Enrico Zanoni

List of Publications by Year
in descending order

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249	8,590	53660 45	54797 84
papers	citations	h-index	g-index

249	249	249	4522
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cumulative Hot-Electron Trapping in GaN-Based Power HEMTs Observed by an Ultrafast (10 V/Ns) On-Wafer Methodology. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 5019-5026.	3.7	15
2	Origin of the Diffusion-Related Optical Degradation of 1.3 Î¼m Inas QD-LDs Epitaxially Grown on Silicon Substrate. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-9.	1.9	6
3	Trap-state mapping to model GaN transistors dynamic performance. Scientific Reports, 2022, 12, 1755.	1.6	10
4	Defects and Reliability of GaNâ€Based LEDs: Review and Perspectives. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	28
5	Reliability of Commercial UVC LEDs: 2022 State-of-the-Art. Electronics (Switzerland), 2022, 11, 728.	1.8	20
6	Modeling the effect of spatial position and concentration of defects on optical degradation of InGaN/GaN multi quantum well light emitting diodes. , 2022, , .		0
7	UV LED reliability: degradation mechanisms and challenges. , 2022, , .		2
8	Failure Physics and Reliability of GaNâ€Based HEMTs for Microwave and Millimeterâ€Wave Applications: A Review of Consolidated Data and Recent Results. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	0.8	6
9	Conduction properties and threshold voltage instability in Î²-Ga2O3 MOSFETs. , 2022, , .		2
10	Optical degradation of InAs quantum-dot lasers on silicon: dependence on temperature and on diffusion processes. , 2022, , .		0
11	Defects in III-N LEDs: experimental identification and impact on electro-optical characteristics. , 2022, , .		0
12	Investigation of deep level defects in n-type GaAsBi. , 2022, , .		0
13	Deep levels and conduction processes in nitrogen-implanted Ga2O3 Schottky barrier diodes. , 2022, , .		0
14	On the performance and reliability of state-of-the-art commercial UV-C LEDs for disinfection purposes. , 2022, , .		0
15	Deep defects in InGaN LEDs: modeling the impact on the electrical characteristics. , 2022, , .		0
16	Logarithmic trapping and detrapping in <i>Î²</i> -Ga2O3 MOSFETs: Experimental analysis and modeling. Applied Physics Letters, 2022, 120, .	1.5	8
17	Influence of Drain and Gate Potential on Gate Failure in Semi-Vertical GaN-on-Si Trench MOSFETs. , 2022, , .		1
18	Modeling Hot-Electron Trapping in GaN-based HEMTs. , 2022, , .		1

#	Article	IF	Citations
19	Quantum efficiency of InGaNâ€“GaN multi-quantum well solar cells: Experimental characterization and modeling. Journal of Applied Physics, 2022, 131, .	1.1	4
20	Compact Modeling of Nonideal Trapping/Detrapping Processes in GaN Power Devices. IEEE Transactions on Electron Devices, 2022, 69, 4432-4437.	1.6	2
21	Degradation of 1.3 Î¼m InAs Quantum-Dot Laser Diodes: Impact of Dislocation Density and Number of Quantum Dot Layers. IEEE Journal of Quantum Electronics, 2021, 57, 1-8.	1.0	12
22	Full Optical Contactless Thermometry Based on LED Photoluminescence. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	2.4	6
23	Degradation mechanisms of InGaN visible LEDs and AlGaN UV LEDs. , 2021, , 273-312.		6
24	Gradual Degradation of InGaAs LEDs: Impact on Non-Radiative Lifetime and Extraction of Defect Characteristics. Materials, 2021, 14, 1114.	1.3	9
25	â€œHole Redistributionâ€•Model Explaining the Thermally Activated <i>R</i> _{ON} Stress/Recovery Transients in Carbon-Doped AlGaN/GaN Power MIS-HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 697-703.	1.6	36
26	A Generalized Approach to Determine the Switching Reliability of GaN HEMTs on-Wafer Level. , 2021, , .		4
