Nikolai B Smirnov

List of Publications by Citations

236 papers	3,955 citations	34 h-index	47 g-index
236 ext. papers	4,291 ext. citations	2.4 avg, IF	4.9 L-index

#	Paper	IF	Citations
236	Electrical characteristics of Au and Ag Schottky contacts on n-ZnO. *Applied Physics Letters*, **2003**, 83, 1575-1577	3.4	168
235	Deep centers and their spatial distribution in undoped GaN films grown by organometallic vapor phase epitaxy. *Journal of Applied Physics*, **1998**, 84, 870-876	2.5	106
234	Lateral AlxGa1−xN power rectifiers with 9.7 kV reverse breakdown voltage. *Applied Physics Letters*, **2001**, 78, 823-825	3.4	85
233	Proton implantation effects on electrical and recombination properties of undoped ZnO. *Journal of Applied Physics*, **2003**, 94, 2895-2900	2.5	73
232	Point defect induced degradation of electrical properties of Ga2O3 by 10 MeV proton damage. *Applied Physics Letters*, **2018**, 112, 032107	3.4	72
231	Electrical and optical properties of Cr and Fe implanted n-GaN. *Journal of Applied Physics*, **2003**, 93, 5388-5396	2.5	65
230	Electrical properties of bulk semi-insulating β-Ga2O3 (Fe). *Applied Physics Letters*, **2018**, 113, 142102	3.4	59
229	Compensation and persistent photocapacitance in homoepitaxial Sn-doped β-Ga2O3. *Journal of Applied Physics*, **2018**, 123, 115702	2.5	57
228	Effects of proton implantation on electrical and recombination properties of n-GaN. *Solid-State Electronics*, **2000**, 44, 1971-1983	1.7	57
227	Hydrogen plasma treatment effects on electrical and optical properties of n-ZnO. *Journal of Applied Physics*, **2003**, 94, 400-406	2.5	54
226	Electrical and optical properties of Fe-doped semi-insulating GaN templates. *Applied Physics Letters*, **2003**, 83, 3314-3316	3.4	50
225	Hole traps and persistent photocapacitance in proton irradiated β-Ga2O3 films doped with Si. *APL Materials*, **2018**, 6, 096102	5.7	50
224	Fast neutron irradiation effects in n-GaN. *Journal of Vacuum Science & Technology B*, **2007**, 25, 436		46
223	Defects responsible for charge carrier removal and correlation with deep level introduction in irradiated β-Ga2O3. *Applied Physics Letters*, **2018**, 113, 092102	3.4	46
222	Properties of highly Cr-doped AlN. *Applied Physics Letters*, **2004**, 85, 4067-4069	3.4	45
221	Al composition dependence of breakdown voltage in AlxGa1−xN Schottky rectifiers. *Applied Physics Letters*, **2000**, 76, 1767-1769	3.4	45
220	Deep traps responsible for hysteresis in capacitance-voltage characteristics of AlGaN/GaN heterostructure transistors. *Applied Physics Letters*, **2007**, 91, 232116	3.4	43

219	Optical and magnetic properties of ZnO bulk crystals implanted with Cr and Fe. *Materials Science in Semiconductor Processing*, **2004**, 7, 77-81	4.3	43
218	Neutron irradiation effects on electrical properties and deep-level spectra in undoped n-AlGaN□GaN heterostructures. *Journal of Applied Physics*, **2005**, 98, 033529	2.5	43
217	Deep hole traps in n-GaN films grown by hydride vapor phase epitaxy. *Journal of Applied Physics*, **2002**, 91, 6580	2.5	43
216	Spatial variations of doping and lifetime in epitaxial laterally overgrown GaN. *Applied Physics Letters*, **2007**, 90, 152114	3.4	42
215	Deep level transient spectroscopy in III-Nitrides: Decreasing the effects of series resistance. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 061203	1.3	41
214	Comparison of hole traps in n-GaN grown by hydride vapor phase epitaxy, metal organic chemical vapor deposition, and epitaxial lateral overgrowth. *Journal of Applied Physics*, **2011**, 109, 123701	2.5	41
213	Optical and electrical properties of GaMnN films grown by molecular-beam epitaxy. *Journal of Applied Physics*, **2002**, 92, 4989-4993	2.5	41
212	Electrical and optical properties of GaN films implanted with Mn and Co. *Journal of Applied Physics*, **2002**, 92, 3130-3136	2.5	40
211	Enhanced tunneling in GaN/InGaN multi-quantum-well heterojunction diodes after short-term injection annealing. *Journal of Applied Physics*, **2002**, 91, 5203-5207	2.5	38
