n - p biasing transistor feasibility study, design and first experimental results. Semiconductor Science and Technology, 2006, 21, 194-200.	1.0	1
140	Recent developments in 130 nm CMOS monolithic active pixel detectors. Nuclear Physics, Section B, Proceedings Supplements, 2007, 172, 20-24.	0.5	1
141	Characterization and Numerical Simulations of High Power Field-Plated pHEMTs. , 2008, , .		1
142	Fabrication of novel high frequency and high breakdown InAlAs-InGaAs pHEMTs. , 2010, , .		1
143	TCAD optimization of field-plated InAlAs-InGaAs HEMTs. , 2010, , .		1
144	Analysis of interface-trap effects in inversion-type InGaAs/ZrO ₂ MOSFETs. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
145	Advances in the development of pixel detector for the SuperB Silicon Vertex Tracker. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 731, 25-30.	0.7	1
146	Latest results of the R&D on CMOS MAPS for the Layer0 of the SuperB SVT. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 732, 484-487.	0.7	1
147	Beam test results for the SuperB-SVT thin striplet detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 718, 314-317.	0.7	1
148	Low-noise readout channel with a novel dynamic signal compression for future X-FEL applications. , 2014, , .		1
149	PFM2: A 32 Å— 32 readout chip for the PixFEL X-ray imager demonstrator. , 2016, , .		1
150	First experimental results on active and slim-edge silicon sensors for XFEL. Journal of Instrumentation, 2016, 11, C12018-C12018.	0.5	1
151	A Wireless Personal Sensor Node for Real Time Dosimetry of Interventional Radiology Operators. Lecture Notes in Electrical Engineering, 2017, , 1-7.	0.3	1
152	Variability and sensitivity to process parameters variations in InGaAs dual-gate ultra-thin body MOSFETs: A scaling perspective. , 2017, , .		1
153	Random dopant fluctuation variability in scaled InGaAs dual-gate ultra-thin body MOSFETs: Source and drain doping effect. , 2017, , .		1
154	Characterization and TCAD Modeling of Mixed-Mode Stress Induced by Impact Ionization in Scaled SiGe HBTs. IEEE Transactions on Electron Devices, 2020, 67, 4597-4601.	1.6	1
155	Role of carbon in dynamic effects and reliability of 0.15-um AlGaIn/GaN HEMTs for RF power amplifiers. , 2022, , .		1
156	Gate oxide reliability improvement related to dry local oxidation of silicon. Microelectronics Reliability, 1999, 39, 181-185.	0.9	0
157	Gate-lag effects in AlGaAs/GaAs power HFET's. Microelectronics Reliability, 2001, 41, 1585-1589.	0.9	0
158	A 180-nm CMOS time-of-flight 3-D image sensor. , 2010, , .		0
159	Defect-related tunneling contributions to subthreshold forward current in GaN-Based LEDs. , 2015, , .		0
160	A 10 bit resolution readout channel with dynamic range compression for X-ray imaging at FELs. , 2015, , .		0
161	PFM2: a 32 Å— 32 processor for X-ray diffraction imaging at FELs. Journal of Instrumentation, 2016, 11, C11033-C11033.	0.5	0
162	Effects of border traps on transfer curve hysteresis and split-CV mobility measurement in InGaAs quantum-well MOSFETs. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
163	The PixFEL project: Progress towards a fine pitch X-ray imaging camera for next generation FEL facilities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 131-134.	0.7	0
164	A novel test methodology for R&I and V&T monitoring in GaN HEMTs during switch-mode operation. , 2017, , .		0
165	The PixFEL front-end for X-ray imaging in the radiation environment of next generation FELs. , 2017, , .		0
166	Characterization of a premixed flat combustor through plasma current measurements. , 2020, , .		0
167	TOF-Range Image Sensor in 0.18µm CMOS technology based on Current Assisted Photonic Demodulators. , 2011, , .		0
168	Defects in III-N LEDs: experimental identification and impact on electro-optical characteristics. , 2022, , .		0
169	Editorial for the Special Issue on Wide Bandgap Based Devices: Design, Fabrication and Applications, Volume II. Micromachines, 2022, 13, 403.	1.4	0
170	Deep defects in InGaN LEDs: modeling the impact on the electrical characteristics. , 2022, , .		0