27	Understanding the Leakage Mechanisms and Breakdown Limits of Vertical GaN-on-Si p+nâˆ’n Diodes: The Road to Reliable Vertical MOSFETs. Micromachines, 2021, 12, 445.	1.4	12
28	Inactivating SARS-CoV-2 Using 275 nm UV-C LEDs through a Spherical Irradiation Box: Design, Characterization and Validation. Materials, 2021, 14, 2315.	1.3	24
29	Challenges and Perspectives for Vertical GaN-on-Si Trench MOS Reliability: From Leakage Current Analysis to Gate Stack Optimization. Materials, 2021, 14, 2316.	1.3	15
30	A Physics-Based Approach to Model Hot-Electron Trapping Kinetics in p-GaN HEMTs. IEEE Electron Device Letters, 2021, 42, 673-676.	2.2	25
31	CdTe solar cells: technology, operation and reliability. Journal Physics D: Applied Physics, 2021, 54, 333002.	1.3	25
32	Deep levels and carrier capture kinetics in n-GaAsBi alloys investigated by deep level transient spectroscopy. Journal Physics D: Applied Physics, 2021, 54, 345109.	1.3	11
33	Electric Field and Self-Heating Effects on the Emission Time of Iron Traps in GaN HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 3325-3332.	1.6	20
34	UV-Based Technologies for SARS-CoV2 Inactivation: Status and Perspectives. Electronics (Switzerland), 2021, 10, 1703.	1.8	30
35	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
36	Effect of indium content and carrier distribution on the efficiency and reliability of InGaN/GaN-based multi quantum well light emitting diode. Microelectronics Reliability, 2021, 126, 114377.	0.9	1

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37	Effects of quantum-well indium content on deep defects and reliability of InGaN/GaN light-emitting diodes with under layer. Journal Physics D: Applied Physics, 2021, 54, 505108.	1.3	11
38	Drain Field Plate Impact on the Hard-Switching Performance of AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2021, 68, 5003-5008.	1.6	8
39	Degradation mechanisms of 1.3ÂÎ¼m C-doped quantum dot lasers grown on native substrate. Microelectronics Reliability, 2021, , 114222.	0.9	1
40	Hot electron effects in AlGaN/GaN HEMTs during hard-switching events. Microelectronics Reliability, 2021, 126, 114208.	0.9	3
41	Non-monotonic threshold voltage variation in 4H-SiC metalâ€"oxideâ€"semiconductor field-effect transistor: Investigation and modeling. Journal of Applied Physics, 2021, 130, .	1.1	9
42	Positive and negative charge trapping GaN HEMTs: Interplay between thermal emission and transport-limited processes. Microelectronics Reliability, 2021, 126, 114255.	0.9	7
43	Review on the degradation of GaN-based lateral power transistors. E-Prime, 2021, 1, 100018.	2.1	3
44	GaN-based power devices: Physics, reliability, and perspectives. Journal of Applied Physics, 2021, 130, .	1.1	191
45	Understanding the effects of off-state and hard-switching stress in gallium nitride-based power transistors. Semiconductor Science and Technology, 2021, 36, 014001.	1.0	10
46	A Review of the Reliability of Integrated IR Laser Diodes for Silicon Photonics. Electronics (Switzerland), 2021, 10, 2734.	1.8	6
47	Microstructural Degradation Investigations of OFF-State Stressed 0.15 Î¼m RF AlGaN/GaN HEMTs: Failure Mode related Breakdown. , 2021, , .		0
48	Dynamic and Capacitive Characterization of 3D GaN n-p-n Vertical Fin-FETs. , 2021, , .		0
49	Impact of thermal annealing on deep levels in nitrogen-implanted Î²-Ga2O3 Schottky barrier diodes. Journal of Applied Physics, 2021, 130, .	1.1	3
50	Charge Trapping in GaN Power Transistors: Challenges and Perspectives. , 2021, , .		4
51	Investigation of Current-Driven Degradation of 1.3 <i>Î¼</i>m Quantum-Dot Lasers Epitaxially Grown on Silicon. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.	1.9	13
