Hongxing Jiang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2343010/publications.pdf

Version: 2024-02-01

418 papers	17,995 citations	12330 69 h-index	19749 117 g-index
426 all docs	426 docs citations	426 times ranked	12462 citing authors

#	Article	IF	Citations
1	Deep Ultraviolet Photoluminescence of Water-Soluble Self-Passivated Graphene Quantum Dots. ACS Nano, 2012, 6, 5102-5110.	14.6	1,526
2	Deep Ultraviolet to Near-Infrared Emission and Photoresponse in Layered N-Doped Graphene Quantum Dots. ACS Nano, 2014, 8, 6312-6320.	14.6	455
3	InGaN/GaN multiple quantum well solar cells with long operating wavelengths. Applied Physics Letters, 2009, 94, .	3.3	321
4	III-nitride blue and ultraviolet photonic crystal light emitting diodes. Applied Physics Letters, 2004, 84, 466-468.	3.3	318
5	Band structure and fundamental optical transitions in wurtzite AlN. Applied Physics Letters, 2003, 83, 5163-5165.	3.3	310
6	Unique optical properties of AlGaN alloys and related ultraviolet emitters. Applied Physics Letters, 2004, 84, 5264-5266.	3.3	303
7	III-Nitride full-scale high-resolution microdisplays. Applied Physics Letters, 2011, 99, .	3.3	270
8	III-nitride blue microdisplays. Applied Physics Letters, 2001, 78, 1303-1305.	3.3	264
9	Mg acceptor level in AlN probed by deep ultraviolet photoluminescence. Applied Physics Letters, 2003, 83, 878-880.	3.3	249
10	Structural phase behavior in IIâ€“VI semiconductor nanoparticles. Applied Physics Letters, 1995, 67, 831-833.	3.3	231
11	Fundamental optical transitions in GaN. Applied Physics Letters, 1996, 68, 2784-2786.	3.3	185
12	GaN microdisk light emitting diodes. Applied Physics Letters, 2000, 76, 631-633.	3.3	185
13	InGaN/GaN multiple quantum well concentrator solar cells. Applied Physics Letters, 2010, 97, .	3.3	179
14	Epitaxially grown semiconducting hexagonal boron nitride as a deep ultraviolet photonic material. Applied Physics Letters, 2011, 98, .	3.3	178
15	Nitride micro-LEDs and beyond - a decade progress review. Optics Express, 2013, 21, A475.	3.4	173
16	200nm deep ultraviolet photodetectors based on AlN. Applied Physics Letters, 2006, 89, 213510.	3.3	170
17	Time-resolved photoluminescence studies of InxGa1â^'xAs1â^'yNy. Applied Physics Letters, 2000, 76, 188-190.	3.3	162
18	Nitride deep-ultraviolet light-emitting diodes with microlens array. Applied Physics Letters, 2005, 86, 173504.	3.3	162

