Alexander Y Polyakov

List of Publications by Year
in descending order

263	6,473	81900	110387
papers	citations	39 h-index	64 g-index

266	266	266	4030
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Betavoltaic cell based on Ni/Î²-Ga2O3 and 63Ni source. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	4
2	Communicationâ€"Electron-Beam Stimulated Release of Dislocations from Pinning Sites in GaN. ECS Journal of Solid State Science and Technology, 2022, 11, 015003.	1.8	2
3	Deep level defect states in Î²-, Î±-, and É›-Ga2O3 crystals and films: Impact on device performance. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	35
4	Structural and electrical properties of thick Î²-Ga2O3 grown on GaN/sapphire templates. APL Materials, 2022, 10, .	5.1	13
5	Point defect creation by proton and carbon irradiation of Î±-Ga2O3. Journal of Applied Physics, 2022, 132, .	2.5	11
6	Halide Vapor Phase Epitaxy of In₂O₃ and (In_{1â^'x}Ga_x)₂O₃ on Sapphire Substrates and GaN/Al₂O₃ Templates. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000442.	1.8	9
7	Estimations of Activation Energy for Dislocation Mobility in p-GaN. ECS Journal of Solid State Science and Technology, 2021, 10, 026004.	1.8	2
8	On the relation between mobile ion kinetics, device design, and doping in double-cation perovskite solar cells. Applied Physics Letters, 2021, 118, .	3.3	5
9	Parasitic pâ€"n junctions formed at V-pit defects in p-GaN. Journal of Applied Physics, 2021, 129, 155702.	2.5	2
10	Reviewâ€"Radiation Damage in Wide and Ultra-Wide Bandgap Semiconductors. ECS Journal of Solid State Science and Technology, 2021, 10, 055008.	1.8	56
11	Experimental estimation of electronâ€"hole pair creation energy in Î² -Ga2O3. Applied Physics Letters, 2021, 118, .	3.3	26
12	Electrical properties and deep trap spectra in Ga2O3 films grown by halide vapor phase epitaxy on p-type diamond substrates. Journal of Applied Physics, 2021, 129, .	2.5	14
13	Crystal orientation dependence of deep level spectra in proton irradiated bulk Î²-Ga2O3. Journal of Applied Physics, 2021, 130, .	2.5	12
14	Dislocations introduced in n-GaN at room temperature cause conductivity inversion. Journal of Alloys and Compounds, 2021, 877, 160281.	5.5	5
15	Diffusion of dopants and impurities in Î²-Ga2O3. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	26
16	1â€‰GeV proton damage in Î²-Ga2O3. Journal of Applied Physics, 2021, 130, .	2.5	7
17	Effects of 5 MeV electron irradiation on deep traps and electroluminescence from near-UV InGaN/GaN single quantum well light-emitting diodes with and without InAlN superlattice underlayer. Journal Physics D: Applied Physics, 2020, 53, 445111.	2.8	4
18	Photosensitivity of Ga2O3 Schottky diodes: Effects of deep acceptor traps present before and after neutron irradiation. APL Materials, 2020, 8, .	5.1	30