52	Degradation Mechanisms of GaNâ€Based Vertical Devices: A Review. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900750.	0.8	8
53	High Breakdown Voltage and Low Buffer Trapping in Superlattice GaN-on-Silicon Heterostructures for High Voltage Applications. Materials, 2020, 13, 4271.	1.3	14
54	Cause and Effects of OFF-State Degradation in Hydrogen-Terminated Diamond MESFETs. IEEE Transactions on Electron Devices, 2020, 67, 4021-4026.	1.6	8

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55	GaN Vertical pâ€“iâ€“n Diodes in Avalanche Regime: Time-Dependent Behavior and Degradation. IEEE Electron Device Letters, 2020, 41, 1300-1303.	2.2	3
56	Excitation Intensity and Temperature-Dependent Performance of InGaN/GaN Multiple Quantum Wells Photodetectors. Electronics (Switzerland), 2020, 9, 1840.	1.8	13
57	Highly stable threshold voltage in GaN nanowire FETs: The advantages of <i>p</i>-GaN channel/Al2O3 gate insulator. Applied Physics Letters, 2020, 117, .	1.5	15
58	Hot-Electron Effects in AlGaN/GaN HEMTs Under Semi-ON DC Stress. IEEE Transactions on Electron Devices, 2020, 67, 4602-4605.	1.6	41
59	Geometric Modeling of Thermal Resistance in GaN HEMTs on Silicon. IEEE Transactions on Electron Devices, 2020, 67, 5408-5414.	1.6	4
60	Trapping and Detrapping Mechanisms in <i>Î²</i>-Gaâ‚‚Oâ‚ƒ Vertical FinFETs Investigated by Electro-Optical Measurements. IEEE Transactions on Electron Devices, 2020, 67, 3954-3959.	1.6	24
61	Use of Bilayer Gate Insulator in GaN-on-Si Vertical Trench MOSFETs: Impact on Performance and Reliability. Materials, 2020, 13, 4740.	1.3	12
62	Non thermally-activated transients and buffer traps in GaN transistors with p-type gate: A new method for extracting the activation energy. Microelectronics Reliability, 2020, 114, 113842.	0.9	3
63	A novel on-wafer approach to test the stability of GaN-based devices in hard switching conditions: Study of hot-electron effects. Microelectronics Reliability, 2020, 114, 113830.	0.9	10
64	OFF-state trapping phenomena in GaN HEMTs: Interplay between gate trapping, acceptor ionization and positive charge redistribution. Microelectronics Reliability, 2020, 114, 113841.	0.9	6
65	Influence of CdTe solar cell properties on stability at high temperatures. Microelectronics Reliability, 2020, 114, 113847.	0.9	6
66	Degradation of InGaN-based LEDs: Demonstration of a recombination-dependent defect-generation process. Journal of Applied Physics, 2020, 127, .	1.1	20
67	Thermal droop in III-nitride based light-emitting diodes: Physical origin and perspectives. Journal of Applied Physics, 2020, 127, .	1.1	54
68	Storage and release of buffer charge in GaN-on-Si HEMTs investigated by transient measurements. Applied Physics Express, 2020, 13, 074003.	1.1	8
69	On-Wafer Fast Evaluation of Failure Mechanism of 0.25-<i>Î¼</i>m AlGaN/GaN HEMTs: Evidence of Sidewall Indiffusion. IEEE Transactions on Electron Devices, 2020, 67, 2765-2770.	1.6	2
70	Reliability Physics of GaN HEMT Microwave Devices: The Age of Scaling. , 2020, , .		7
71	Trap Dynamics Model Explaining the R_{ON} Stress/Recovery Behavior in Carbon-Doped Power AlGaN/GaN MOS-HEMTs. , 2020, , .		11
72	Modeling of the Vertical Leakage Current in AlN/Si Heterojunctions for GaN Power Applications. IEEE Transactions on Electron Devices, 2020, 67, 595-599.	1.6	10

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73	Vertical Leakage in GaN-on-Si Stacks Investigated by a Buffer Decomposition Experiment. Micromachines, 2020, 11, 101.	1.4	3
74	Observation of I_D-V_D Kink in N-Polar GaN MIS-HEMTs at Cryogenic Temperatures. IEEE Electron Device Letters, 2020, 41, 345-348.	2.2	15