#	Article	IF	Citations
19	Deep impurity transitions involving cation vacancies and complexes in AlGaN alloys. Applied Physics Letters, 2005, 86, 222108.	3.3	160
20	Metastability and persistent photoconductivity in Mgâ€doped pâ€type GaN. Applied Physics Letters, 1996, 68, 1808-1810.	3.3	154
21	Development of microLED. Applied Physics Letters, 2020, 116, .	3.3	152
22	Photoluminescence studies of impurity transitions in Mg-doped AlGaN alloys. Applied Physics Letters, 2009, 94, .	3.3	150
23	Optical and electrical properties of Mg-doped p-type AlxGa1â^'xN. Applied Physics Letters, 2002, 80, 1210-1212.	3.3	149
24	Temperature and compositional dependence of the energy band gap of AlGaN alloys. Applied Physics Letters, 2005, 87, 242104.	3.3	147
25	Nature of Mg impurities in GaN. Applied Physics Letters, 1996, 69, 1474-1476.	3.3	145
26	Dependence of Ni/AlGaN Schottky barrier height on Al mole fraction. Journal of Applied Physics, 2000, 87, 801-804.	2.5	140
27	Structure and Photoluminescence Study of TiO₂ Nanoneedle Texture along Vertically Aligned Carbon Nanofiber Arrays. Journal of Physical Chemistry C, 2008, 112, 17127-17132.	3.1	135
28	Enhanced light extraction in III-nitride ultraviolet photonic crystal light-emitting diodes. Applied Physics Letters, 2004, 85, 142-144.	3.3	134
29	III-nitride photonic crystals. Applied Physics Letters, 2003, 83, 1231-1233.	3.3	131
30	Mechanisms of bandâ€edge emission in Mgâ€doped pâ€type GaN. Applied Physics Letters, 1996, 68, 1883-1885.	3.3	130
31	InGaN/GaN quantum well interconnected microdisk light emitting diodes. Applied Physics Letters, 2000, 77, 3236-3238.	3.3	123
32	Correlation between optoelectronic and structural properties and epilayer thickness of AlN. Applied Physics Letters, 2007, 90, 241101.	3.3	123
33	Hydrogen generation by solar water splitting using p-InGaN photoelectrochemical cells. Applied Physics Letters, 2010, 96, .	3.3	123
34	Time-resolved photoluminescence studies of AlxGa1â^'xN alloys. Applied Physics Letters, 2000, 76, 1252-1254.	3.3	121
35	Hexagonal boron nitride for deep ultraviolet photonic devices. Semiconductor Science and Technology, 2014, 29, 084003.	2.0	121
36	Photoluminescence studies of impurity transitions in AlGaN alloys. Applied Physics Letters, 2006, 89, 092107.	3.3	119

#	Article	IF	Citations
37	Dielectric strength, optical absorption, and deep ultraviolet detectors of hexagonal boron nitride epilayers. Applied Physics Letters, 2012, 101, .	3.3	118
38	Electrical and optical properties of Mg-doped Al0.7Ga0.3N alloys. Applied Physics Letters, 2005, 86, 092108.	3.3	117
39	Enhanced p-type conduction in GaN and AlGaN by Mg-Î´-doping. Applied Physics Letters, 2003, 82, 3041-3043.	3.3	116
40	Transport properties of highly conductive n-type Al-rich AlxGa1â^'xN(xâ©¾0.7). Applied Physics Letters, 2004, 85, 3769-3771.	3.3	116
41	Correlation between optical and electrical properties of Mg-doped AlN epilayers. Applied Physics Letters, 2006, 89, 152120.	3.3	113
42	Quantum-confined Stark effects in semiconductor quantum dots. Physical Review B, 1995, 52, 5913-5922.	3.2	107
43	III-nitride micro-emitter arrays: development and applications. Journal Physics D: Applied Physics, 2008, 41, 094001.	2.8	107
44	Persistent photoconductivity in a two-dimensional electron gas system formed by an AlGaN/GaN heterostructure. Journal of Applied Physics, 1997, 82, 1227-1230.	2.5	105
45	Thermoelectric properties of InxGa1â^'xN alloys. Applied Physics Letters, 2008, 92, .	3.3	105
46	Hexagonal boron nitride epitaxial layers as neutron detector materials. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 654, 417-420.	1.6	105
47	Timeâ€resolved photoluminescence studies of InGaN epilayers. Applied Physics Letters, 1996, 69, 2837-2839.	3.3	101
48	Piezoelectric effects on the optical properties of GaN/AlxGa1â^'xN multiple quantum wells. Applied Physics Letters, 1998, 73, 3426-3428.	3.3	101
49	Polarization of III-nitride blue and ultraviolet light-emitting diodes. Applied Physics Letters, 2005, 86, 091107.	3.3	99
50	Optical and electrical properties of Al-rich AlGaN alloys. Applied Physics Letters, 2001, 79, 3245-3247.	3.3	94
51	Nature of deep center emissions in GaN. Applied Physics Letters, 2010, 96, .	3.3	94
52	Effects of tensile and compressive strain on the luminescence properties of AlInGaN/InGaN quantum well structures. Applied Physics Letters, 2000, 77, 821-823.	3.3	93
53	Epitaxial growth and demonstration of hexagonal BN/AlGaN p-n junctions for deep ultraviolet photonics. Applied Physics Letters, 2012, 100, .	3.3	93
54	Band-edge photoluminescence of AlN epilayers. Applied Physics Letters, 2002, 81, 3365-3367.	3.3	91