210	Diffusion length of non-equilibrium minority charge carriers in □Ga2O3 measured by electron beam induced current. *Journal of Applied Physics*, **2018**, 123, 185704	2.5	37
209	Donor nonuniformity in undoped and Si doped n-GaN prepared by epitaxial lateral overgrowth. *Applied Physics Letters*, **2008**, 92, 042118	3.4	37
208	Electrical properties of undoped bulk ZnO substrates. *Journal of Electronic Materials*, **2006**, 35, 663-669	1.9	37
207	Effects of laterally overgrown n-GaN thickness on defect and deep level concentrations. *Journal of Vacuum Science & Technology B*, **2008**, 26, 990		36
206	Temperature dependence and current transport mechanisms in AlxGa1□N Schottky rectifiers. *Applied Physics Letters*, **2000**, 76, 3816-3818	3.4	36
205	Deep hole traps in undoped n-GaN films grown by hydride vapor phase epitaxy. *Journal of Applied Physics*, **2014**, 115, 223702	2.5	34
204	Fermi level pinning in heavily neutron-irradiated GaN. *Journal of Applied Physics*, **2006**, 100, 093715	2.5	34
203	Deep centers in AlGaN-based light emitting diode structures. *Solid-State Electronics*, **1999**, 43, 1929-1936	1.7	34
202	Fermi level dependence of hydrogen diffusivity in GaN. *Applied Physics Letters*, **2001**, 79, 1834-1836	3.4	31

201	Alpha particle detection with GaN Schottky diodes. *Journal of Applied Physics*, **2009**, 106, 103708	2.5	30
200	Role of nonradiative recombination centers and extended defects in nonpolar GaN on light emission efficiency. *Applied Physics Letters*, **2011**, 98, 072104	3.4	30
199	Proton implantation effects on electrical and luminescent properties of p-GaN. *Journal of Applied Physics*, **2003**, 94, 3069-3074	2.5	30
198	Deep electron and hole traps in freestanding n-GaN grown by hydride vapor phase epitaxy. *Journal of Applied Physics*, **2002**, 92, 5241-5247	2.5	30
197	Hydrogen plasma treatment of β-Ga2O3: Changes in electrical properties and deep trap spectra. *Applied Physics Letters*, **2019**, 115, 032101	3.4	29
196	Electrical and structural properties of AlN/GaN and AlGaN/GaN heterojunctions. *Journal of Applied Physics*, **2008**, 104, 053702	2.5	29
195	Comparison of neutron irradiation effects in AlGaN/AlN/GaN, AlGaN/GaN, and InAlN/GaN heterojunctions. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 061207	1.3	28
194	Neutron Radiation Effects in Epitaxially Laterally Overgrown GaN Films. *Journal of Electronic Materials*, **2007**, 36, 1320-1325	1.9	28
193	Neutron irradiation effects in p-GaN. *Journal of Vacuum Science & Technology B*, **2006**, 24, 2256		28
192	Neutron transmutation doping effects in GaN. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 608-612	1.3	26
191	Electrical properties and radiation detector performance of free-standing bulk n-GaN. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 021205	1.3	26
190	Properties of Au and Ag Schottky diodes prepared on undoped n-ZnO. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1603-1608	2.9	26
189	Hydrogen plasma passivation effects on properties of p-GaN. *Journal of Applied Physics*, **2003**, 94, 3960-3965	2.5	26
188	Hydrogen passivation effects in InGaAlP and InGaP. *Journal of Applied Physics*, **1994**, 76, 7390-7398	2.5	26
187	Electrical properties, structural properties, and deep trap spectra of thin β-Ga2O3 films grown by halide vapor phase epitaxy on basal plane sapphire substrates. *APL Materials*, **2018**, 6, 121110	5.7	26
186	Electrical Properties, Deep Trap and Luminescence Spectra in Semi-Insulating, Czochralski β-Ga2O3 (Mg). *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3019-Q3023	2	25
185	Defects at the surface of β-Ga2O3 produced by Ar plasma exposure. *APL Materials*, **2019**, 7, 061102	5.7	25
184	Influence of high-temperature annealing on the properties of Fe doped semi-insulating GaN structures. *Journal of Applied Physics*, **2004**, 95, 5591-5596	2.5	24

183	Deep traps determining the non-radiative lifetime and defect band yellow luminescence in n-GaN. *Journal of Alloys and Compounds*, **2016**, 686, 1044-1052	5.7	24
182	Trap states in multication mesoscopic perovskite solar cells: A deep levels transient spectroscopy investigation. *Applied Physics Letters*, **2018**, 113, 263501	3.4	24