75	Fast System to measure the dynamic onâ€resistance of onâ€wafer 600ÂV normally off GaN HEMTs in hardâ€switching application conditions. IET Power Electronics, 2020, 13, 2390-2397.	1.5	12
76	Carrier capture kinetics, deep levels, and isolation properties of <i>Î²</i> -Ga2O3 Schottky-barrier diodes damaged by nitrogen implantation. Applied Physics Letters, 2020, 117, .	1.5	20
77	Efficiency and Catastrophic Failure of High-Power Blue GaN LEDs During Extremely High Temperature and Current Stress. IEEE Transactions on Device and Materials Reliability, 2020, 20, 429-435.	1.5	3
78	Modeling the degradation mechanisms of AlGaN-based UV-C LEDs: from injection efficiency to mid-gap state generation. Photonics Research, 2020, 8, 1786.	3.4	27
79	Demonstration of current-dependent degradation of quantum-dot lasers grown on silicon: role of defect diffusion processes. , 2020, , .		1
80	Positive temperature dependence of time-dependent breakdown of GaN-on-Si E-mode HEMTs under positive gate stress. Applied Physics Letters, 2019, 115, .	1.5	25
81	Hot-Electron Effects in GaN GITs and HD-GITs: A Comprehensive Analysis. , 2019, , .		5
82	Degradation processes of 280 nm high power DUV LEDs: impact on parasitic luminescence. Japanese Journal of Applied Physics, 2019, 58, SCCC19.	0.8	19
83	Breakdown Walkout in Polarization-Doped Vertical GaN Diodes. IEEE Transactions on Electron Devices, 2019, 66, 4597-4603.	1.6	9
84	High-Current Stress of UV-B (In)AlGaN-Based LEDs: Defect-Generation and Diffusion Processes. IEEE Transactions on Electron Devices, 2019, 66, 3387-3392.	1.6	24
85	ESD-failure of E-mode GaN HEMTs: Role of device geometry and charge trapping. Microelectronics Reliability, 2019, 100-101, 113334.	0.9	13
86	Stability and degradation of isolation and surface in Ga2O3 devices. Microelectronics Reliability, 2019, 100-101, 113453.	0.9	6
87	Gate Reliability of p-GaN Gate AlGaN/GaN High Electron Mobility Transistors. IEEE Electron Device Letters, 2019, 40, 379-382.	2.2	21
88	Perimeter Driven Transport in the p-GaN Gate as a Limiting Factor for Gate Reliability. , 2019, , .		27
89	Physical Origin of the Optical Degradation of InAs Quantum Dot Lasers. IEEE Journal of Quantum Electronics, 2019, 55, 1-7.	1.0	16
90	Evidence for defect-assisted tunneling and recombination at extremely low current in InGaN/GaN-based LEDs. Applied Physics Express, 2019, 12, 052007.	1.1	17

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91	Demonstration of UV-Induced Threshold Voltage Instabilities in Vertical GaN Nanowire Array-Based Transistors. IEEE Transactions on Electron Devices, 2019, 66, 2119-2124.	1.6	5
92	Investigation of nBTI degradation on GaN-on-Si E-mode MOSc-HEMT. , 2019, , .		19
93	The Effect of Proton Irradiation in Suppressing Current Collapse in AlGaN/GaN High-Electron-Mobility Transistors. IEEE Transactions on Electron Devices, 2019, 66, 372-377.	1.6	19
94	Challenges for highly-reliable GaN-based LEDs. , 2019, , .		0
95	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	1.3	843
96	Trapping phenomena and degradation mechanisms in GaN-based power HEMTs. Materials Science in Semiconductor Processing, 2018, 78, 118-126.	1.9	75
97	Positive and negative threshold voltage instabilities in GaN-based transistors. Microelectronics Reliability, 2018, 80, 257-265.	0.9	26
98	Demonstration of avalanche capability in polarization-doped vertical GaN pn diodes: study of walkout due to residual carbon concentration. , 2018, , .		10
99	Power GaN HEMT degradation: from time-dependent breakdown to hot-electron effects. , 2018, , .		6