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19	Anisotropy of hydrogen plasma effects in bulk n-type Î²-Ga2O3. Journal of Applied Physics, 2020, 127, .	2.5	25
20	In Situ Transmission Electron Microscopy Observations of Forward Bias Degradation of Vertical Geometry Î²-Ga₂O₃ Rectifiers. ECS Journal of Solid State Science and Technology, 2020, 9, 055008.	1.8	6
21	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.	6.2	15
22	Pulsed fast reactor neutron irradiation effects in Si doped n-type Î²-Ga₂O₃. Journal Physics D: Applied Physics, 2020, 53, 274001.	2.8	22
23	Electric field dependence of major electron trap emission in bulk Î²-Ga₂O₃: Pooleâ€“Frenkel effect versus phonon-assisted tunneling. Journal Physics D: Applied Physics, 2020, 53, 304001.	2.8	18
24	Editorsâ€™ Choiceâ€”Electrical Properties and Deep Traps in Î±-Ga₂O₃:Sn Films Grown on Sapphire by Halide Vapor Phase Epitaxy. ECS Journal of Solid State Science and Technology, 2020, 9, 045003.	1.8	34
25	Ultrawide-Bandgap p-n Heterojunction of Diamond/Î²-Ga₂O₃ for a Solar-Blind Photodiode. ECS Journal of Solid State Science and Technology, 2020, 9, 045004.	1.8	31
26	Role of hole trapping by deep acceptors in electron-beam-induced current measurements in Î²-Ga₂O₃ vertical rectifiers. Journal Physics D: Applied Physics, 2020, 53, 495108.	2.8	16
27	Ion Dynamics in Single and Multi-Cation Perovskite. ECS Journal of Solid State Science and Technology, 2020, 9, 065015.	1.8	5
28	Prefaceâ€”JSS Focus Issue on Gallium Oxide Based Materials and Devices II. ECS Journal of Solid State Science and Technology, 2020, 9, 060001.	1.8	2
29	Hydrogen plasma treatment of Î² -Ga2O3: Changes in electrical properties and deep trap spectra. Applied Physics Letters, 2019, 115, .	3.3	39
30	Effects of Hydrogen Plasma Treatment Condition on Electrical Properties of Î²-Ga₂O₃. ECS Journal of Solid State Science and Technology, 2019, 8, P661-P666.	1.8	7
31	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, .	2.5	21
32	Radiation damage effects in Ga₂O₃ materials and devices. Journal of Materials Chemistry C, 2019, 7, 10-24.	5.5	154
33	Electrical Properties, Deep Trap and Luminescence Spectra in Semi-Insulating, Czochralski Î²-Ga₂O₃ (Mg). ECS Journal of Solid State Science and Technology, 2019, 8, Q3019-Q3023.	1.8	41
34	Defects at the surface of Î²-Ga2O3 produced by Ar plasma exposure. APL Materials, 2019, 7, .	5.1	36
35	Deep trap analysis in green light emitting diodes: Problems and solutions. Journal of Applied Physics, 2019, 125, .	2.5	10
36	Deep trap spectra of Sn-doped Î±-Ga2O3 grown by halide vapor phase epitaxy on sapphire. APL Materials, 2019, 7, .	5.1	35

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37	Electrical Properties, Deep Levels and Luminescence Related to Fe in Bulk Semi-Insulating Î²-Ga₂O₃ Doped with Fe. ECS Journal of Solid State Science and Technology, 2019, 8, Q3091-Q3096.	1.8	24
38	Deep traps and persistent photocapacitance in Î²-(Al0.14 Ga0.86)2O3/Ga2O3 heterojunctions. Journal of Applied Physics, 2019, 125, .	2.5	2
39	IIIâ€Nitride Nanowires as Building Blocks for Advanced Light Emitting Diodes. Physica Status Solidi (B): Basic Research, 2019, 256, 1800589.	1.5	7
40	Defect States Determining Dynamic Trapping-Detrapping in Î²-Ga₂O₃ Field-Effect Transistors. ECS Journal of Solid State Science and Technology, 2019, 8, Q3013-Q3018.	1.8	30
41	Betavoltaic battery performance: Comparison of modeling and experiment. Applied Radiation and Isotopes, 2018, 137, 184-189.	1.5	30
42	Trapping Phenomena in InAlN/GaN High Electron Mobility Transistors. ECS Journal of Solid State Science and Technology, 2018, 7, Q1-Q7.	1.8	11
43	Point defect induced degradation of electrical properties of Ga2O3 by 10â€‰MeV proton damage. Applied Physics Letters, 2018, 112, .	3.3	98
44	Temperature Dependence of Lowâ€Energy Electron Beam Irradiation Effect on Optical Properties of MQW InGaN/GaN Structures. Physica Status Solidi (B): Basic Research, 2018, 255, 1700646.	1.5	3
45	Compensation and persistent photocapacitance in homoepitaxial Sn-doped Î²-Ga2O3. Journal of Applied Physics, 2018, 123, .	2.5	73
46	Recombination properties of dislocations in GaN. Journal of Applied Physics, 2018, 123, 161543.	2.5	26
47	Large Area Polymer Composite Films Embedded with Colloidal Quantum Dots for Efficient White Light Generation. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700644.	1.8	8
48	Trap states in multication mesoscopic perovskite solar cells: A deep levels transient spectroscopy investigation. Applied Physics Letters, 2018, 113, .	3.3	33
49	Electrical properties, structural properties, and deep trap spectra of thin Î±-Ga2O3 films grown by halide vapor phase epitaxy on basal plane sapphire substrates. APL Materials, 2018, 6, .	5.1	33
50	Enhanced Luminescence of InGaN Quantum Well Structures with Localized Surface Plasmon by Using Sputterâ€Fabricated Ag Nanoparticles in an Ionic Liquid. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800516.	1.8	2
51	Electrical properties of bulk semi-insulating Î²-Ga2O3 (Fe). Applied Physics Letters, 2018, 113, .	3.3	77
52	Hole traps and persistent photocapacitance in proton irradiated Î²-Ga2O3 films doped with Si. APL Materials, 2018, 6, .	5.1	73
53	Performance of InGaN/GaN Light Emitting Diodes with n-GaN Layer Embedded with SiO2 Nano-Particles. Applied Sciences (Switzerland), 2018, 8, 1574.	2.5	3
54	Defects responsible for charge carrier removal and correlation with deep level introduction in irradiated Î²-Ga2O3. Applied Physics Letters, 2018, 113, .	3.3	62