181	Properties of Fe-doped semi-insulating GaN structures. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 120		23
180	Electrical, luminescent, and deep trap properties of Si doped n-GaN grown by pendeo epitaxy. *Journal of Applied Physics*, **2016**, 119, 015103	2.5	23
179	Studies of deep level centers determining the diffusion length in epitaxial layers and crystals of undoped n-GaN. *Journal of Applied Physics*, **2016**, 119, 205109	2.5	23
178	Deep trap spectra of Sn-doped □Ga2O3 grown by halide vapor phase epitaxy on sapphire. *APL Materials*, **2019**, 7, 051103	5.7	22
177	10 MeV electrons irradiation effects in variously doped n-GaN. *Journal of Applied Physics*, **2011**, 109, 123703	2.5	22
176	Electrical properties and deep traps spectra of a-plane GaN films grown on r-plane sapphire. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 166, 220-224	3.1	22
175	Persistent photoconductivity in p-type ZnO(N) grown by molecular beam epitaxy. *Applied Physics Letters*, **2007**, 90, 132103	3.4	22
174	Deep traps in unpassivated and Sc2O3-passivated AlGaN/GaN high electron mobility transistors. *Applied Physics Letters*, **2003**, 83, 2608-2610	3.4	22
173	Defects responsible for lifetime degradation in electron irradiated n-GaN grown by hydride vapor phase epitaxy. *Applied Physics Letters*, **2017**, 110, 112102	3.4	21
172	Properties of Fe-doped, thick, freestanding GaN crystals grown by hydride vapor phase epitaxy. *Journal of Vacuum Science & Technology B*, **2007**, 25, 686		21
171	Properties of Mn- and Co-doped bulk ZnO crystals. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2005**, 23, 274		21
170	Electronic states in modulation doped p-AlGaN/GaN superlattices. *Journal of Applied Physics*, **2001**, 90, 4032-4038	2.5	21
169	Electrical Properties, Deep Levels and Luminescence Related to Fe in Bulk Semi-Insulating □Ga2O3 Doped with Fe. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3091-Q3096	2	19
168	Point defects controlling non-radiative recombination in GaN blue light emitting diodes: Insights from radiation damage experiments. *Journal of Applied Physics*, **2017**, 122, 115704	2.5	19
167	Effect of electron irradiation on AlGaN/GaN and InAlN/GaN heterojunctions. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2013**, 31, 022206	1.3	19
166	Residual impurities and native defects in 6H-SiC bulk crystals grown by halide chemical-vapor deposition. *Journal of Applied Physics*, **2006**, 99, 013508	2.5	19

165	Electrical and recombination properties and deep traps spectra in MOCVD ELOG GaN layers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 2087-2090		19
164	Electrical and optical properties of modulation-doped p-AlGaN/GaN superlattices. *Applied Physics Letters*, **2001**, 79, 4372-4374	3.4	19
163	Defect States Determining Dynamic Trapping-Detrapping in Ga2O3 Field-Effect Transistors. *ECS Journal of Solid State Science and Technology*, **2019**, 8, Q3013-Q3018	2	19
162	Spatial location of the Ec-0.6 eV electron trap in AlGaN/GaN heterojunctions. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 050602	1.3	18
161	Electrical and structural properties of GaN films and GaN/InGaN light-emitting diodes grown on porous GaN templates fabricated by combined electrochemical and photoelectrochemical etching. *Journal of Alloys and Compounds*, **2014**, 589, 507-512	5.7	18
160	Proton implantation effects on electrical and optical properties of undoped AlGaN with high Al mole fraction. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 2500		18
159	Carrier Removal Rates and Deep Traps in Neutron Irradiated n-GaN Films. *Journal of the Electrochemical Society*, **2011**, 158, H866	3.9	17
158	Electrical properties of GaN (Fe) buffers for AlGaNGaN high electron mobility transistor structures. *Applied Physics Letters*, **2008**, 92, 042110	3.4	17
157	Lattice vibrational properties of ZnMgO grown by pulsed laser deposition. *Applied Physics Letters*, **2007**, 90, 192110	3.4	17
156	Neutron irradiation effects in AlGaN/GaN heterojunctions. *Physica B: Condensed Matter*, **2006**, 376-377, 523-526	2.8	17