100	Analysis and Reliability Study of Luminescent Materials for White Lighting. Proceedings (mdpi), 2018, 2, .	0.2	1
101	Degradation of GaN-on-GaN vertical diodes submitted to high current stress. Microelectronics Reliability, 2018, 88-90, 568-571.	0.9	9
102	Gate Conduction Mechanisms and Lifetime Modeling of p-Gate AlGaN/GaN High-Electron-Mobility Transistors. IEEE Transactions on Electron Devices, 2018, 65, 5365-5372.	1.6	65
103	Current induced degradation study on state of the art DUV LEDs. Microelectronics Reliability, 2018, 88-90, 868-872.	0.9	20
104	Impact of sidewall etching on the dynamic performance of GaN-on-Si E-mode transistors. Microelectronics Reliability, 2018, 88-90, 572-576.	0.9	16
105	Degradation mechanisms of heterogeneous III-V/Silicon loop-mirror laser diodes for photonic integrated circuits. Microelectronics Reliability, 2018, 88-90, 855-858.	0.9	8
106	Evidence of optically induced degradation in gallium nitride optoelectronic devices. Applied Physics Express, 2018, 11, 111002.	1.1	9
107	Reliability of Blue-Emitting Eu2+-Doped Phosphors for Laser-Lighting Applications. Materials, 2018, 11, 1552.	1.3	1
108	On the origin of the leakage current in p-gate AlGaN/GaN HEMTs. , 2018, , .		34

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109	Physical mechanisms limiting the performance and the reliability of GaN-based LEDs. , 2018, , 455-489.		9
110	Review of dynamic effects and reliability of depletion and enhancement GaN HEMTs for power switching applications. IET Power Electronics, 2018, 11, 668-674.	1.5	24
111	GaN-Based Laser Wireless Power Transfer System. Materials, 2018, 11, 153.	1.3	26
112	Study and Development of a Fluorescence Based Sensor System for Monitoring Oxygen in Wine Production: The WOW Project. Sensors, 2018, 18, 1130.	2.1	17
113	Observation of Hot Electron and Impact Ionization in N-Polar GaN MIS-HEMTs. IEEE Electron Device Letters, 2018, 39, 1007-1010.	2.2	23
114	Impact of Substrate Resistivity on the Vertical Leakage, Breakdown, and Trapping in GaN-on-Si E-Mode HEMTs. IEEE Transactions on Electron Devices, 2018, 65, 2765-2770.	1.6	35
115	Degradation Mechanisms of GaN HEMTs With p-Type Gate Under Forward Gate Bias Overstress. IEEE Transactions on Electron Devices, 2018, 65, 2778-2783.	1.6	51
116	Secondary Electroluminescence of GaN-on-Si RF HEMTs: Demonstration and Physical Origin. IEEE Transactions on Electron Devices, 2017, 64, 1032-1037.	1.6	2
117	Degradation Mechanisms of Heterogeneous III-V/Silicon 1.55- $mu ext{m}$ DBR Laser Diodes. IEEE Journal of Quantum Electronics, 2017, 53, 1-8.	1.0	12
118	Characterization of Defects in AlGaN/GaN HEMTs Based on Nonlinear Microwave Current Transient Spectroscopy. IEEE Transactions on Electron Devices, 2017, 64, 2135-2141.	1.6	9
119	Defect-Related Degradation of AlGaN-Based UV-B LEDs. IEEE Transactions on Electron Devices, 2017, 64, 200-205.	1.6	62
120	Evidence of Hot-Electron Effects During Hard Switching of AlGaN/GaN HEMTs. IEEE Transactions on Electron Devices, 2017, 64, 3734-3739.	1.6	90
121	Field- and current-driven degradation of GaN-based power HEMTs with p-GaN gate: Dependence on Mg-doping level. Microelectronics Reliability, 2017, 76-77, 298-303.	0.9	25
122	Degradation of InGaN-based MQW solar cells under 405 nm laser excitation. Microelectronics Reliability, 2017, 76-77, 575-578.	0.9	5
123	GaN-based MIS-HEMTs: Impact of cascode-mode high temperature source current stress on NBTI shift. , 2017, , .		10
124	Instability of Dynamic- $R_{ext ON}$ and Threshold Voltage in GaN-on-GaN Vertical Field-Effect Transistors. IEEE Transactions on Electron Devices, 2017, 64, 3126-3131.	1.6	21