#	Article	IF	Citations
55	Deep ultraviolet picosecond time-resolved photoluminescence studies of AlN epilayers. Applied Physics Letters, 2003, 82, 1694-1696.	3.3	90
56	Relaxation of persistent photoconductivity inAl0.3Ga0.7As. Physical Review B, 1990, 42, 5855-5858.	3.2	88
57	Percolation transition of persistent photoconductivity in II-VI mixed crystals. Physical Review Letters, 1990, 64, 2547-2550.	7.8	86
58	Quantum shift of band-edge stimulated emission in InGaNâ€“GaN multiple quantum well light-emitting diodes. Applied Physics Letters, 1997, 70, 2978-2980.	3.3	85
59	Direct hydrogen gas generation by using InGaN epilayers as working electrodes. Applied Physics Letters, 2008, 93, .	3.3	85
60	AlGaN-based ultraviolet light-emitting diodes grown on AlN epilayers. Applied Physics Letters, 2004, 85, 4777-4779.	3.3	83
61	A study of the Au/Ni ohmic contact on p-GaN. Journal of Applied Physics, 2000, 88, 4196.	2.5	82
62	Excitonic recombination in GaN grown by molecular beam epitaxy. Applied Physics Letters, 1995, 67, 3387-3389.	3.3	76
63	AlxGa1â^'xN/GaN band offsets determined by deep-level emission. Journal of Applied Physics, 2001, 90, 1887-1890.	2.5	76
64	The origin of deep-level impurity transitions in hexagonal boron nitride. Applied Physics Letters, 2015, 106, .	3.3	76
65	Realization of highly efficient hexagonal boron nitride neutron detectors. Applied Physics Letters, 2016, 109, .	3.3	75
66	Achieving highly conductive AlGaN alloys with high Al contents. Applied Physics Letters, 2002, 81, 1038-1040.	3.3	74
67	Growth and optical properties of InxAlyGa1â^'xâ^'yN quaternary alloys. Applied Physics Letters, 2001, 78, 61-63.	3.3	72
68	Growth of III-nitride photonic structures on large area silicon substrates. Applied Physics Letters, 2006, 88, 171909.	3.3	72
69	Two-dimensional excitons in three-dimensional hexagonal boron nitride. Applied Physics Letters, 2013, 103, .	3.3	72
70	Band-edge exciton states in AlN single crystals and epitaxial layers. Applied Physics Letters, 2004, 85, 4334.	3.3	70
71	Electroluminescent properties of erbium-doped IIIâ€“N light-emitting diodes. Applied Physics Letters, 2004, 84, 1061-1063.	3.3	69
72	Electrical and optical properties of p-type InGaN. Applied Physics Letters, 2009, 95, .	3.3	66