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55	Enhanced luminescence of CsPbBr₃ perovskite nanocrystals on stretchable templates with Au/SiO₂ plasmonic nanoparticles. Optics Letters, 2018, 43, 2352.	3.3	7
56	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.	1.8	13
57	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.	1.8	11
58	Diffusion length of non-equilibrium minority charge carriers in Î²-Ga2O3 measured by electron beam induced current. Journal of Applied Physics, 2018, 123, .	2.5	50
59	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.	1.8	13
60	Current relaxation analysis in AlGaN/GaN high electron mobility transistors. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	12
61	Effect of nanopillar sublayer embedded with SiO2 on deep traps in green GaN/InGaN light emitting diodes. Journal of Applied Physics, 2017, 121, .	2.5	10
62	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.	3.3	21
63	Defects responsible for lifetime degradation in electron irradiated n-GaN grown by hydride vapor phase epitaxy. Applied Physics Letters, 2017, 110, .	3.3	26
64	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.	1.8	13
65	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.	1.8	10
66	Degradation-induced low frequency noise and deep traps in GaN/InGaN near-UV LEDs. Applied Physics Letters, 2017, 111, .	3.3	21
67	Point defects controlling non-radiative recombination in GaN blue light emitting diodes: Insights from radiation damage experiments. Journal of Applied Physics, 2017, 122, .	2.5	24
68	Ag/SiO₂ nanoparticle-based plasmonic enhancement of light output in nanohole-patterned InGaN/GaN blue light-emitting diodes. Japanese Journal of Applied Physics, 2017, 56, 100305.	1.5	1
69	Electron irradiation of nearâ€UV GaN/InGaN light emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700372.	1.8	11
70	Radiation enhanced basal plane dislocation glide in GaN. Japanese Journal of Applied Physics, 2016, 55, 05FM03.	1.5	11
71	Electrical, luminescent, and deep trap properties of Si doped n-GaN grown by pendeo epitaxy. Journal of Applied Physics, 2016, 119, .	2.5	27
72	Studies of deep level centers determining the diffusion length in epitaxial layers and crystals of undoped n-GaN. Journal of Applied Physics, 2016, 119, .	2.5	25