155	Studies of deep centers in dilute GaAsN and InGaAsN films grown by molecular beam epitaxy. *Solid-State Electronics*, **2002**, 46, 2155-2160	1.7	17
154	Changes in electron and hole traps in GaN-based light emitting diodes from near-UV to green spectral ranges. *Applied Physics Letters*, **2017**, 110, 192107	3.4	16
153	Anisotropy of In incorporation in GaN/InGaN multiquantum wells prepared by epitaxial lateral overgrowth. *Applied Physics Letters*, **2009**, 94, 142103	3.4	16
152	Deep electron and hole traps in neutron transmutation doped n-GaN. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 041201	1.3	16
151	Electron irradiation of AlGaNGaN and AlNGaN heterojunctions. *Applied Physics Letters*, **2008**, 93, 152101	3.4	16
150	Semi-Insulating, Fe-Doped Buffer Layers Grown by Molecular Beam Epitaxy. *Journal of the Electrochemical Society*, **2007**, 154, H749	3.9	16
149	Studies of Interface States in Sc[sub 2]O[sub 3]GaN, MgOGaN, and MgScOGaN structures. *Journal of the Electrochemical Society*, **2007**, 154, H115	3.9	16
148	Study of GaAs as a material for solar neutrino detectors. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2000**, 439, 651-661	1.2	16

147	Annealing effects on electrical properties of MgZnO films grown by pulsed laser deposition. *Journal of Applied Physics*, **2008**, 103, 083704	2.5	15
146	Comparison of deep levels spectra and electrical properties of GaAs crystals grown by vertical Bridgeman and by liquid encapsulated Czochralski methods. *Solid-State Electronics*, **2002**, 46, 269-277	1.7	15
145	Electrical properties and defect states in undoped high-resistivity GaN films used in high-power rectifiers. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2000**, 18, 1237		15
144	Effects of InAlN underlayer on deep traps detected in near-UV InGaN/GaN single quantum well light-emitting diodes. *Journal of Applied Physics*, **2019**, 126, 125708	2.5	14
143	Anisotropy of hydrogen plasma effects in bulk n-type Ga2O3. *Journal of Applied Physics*, **2020**, 127, 175702	2.5	14
142	Deep centers and persistent photocapacitance in AlGaN/GaN high electron mobility transistor structures grown on Si substrates. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2013**, 31, 011211	1.3	14
141	EBIC and CL studies of ELOG GaN films. *Superlattices and Microstructures*, **2009**, 45, 308-313	2.8	14
140	Electrical and luminescent properties and deep traps spectra in GaN nanopillar layers prepared by dry etching. *Journal of Applied Physics*, **2012**, 112, 073112	2.5	14
139	Studies of defects in Mg doped p-GaN films grown by hydride vapor phase epitaxy on SiC substrates. *Solid-State Electronics*, **2001**, 45, 261-265	1.7	14
138	Photosensitivity of Ga2O3 Schottky diodes: Effects of deep acceptor traps present before and after neutron irradiation. *APL Materials*, **2020**, 8, 111105	5.7	13
137	Pulsed fast reactor neutron irradiation effects in Si doped n-type Ga2O3. *Journal Physics D: Applied Physics*, **2020**, 53, 274001	3	13
136	Deep Electron Traps Responsible for Higher Quantum Efficiency in Improved GaN/InGaN Light Emitting Diodes Embedded with SiO2Nanoparticles. *ECS Journal of Solid State Science and Technology*, **2016**, 5, Q274-Q277	2	13
135	Degradation-induced low frequency noise and deep traps in GaN/InGaN near-UV LEDs. *Applied Physics Letters*, **2017**, 111, 062103	3.4	13
134	Effect of buffer layer structure on electrical and structural properties of AlGaN/GaN high electron mobility transistors. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 011205	1.3	13
133	Temperature stability of high-resistivity GaN buffer layers grown by metalorganic chemical vapor deposition. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2013**, 31, 051208	1.3	13
132	Comparison of electrical properties and deep traps in p-AlxGa1xN grown by molecular beam epitaxy and metal organic chemical vapor deposition. *Journal of Applied Physics*, **2009**, 106, 073706	2.5	13
131	Semi-insulating LEC GaAs as a material for radiation detectors: materials science issues. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2001**, 466, 14-24	1.2	13