125	Recombination mechanisms and thermal droop in AlGaN-based UV-B LEDs. Photonics Research, 2017, 5, A44.	3.4	36
126	Gate Stability of GaN-Based HEMTs with P-Type Gate. Electronics (Switzerland), 2016, 5, 14.	1.8	31

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127	High-Resolution Cathodoluminescence Investigation of Degradation Processes in InGaN Green Laser Diodes. Microscopy and Microanalysis, 2016, 22, 1738-1739.	0.2	1
128	Drain current transient and low-frequency dispersion characterizations in AlGaN/GaN HEMTs. International Journal of Microwave and Wireless Technologies, 2016, 8, 663-672.	1.5	13
129	On trapping mechanisms at oxide-traps in Al2O3/GaN metal-oxide-semiconductor capacitors. Applied Physics Letters, 2016, 108, .	1.5	43
130	A physical model for the reverse leakage current in (In,Ga)N/GaN light-emitting diodes based on nanowires. Journal of Applied Physics, 2016, 119, .	1.1	33
131	Role of defects in the thermal droop of InGaN-based light emitting diodes. Journal of Applied Physics, 2016, 119, .	1.1	55
132	Time-Dependent Failure of GaN-on-Si Power HEMTs With p-GaN Gate. IEEE Transactions on Electron Devices, 2016, 63, 2334-2339.	1.6	111
133	Reliability and parasitic issues in GaN-based power HEMTs: a review. Semiconductor Science and Technology, 2016, 31, 093004.	1.0	108
134	Degradation of InGaN laser diodes caused by temperature- and current-driven diffusion processes. Microelectronics Reliability, 2016, 64, 623-626.	0.9	24
135	Non-linear electro-thermal AlGaN/GaN model including large-signal dynamic thermal-trapping effects. , 2016, , .		10
136	Experimental demonstration of weibull distributed failure in p-type GaN high electron mobility transistors under high forward bias stress. , 2016, , .		8
137	Reliability of power devices: Bias-induced threshold voltage instability and dielectric breakdown in GaN MIS-HEMTs. , 2016, , .		4
138	Reliability of Gallium Nitride microwave transistors. , 2016, , .		5
139	Trapping and reliability issues in GaN-based MIS HEMTs with partially recessed gate. Microelectronics Reliability, 2016, 58, 151-157.	0.9	38
140	Negative Bias-Induced Threshold Voltage Instability in GaN-on-Si Power HEMTs. IEEE Electron Device Letters, 2016, 37, 474-477.	2.2	102
141	Nanoscale Investigation of Degradation and Wavelength Fluctuations in InGaN-Based Green Laser Diodes. IEEE Nanotechnology Magazine, 2016, 15, 274-280.	1.1	10
142	On-Wafer Single-Pulse Thermal Loadâ€"Pull RF Characterization of Trapping Phenomena in AlGaN/GaN HEMTs. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-9.	2.9	14
143	Impact of thermal treatment on the optical performance of InGaN/GaN light emitting diodes. AIP Advances, 2015, 5, 107121.	0.6	1
144	Degradation mechanisms and lifetime of stateâ€ofâ€theâ€art green laser diodes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 974-979.	0.8	9

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145	Physicsâ€based modeling and experimental implications of trapâ€assisted tunneling in InGaN/GaN lightâ€emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 947-953.	0.8	77
146	Effects and exploitation of tunable white light for circadian rhythm and human-centric lighting. , 2015, , .		7
147	Notice of Removal: Analysis of the mechanisms limiting the reliability of retrofit LED lamps. , 2015, , .		0
148	Reliability and failure physics of GaN HEMT, MIS-HEMT and p-gate HEMTs for power switching applications: Parasitic effects and degradation due to deep level effects and time-dependent breakdown phenomena. , 2015, , .		22
149	Trap investigation under class AB operation in AlGaN/GaN HEMTs based on output-admittance frequency dispersion, pulsed and transient measurements. , 2015, , .		6