#	ARTICLE	IF	CITATIONS
73	Optical transitions in GaN/AlxGa1â^'xN multiple quantum wells grown by molecular beam epitaxy. Applied Physics Letters, 1996, 69, 2453-2455.	3.3	65
74	Optical modes within III-nitride multiple quantum well microdisk cavities. Applied Physics Letters, 1998, 72, 1530-1532.	3.3	65
75	GaN-based waveguide devices for long-wavelength optical communications. Applied Physics Letters, 2003, 82, 1326-1328.	3.3	64
76	Reviewâ€"Hexagonal Boron Nitride Epilayers: Growth, Optical Properties and Device Applications. ECS Journal of Solid State Science and Technology, 2017, 6, Q3012-Q3021.	1.8	64
77	Neutralâ€donorâ€bound exciton recombination dynamics in GaN grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 67, 1653-1655.	3.3	62
78	Fabrication of n-type nickel doped B5C1+Î´ homojunction and heterojunction diodes. Applied Physics Letters, 1997, 70, 1028-1030.	3.3	62
79	Optical properties of AlN and GaN in elevated temperatures. Applied Physics Letters, 2004, 85, 3489-3491.	3.3	62
80	Effects of well thickness and Si doping on the optical properties of GaN/AlGaN multiple quantum wells. Applied Physics Letters, 1997, 71, 1368-1370.	3.3	61
81	Exciton-phonon interaction in InGaN/GaN and GaN/AlGaN multiple quantum wells. Applied Physics Letters, 1997, 70, 2882-2884.	3.3	61
82	III-nitride ultraviolet light-emitting diodes with delta doping. Applied Physics Letters, 2003, 83, 566-568.	3.3	60
83	Exciton localization in AlGaN alloys. Applied Physics Letters, 2006, 88, 062103.	3.3	60
84	Optical resonance modes in GaN pyramid microcavities. Applied Physics Letters, 1999, 75, 763-765.	3.3	59
85	Persistent photoconductivity in Ga1â^'xInxNyAs1â^'y. Applied Physics Letters, 1999, 75, 1899-1901.	3.3	58
86	Properties of Co-, Cr-, or Mn-implanted AlN. Journal of Applied Physics, 2003, 94, 1592-1596.	2.5	58
87	Room temperature intrinsic optical transition in GaN epilayers: The band-to-band versus excitonic transitions. Applied Physics Letters, 1997, 71, 635-637.	3.3	57
88	Erbium-doped GaN epilayers synthesized by metal-organic chemical vapor deposition. Applied Physics Letters, 2006, 89, 151903.	3.3	57
89	Photoluminescence studies of bandâ€edge transitions in GaN epitaxial layers grown by plasmaâ€assisted molecular beam epitaxy. Journal of Applied Physics, 1996, 79, 2675-2683.	2.5	56
90	Comparison of optical transitions in InGaN quantum well structures and microdisks. Journal of Applied Physics, 2001, 89, 4951-4954.	2.5	56

#	Article	IF	Citations
91	Single phase InxGa1â^'xNâ€^(0.25â‰¤xâ‰¤0.63) alloys synthesized by metal organic chemical vapor deposition. Applied Physics Letters, 2008, 93, .	3.3	56
92	Mechanism of enhanced luminescence in InxAlyGa1â^'xâ^'yN quaternary alloys. Applied Physics Letters, 2002, 80, 1397-1399.	3.3	55
93	Persistent photoconductivity and related critical phenomena inZn0.3Cd0.7Se. Physical Review B, 1989, 40, 10025-10028.	3.2	53
94	Kinetics of persistent photoconductivity inAl0.3Ga0.7As andZn0.3Cd0.7Se semiconductor alloys. Physical Review B, 1992, 45, 13996-14004.	3.2	53
95	Characterization of AlN metal-semiconductor-metal diodes in the spectral range of 44â€“360nm: Photoemission assessments. Applied Physics Letters, 2008, 92, .	3.3	53
96	Suppression of thermal conductivity in InxGa1â^'xN alloys by nanometer-scale disorder. Applied Physics Letters, 2013, 102, 121906.	3.3	53
97	Band structure of superlattice with graded interfaces. Journal of Applied Physics, 1987, 61, 624-628.	2.5	51
98	The origin of 2.78 eV emission and yellow coloration in bulk AlN substrates. Applied Physics Letters, 2009, 95, .	3.3	51
99	Fabrication and characterization of solid-state thermal neutron detectors based on hexagonal boron nitride epilayers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 748, 84-90.	1.6	51
100	Optical and electrical properties of Mg-doped AlN nanowires grown by molecular beam epitaxy. Applied Physics Letters, 2015, 106, .	3.3	50
101	Optical resonance modes in InGaN/GaN multiple-quantum-well microring cavities. Applied Physics Letters, 1999, 75, 2563-2565.	3.3	49
102	Linewidths of excitonic luminescence transitions in AlGaN alloys. Applied Physics Letters, 2001, 78, 1829-1831.	3.3	49
103	Origin of the significantly enhanced optical transitions in layered boron nitride. Physical Review B, 2012, 86, .	3.2	49
104	Hexagonal boron nitride thin film thermal neutron detectors with high energy resolution of the reaction products. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 783, 121-127.	1.6	49
105	Large-Scale Growth of High-Quality Hexagonal Boron Nitride Crystals at Atmospheric Pressure from an Feâ€“Cr Flux. Crystal Growth and Design, 2017, 17, 4932-4935.	3.0	49
106	Optical properties of GaN pyramids. Applied Physics Letters, 1999, 74, 1227-1229.	3.3	48
107	Silicon doping dependence of highly conductive n-type Al0.7Ga0.3N. Applied Physics Letters, 2004, 85, 4669-4671.	3.3	48
108	Annealing of dry etch damage in metallized and bare (-201) Ga2O3. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	48