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73	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, .	1.2	15
74	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.	1.8	12
75	Deep Traps in AlGaN/GaN High Electron Mobility Transistors on SiC. ECS Journal of Solid State Science and Technology, 2016, 5, Q260-Q265.	1.8	13
76	Electron traps as major recombination centers in n-GaN films grown by metalorganic chemical vapor deposition. Applied Physics Express, 2016, 9, 061002.	2.4	14
77	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.	1.8	15
78	Reviewâ€"Ionizing Radiation Damage Effects on GaN Devices. ECS Journal of Solid State Science and Technology, 2016, 5, Q35-Q60.	1.8	243
79	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, .	1.2	48
80	Photoluminescence enhancement by localized surface plasmons in AlGaN/GaN/AlGaN double heterostructures. Physica Status Solidi - Rapid Research Letters, 2015, 9, 575-579.	2.4	7
81	EBIC investigations of dislocations in ELOG GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1132-1135.	0.8	6
82	Deep traps in GaN-based structures as affecting the performance of GaN devices. Materials Science and Engineering Reports, 2015, 94, 1-56.	31.8	191
83	Enhanced optical properties of nanopillar light-emitting diodes by coupling localized surface plasmon of Ag/SiO₂nanoparticles. Applied Physics Express, 2015, 8, 092002.	2.4	11
84	Performance enhancement of GaN-based light emitting diodes by the interaction with localized surface plasmons. Nano Energy, 2015, 13, 140-173.	16.0	48
85	Improved GaN films with low background doping and low deep trap density grown by hydride vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 341-344.	0.8	0
86	Device performance of inverted polymer solar cells with AgSiO_2 nanoparticles in active layer. Optics Express, 2015, 23, A211.	3.4	13
87	Movement of basal plane dislocations in GaN during electron beam irradiation. Applied Physics Letters, 2015, 106, .	3.3	24
88	Low energy electron beam irradiation effect on optical properties of nanopillar MQW InGaN/GaN structures. , 2014, , .		2
89	Enhanced optical output performance in InGaN/GaN light-emitting diode embedded with SiO_2 nanoparticles. Optics Express, 2014, 22, 21454.	3.4	10
90	Deep hole traps in undoped n-GaN films grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2014, 115, .	2.5	39

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91	Structural defects responsible for excessive leakage current in Schottky diodes prepared on undoped n-GaN films grown by hydride vapor phase epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 051212.	1.2	6
92	Microcathodoluminescence spectra evolution for planar and nanopillar multiquantum-well GaN-based structures as a function of electron irradiation dose. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 011207.	1.2	8
93	Facile Fabrication of Free-Standing Light Emitting Diode by Combination of Wet Chemical Etchings. ACS Applied Materials & Interfaces, 2014, 6, 985-989.	8.0	23
94	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, .	1.2	19
95	Hydride vapor phase GaN films with reduced density of residual electrons and deep traps. Journal of Applied Physics, 2014, 115, .	2.5	12
96	Electrical Characteristics and Deep Traps Spectra of Undoped GaN Films Grown on Si Using Different Strain-Relieving Buffer Types. IEEE Nanotechnology Magazine, 2014, 13, 151-159.	2.0	3
97	Facile low-temperature synthesis of ZnO nanopyramid and its application to photocatalytic degradation of methyl orange dye under UV irradiation. Materials Letters, 2014, 133, 224-227.	2.6	28
98	Review of radiation damage in GaN-based materials and devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	2.1	170
99	Radiation effects in GaN materials and devices. Journal of Materials Chemistry C, 2013, 1, 877-887.	5.5	171
100	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, .	1.2	15
101	Electrical properties of undoped GaN films grown by maskless epitaxial lateral overgrowth. Journal of Applied Physics, 2013, 113, .	2.5	13
102	Effect of electron irradiation on AlGaN/GaN and InAlN/GaN heterojunctions. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 022206.	1.2	23
103	Free-Standing GaN Layer by Combination of Electrochemical and Photo-Electrochemical Etching. Applied Physics Express, 2013, 6, 061001.	2.4	13
104	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.	1.2	18
105	Radiation Damage in GaN-Based Materials and Devices. , 2013, , 1753-1764.		2
106	Electrical properties and radiation detector performance of free-standing bulk n-GaN. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	31
107	Radiation Effects in GaN. Springer Series in Materials Science, 2012, , 251-294.	0.6	6
108	Admittance Spectra Studies of Quantum Well States in AlGaN/AlN/GaN Heterojunctions. ECS Journal of Solid State Science and Technology, 2012, 1, P152-P156.	1.8	5