150	Ageing of InGaN-based LEDs: Effects on internal quantum efficiency and role of defects. Microelectronics Reliability, 2015, 55, 1775-1778.	0.9	33
151	Temperature-Dependent Dynamic <inline-formula> <tex-math notation="LaTeX">$R_{mathrm {mathrm{{scriptstyle ON}}}}$ </tex-math></inline-formula> in GaN-Based MIS-HEMTs: Role of Surface Traps and Buffer Leakage. IEEE Transactions on Electron Devices, 2015, 62, 782-787.	1.6	91
152	Trapping mechanisms in GaNâ€based MISâ€HEMTs grown on silicon substrate. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1122-1129.	0.8	63
153	Hot-Electron Degradation of AlGaN/GaN High-Electron Mobility Transistors During RF Operation: Correlation With GaN Buffer Design. IEEE Electron Device Letters, 2015, 36, 1011-1014.	2.2	28
154	Extensive Investigation of Time-Dependent Breakdown of GaN-HEMTs Submitted to OFF-State Stress. IEEE Transactions on Electron Devices, 2015, 62, 2549-2554.	1.6	45
155	On the impact of carbon-doping on the dynamic Ron and off-state leakage current of 650V GaN power devices. , 2015, , .		60
156	Reliability Investigation of GaN HEMTs for MMICs Applications. Micromachines, 2014, 5, 570-582.	1.4	2
157	Characterization of high-voltage charge-trapping effects in GaN-based power HEMTs. , 2014, , .		2
158	Influence of Shunt Resistance on the Performance of an Illuminated String of Solar Cells: Theory, Simulation, and Experimental Analysis. IEEE Transactions on Device and Materials Reliability, 2014, 14, 942-950.	1.5	33
159	Degradation of dc and pulsed characteristics of InAlN/GaN HEMTs under different proton fluences. , 2014, , .		2
160	Trapping and high field related issues in GaN power HEMTs. , 2014, , .		15
161	Recoverable degradation of blue InGaN-based light emitting diodes submitted to 3â€‰MeV proton irradiation. Applied Physics Letters, 2014, 105, 213506.	1.5	10
162	High performance high reliability AlN/GaN DHFET. , 2014, , .		1

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163	Buffer Traps in Fe-Doped AlGaN/GaN HEMTs: Investigation of the Physical Properties Based on Pulsed and Transient Measurements. IEEE Transactions on Electron Devices, 2014, 61, 4070-4077.	1.6	139
164	High-voltage double-pulsed measurement system for GaN-based power HEMTs. , 2014, , .		18
165	Characterization of the deep levels responsible for non-radiative recombination in InGaN/GaN light-emitting diodes. Applied Physics Letters, 2014, 104, .	1.5	49
166	OFF-State Degradation of AlGaN/GaN Power HEMTs: Experimental Demonstration of Time-Dependent Drain-Source Breakdown. IEEE Transactions on Electron Devices, 2014, 61, 1987-1992.	1.6	35
167	Dislocation-related trap levels in nitride-based light emitting diodes. Applied Physics Letters, 2014, 104, .	1.5	17
168	Trapping in GaN-based metal-insulator-semiconductor transistors: Role of high drain bias and hot electrons. Applied Physics Letters, 2014, 104, .	1.5	59
169	Local Shunting in Multicrystalline Silicon Solar Cells: Distributed Electrical Simulations and Experiments. IEEE Journal of Photovoltaics, 2014, 4, 40-47.	1.5	17
170	Breakdown mechanisms in AlGaN/GaN HEMTs: An overview. Japanese Journal of Applied Physics, 2014, 53, 100211.	0.8	99
171	Thermally-activated degradation of InGaN-based laser diodes: Effect on threshold current and forward voltage. Microelectronics Reliability, 2014, 54, 2147-2150.	0.9	15
172	Threshold voltage instabilities in D-mode GaN HEMTs for power switching applications. , 2014, , .		16
173	Traps localization and analysis in GaN HEMTs. Microelectronics Reliability, 2014, 54, 2222-2226.	0.9	9
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