130	Deep traps and instabilities in AlGaN/GaN high electron mobility transistors on Si substrates. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2016**, 34, 041216	1.3	13

129	Electron traps as major recombination centers in n-GaN films grown by metalorganic chemical vapor deposition. *Applied Physics Express*, **2016**, 9, 061002	2.4	13
128	Electrical properties of undoped GaN films grown by maskless epitaxial lateral overgrowth. *Journal of Applied Physics*, **2013**, 113, 083712	2.5	12
127	Electrical properties and deep traps spectra in undoped and Si-doped m-plane GaN films. *Journal of Applied Physics*, **2009**, 105, 063708	2.5	12
126	Metastable centers in AlGaN/AlN/GaN heterostructures. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 041209	1.3	12
125	Electron Irradiation Effects in GaN□InGaN Multiple Quantum Well Structures. *Journal of the Electrochemical Society*, **2008**, 155, H31	3.9	12
124	Deep-level studies in GaN layers grown by epitaxial lateral overgrowth. *Thin Solid Films*, **2008**, 516, 2035-2040	2.0	12
123	Deep centers spectra and scanning electron microscope studies of p-GaN films prepared by metallorganic chemical vapor deposition on sapphire. *Solid-State Electronics*, **2001**, 45, 255-259	1.7	12
122	Electrical Properties of Bulk, Non-Polar, Semi-Insulating M-GaN Grown by the Ammonothermal Method. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P260-P265	2	11
121	Hydride vapor phase GaN films with reduced density of residual electrons and deep traps. *Journal of Applied Physics*, **2014**, 115, 183706	2.5	11
120	Neutron irradiation effects in undoped n-AlGaN. *Journal of Vacuum Science & Technology B*, **2006**, 24, 1094		11
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118	Properties and annealing stability of Fe doped semi-insulating GaN structures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2476-2479		11
117	Studies of deep centers in high-resistivity p-GaN films doped with Zn and grown on SiC by hydride vapor phase epitaxy. *Solid-State Electronics*, **2001**, 45, 249-253	1.7	11
116	Role of hole trapping by deep acceptors in electron-beam-induced current measurements in □Ga2O3 vertical rectifiers. *Journal Physics D: Applied Physics*, **2020**, 53, 495108	3	11
115	Gate-Lag in AlGaN/GaN High Electron Mobility Transistors: A Model of Charge Capture. *ECS Journal of Solid State Science and Technology*, **2017**, 6, S3034-S3039	2	10
114	Editors□Choice□Electrical Properties and Deep Traps in □Ga2O3:Sn Films Grown on Sapphire by Halide Vapor Phase Epitaxy. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 045003	2	10
113	Electrical, optical, and structural properties of GaN films prepared by hydride vapor phase epitaxy. *Journal of Alloys and Compounds*, **2014**, 617, 200-206	5.7	10
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111	Properties of undoped GaN/InGaN multi-quantum-wells and GaN/InGaN p-n junctions prepared by epitaxial lateral overgrowth. *Journal of Applied Physics*, **2009**, 105, 123708	2.5	10
110	Nonpolar GaN grown on Si by hydride vapor phase epitaxy using anodized Al nanomask. *Applied Physics Letters*, **2009**, 94, 022114	3.4	10
109	Electrical Properties of ZnO(P) and ZnMgO(P) Films Grown by Pulsed Laser Deposition. *Journal of the Electrochemical Society*, **2007**, 154, H825	3.9	10
108	Band line-up and mechanisms of current flow in n-GaN/p-SiC and n-AlGaN/p-SiC heterojunctions. *Applied Physics Letters*, **2002**, 80, 3352-3354	3.4	10
107	Deep levels studies of AlGaN/GaN superlattices. *Solid-State Electronics*, **2003**, 47, 671-676	1.7	10
106	Hydrogen and nitrogen plasma treatment effects on surface properties of GaSb and InGaAsSb. *Solid-State Electronics*, **1995**, 38, 1743-1745	1.7	10
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104	Deep Electron and Hole Traps in Electron-Irradiated Green GaN/InGaN Light Emitting Diodes. *ECS Journal of Solid State Science and Technology*, **2017**, 6, Q127-Q131	2	9