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109	Metastable centers in AlGaN/AlN/GaN heterostructures. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	14
110	Enhanced light output of InGaN/GaN blue light emitting diodes with Ag nano-particles embedded in nano-needle layer. Optics Express, 2012, 20, 6036.	3.4	19
111	Localized surface plasmon enhanced quantum efficiency of InGaN/GaN quantum wells by Ag/SiO_2 nanoparticles. Optics Express, 2012, 20, 2116.	3.4	36
112	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	15
113	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.	1.2	13
114	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, .	1.2	29
115	Deep traps and enhanced photoluminescence efficiency in nonpolar a-GaN/InGaN quantum well structures. Journal of Applied Physics, 2012, 111, 033103.	2.5	4
116	Energy coupling processes in InGaN/GaN nanopillar light emitting diodes embedded with Ag and Ag/SiO2 nanoparticles. Journal of Materials Chemistry, 2012, 22, 21749.	6.7	24
117	Investigation of Optical and Structural Stability of Localized Surface Plasmon Mediated Lightâ€Emitting Diodes by Ag and Ag/SiO‹sub›2‹/sub› Nanoparticles. Advanced Functional Materials, 2012, 22, 2728-2734.	14.9	58
118	Quantum efficiency control of InGaN/GaN multi-quantum-well structures using Ag/SiO2 core-shell nanoparticles. Applied Physics Letters, 2011, 99, 251114.	3.3	17
119	Deep traps and thermal measurements on AlGaN/GaN on Si transistors. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 042201.	1.2	5
120	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
121	The effect of neutron irradiation and annealing temperature on the electrical properties and lattice constant of epitaxial gallium nitride layers. Semiconductors, 2011, 45, 134-140.	0.5	5
122	Deep electron and hole traps in neutron transmutation doped n-GaN. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	1.2	20
123	Role of nonradiative recombination centers and extended defects in nonpolar GaN on light emission efficiency. Applied Physics Letters, 2011, 98, .	3.3	32
124	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	49
125	10 MeV electrons irradiation effects in variously doped n-GaN. Journal of Applied Physics, 2011, 109, .	2.5	26
126	Neutron doping effects in epitaxially laterally overgrown n-GaN. Applied Physics Letters, 2011, 98, .	3.3	8

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127	Carrier Removal Rates and Deep Traps in Neutron Irradiated n-GaN Films. Journal of the Electrochemical Society, 2011, 158, H866.	2.9	17
128	GaN as a detector of Î±-particles and neutrons. Proceedings of SPIE, 2011, , .	0.8	10
129	Shallow and Deep Centers in As-Grown and Annealed MgZnO/ZnO Structures with Quantum Wells. Journal of Electronic Materials, 2010, 39, 601-607.	2.2	7
130	Role of Hydrogen in the CVD of Wide Bandgap Nitride Semiconductors. Chemical Vapor Deposition, 2010, 16, 266-274.	1.3	9
131	Electrical and optical properties of Fe doped AlGaN grown by molecular beam epitaxy. Journal of Applied Physics, 2010, 107, 023708.	2.5	4
132	a-plane GaN hydride vapor phase epitaxy on a-plane GaN templates with and without use of TiN intermediate layers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 1039-1043.	1.2	1
133	GaN epitaxial films grown by hydride vapor phase epitaxy on polycrystalline chemical vapor deposition diamond substrates using surface nanostructuring with TiN or anodic Al oxide. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 1011-1015.	1.2	5
134	Neutron transmutation doping effects in GaN. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 608-612.	1.2	28
135	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
136	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
137	Comparison of electrical properties and deep traps in p-AlxGa1â^'xN grown by molecular beam epitaxy and metal organic chemical vapor deposition. Journal of Applied Physics, 2009, 106, 073706.	2.5	15
138	Anisotropy of In incorporation in GaN/InGaN multiquantum wells prepared by epitaxial lateral overgrowth. Applied Physics Letters, 2009, 94, 142103.	3.3	16
139	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, .	2.5	12
140	Alpha particle detection with GaN Schottky diodes. Journal of Applied Physics, 2009, 106, .	2.5	37
141	Persistent photoconductivity in MgZnO alloys. Semiconductors, 2009, 43, 577-580.	0.5	2
142	Nonpolar GaN grown on Si by hydride vapor phase epitaxy using anodized Al nanomask. Applied Physics Letters, 2009, 94, 022114.	3.3	12
143	A study of vacancies and vacancy pair defects in 4H SiC grown by halide chemical vapor deposition. Journal of Materials Science: Materials in Electronics, 2008, 19, 678-681.	2.2	0
144	Annealing effects on electrical properties of MgZnO films grown by pulsed laser deposition. Journal of Applied Physics, 2008, 103, 083704.	2.5	15

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145	Electron irradiation of AlGaNâˆ•GaN and AlNâˆ•GaN heterojunctions. Applied Physics Letters, 2008, 93, 152101.	3.3	18
146	Electrical and structural properties of AlN/GaN and AlGaN/GaN heterojunctions. Journal of Applied Physics, 2008, 104, 053702.	2.5	31
147	Improved crystalline quality nonpolar a-GaN films grown by hydride vapor phase epitaxy. Journal of Vacuum Science & Technology B, 2008, 26, 1937-1941.	1.3	6
148	Effects of laterally overgrown n-GaN thickness on defect and deep level concentrations. Journal of Vacuum Science & Technology B, 2008, 26, 990.	1.3	39
149	Electron Irradiation Effects in GaNâˆ•InGaN Multiple Quantum Well Structures. Journal of the Electrochemical Society, 2008, 155, H31.	2.9	14
150	Electrical properties of GaN (Fe) buffers for AlGaNâˆ•GaN high electron mobility transistor structures. Applied Physics Letters, 2008, 92, .	3.3	17
151	Donor nonuniformity in undoped and Si doped n-GaN prepared by epitaxial lateral overgrowth. Applied Physics Letters, 2008, 92, 042118.	3.3	38
152	Properties of Fe-doped, thick, freestanding GaN crystals grown by hydride vapor phase epitaxy. Journal of Vacuum Science & Technology B, 2007, 25, 686.	1.3	24
153	Electrical, photoelectrical, and luminescent properties of doped p-type GaN superlattices. Journal of Vacuum Science & Technology B, 2007, 25, 69.	1.3	1
154	Fast neutron irradiation effects in n-GaN. Journal of Vacuum Science & Technology B, 2007, 25, 436.	1.3	54
155	Persistent photoconductivity in p-type ZnO(N) grown by molecular beam epitaxy. Applied Physics Letters, 2007, 90, 132103.	3.3	23
156	Semi-Insulating, Fe-Doped Buffer Layers Grown by Molecular Beam Epitaxy. Journal of the Electrochemical Society, 2007, 154, H749.	2.9	17
157	Studies of Interface States in Sc[sub 2]O[sub 3]âˆ•GaN, MgOâˆ•GaN, and MgScOâˆ•GaN structures. Journal of the Electrochemical Society, 2007, 154, H115.	2.9	19
158	Electrical Properties of ZnO(P) and ZnMgO(P) Films Grown by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2007, 154, H825.	2.9	10
159	Deep traps responsible for hysteresis in capacitance-voltage characteristics of AlGaNâˆ•GaN heterostructure transistors. Applied Physics Letters, 2007, 91, .	3.3	51
160	Spatial variations of doping and lifetime in epitaxial laterally overgrown GaN. Applied Physics Letters, 2007, 90, 152114.	3.3	43
161	Electrical properties and deep traps in ZnO films grown by molecular beam epitaxy. Journal of Vacuum Science & Technology B, 2007, 25, 1794.	1.3	7
162	Lattice vibrational properties of ZnMgO grown by pulsed laser deposition. Applied Physics Letters, 2007, 90, 192110.	3.3	20

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163	Neutron Radiation Effects in Epitaxially Laterally Overgrown GaN Films. Journal of Electronic Materials, 2007, 36, 1320-1325.	2.2	30
164	Electrical and optical properties of doped p-type GaN superlattices. Applied Physics Letters, 2006, 89, 112127.	3.3	3
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