103	Assessing mobile ions contributions to admittance spectra and current-voltage characteristics of 3D and 2D/3D perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2020**, 215, 110670	6.4	9
102	Electric field dependence of major electron trap emission in bulk □Ga2O3: Poole□Frenkel effect versus phonon-assisted tunneling. *Journal Physics D: Applied Physics*, **2020**, 53, 304001	3	9
101	Trapping Phenomena in InAlN/GaN High Electron Mobility Transistors. *ECS Journal of Solid State Science and Technology*, **2018**, 7, Q1-Q7	2	9
100	Defect States Induced in GaN-Based Green Light Emitting Diodes by Electron Irradiation. *ECS Journal of Solid State Science and Technology*, **2018**, 7, P323-P328	2	9
99	Properties of nanopillar structures prepared by dry etching of undoped GaN grown by maskless epitaxial overgrowth. *Journal of Alloys and Compounds*, **2013**, 554, 258-263	5.7	9
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97	GaN as a detector of □particles and neutrons **2011**,		9
96	Electrical and luminescent properties and deep traps spectra of N-polar GaN films. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 166, 83-88	3.1	9
95	Changes in electrical and optical properties of p-AlGaN due to proton implantation. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 2291		9
94	Electrical and optical properties of GaCrN films grown by molecular beam epitaxy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2005**, 23, 1		9

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92	The properties of heavily compensated high resistivity GaSb crystals. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1994**, 22, 279-282	3.1	9
91	Mechanisms of Fermi level pinning in Schottky barriers on InGaAsSb and AlGaAsSb. *Solid-State Electronics*, **1993**, 36, 1371-1373	1.7	9
90	Characteristics of a-GaN films and a-AlGaN/GaN heterojunctions prepared on r-sapphire by two-stage growth process. *Journal of Applied Physics*, **2011**, 110, 093709	2.5	8
89	Deep centers in bulk AlN and their relation to low-angle dislocation boundaries. *Physica B: Condensed Matter*, **2009**, 404, 4939-4941	2.8	8
88	Neutron doping effects in epitaxially laterally overgrown n-GaN. *Applied Physics Letters*, **2011**, 98, 212107	3.4	8
87	Optical and electrical properties of AlCrN films grown by molecular beam epitaxy. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 2758		8
86	Comparison of the electrical and luminescent properties of p-layer-up and n-layer-up GaN/InGaN light emitting diodes and the effects of Mn doping of the upper n-layer. *Solid-State Electronics*, **2003**, 47, 981-987	1.7	8
85	Experimental estimation of electron□hole pair creation energy in □Ga2O3. *Applied Physics Letters*, **2021**, 118, 202106	3.4	8
84	Electrical, Luminescent and Structural Properties of Nanopillar GaN/InGaN Multi-Quantum-Well Structures Prepared by Dry Etching. *ECS Journal of Solid State Science and Technology*, **2016**, 5, Q165-Q170	2	8
83	Deep Traps in AlGaN/GaN High Electron Mobility Transistors on SiC. *ECS Journal of Solid State Science and Technology*, **2016**, 5, Q260-Q265	2	8
82	Current relaxation analysis in AlGaN/GaN high electron mobility transistors. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2017**, 35, 011207	1.3	7
81	Quantum Barrier Growth Temperature Affects Deep Traps Spectra of InGaN Blue Light Emitting Diodes. *ECS Journal of Solid State Science and Technology*, **2018**, 7, Q80-Q84	2	7
80	Electrical properties and deep traps spectra of N-polar and Ga-polar AlGaN films grown by molecular beam epitaxy in a wide composition range. *Journal of Applied Physics*, **2009**, 105, 113712	2.5	7
79	Electrical properties and deep traps in ZnO films grown by molecular beam epitaxy. *Journal of Vacuum Science & Technology B*, **2007**, 25, 1794		7
78	EBIC investigations of GaN layers prepared by epitaxial lateral overgrowth. *Journal of Surface Investigation*, **2008**, 2, 688-691	0.5	7
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74	Electronic properties and deep traps in electron-irradiated n-GaN. *Semiconductors*, **2012**, 46, 433-439	0.7	5
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