#	ARTICLE	IF	CITATIONS
109	Free excitonic transitions in GaN, grown by metalâ€organic chemicalâ€vapor deposition. Journal of Applied Physics, 1996, 79, 7001-7004.	2.5	47
110	Size dependence of III-nitride microdisk light-emitting diode characteristics. Applied Physics Letters, 2001, 78, 3532-3534.	3.3	47
111	The origins of leaky characteristics of schottky diodes on p-GaN. IEEE Transactions on Electron Devices, 2003, 50, 292-296.	3.0	47
112	Effects of plasma treatment on the Ohmic characteristics of Tiâ•Alâ•Tiâ•Au contacts to n-AlGaN. Applied Physics Letters, 2006, 89, 082109.	3.3	46
113	Nature of optical transitions involving cation vacancies and complexes in AlN and AlGaN. Applied Physics Letters, 2012, 100, .	3.3	46
114	Band-edge transitions in hexagonal boron nitride epilayers. Applied Physics Letters, 2012, 101, 051110.	3.3	46
115	The origins of near band-edge transitions in hexagonal boron nitride epilayers. Applied Physics Letters, 2016, 108, .	3.3	46
116	Ultraviolet photoluminescence from Gd-implanted AlN epilayers. Applied Physics Letters, 2006, 89, 152107.	3.3	45
117	Hybrid AlNâ€“SiC deep ultraviolet Schottky barrier photodetectors. Applied Physics Letters, 2007, 90, 263505.	3.3	45
118	Erbium-doped GaN optical amplifiers operating at 1.54â€Î¼m. Applied Physics Letters, 2009, 95, 111109.	3.3	45
119	Dynamics of a bandâ€edge transition in GaN grown by molecular beam epitaxy. Applied Physics Letters, 1995, 66, 3474-3476.	3.3	44
120	Nitride microlens arrays for blue and ultraviolet wavelength applications. Applied Physics Letters, 2003, 82, 3692-3694.	3.3	44
121	AlN avalanche photodetectors. Applied Physics Letters, 2007, 91, .	3.3	44
122	High quality AlN for deep UV photodetectors. Applied Physics Letters, 2009, 95, .	3.3	44
123	Optical polarization in c-plane Al-rich AlN/Al_xGa_{1-x}N single quantum wells. Applied Physics Letters, 2012, 101, 042103.	3.3	44
124	Optical properties of strain-free AlN nanowires grown by molecular beam epitaxy on Si substrates. Applied Physics Letters, 2014, 104, .	3.3	44
125	1.54 â€, Î¼ m emitters based on erbium doped InGaN p-i-n junctions. Applied Physics Letters, 2010, 97, .	3.3	43
126	Hexagonal boron nitride and 6H-SiC heterostructures. Applied Physics Letters, 2013, 102, .	3.3	43

#	Article	IF	Citations
127	Bandgap and exciton binding energies of hexagonal boron nitride probed by photocurrent excitation spectroscopy. Applied Physics Letters, 2016, 109, .	3.3	43
128	Charge storage and persistent photoconductivity in aCdS0.5Se0.5semiconductor alloy. Physical Review B, 1991, 44, 13343-13348.	3.2	42
129	The incorporation of Nickel and Phosphorus dopants into Boron-Carbon alloy thin films. Applied Physics A: Materials Science and Processing, 1998, 67, 335-342.	2.3	42
130	Photoluminescence studies of Si-doped AlN epilayers. Applied Physics Letters, 2003, 83, 2787-2789.	3.3	42
131	Mechanism of enhanced luminescence in InxAlyGa1â^'xâ^'yN quaternary epilayers. Applied Physics Letters, 2004, 84, 1480-1482.	3.3	42
132	Well-width dependence of the quantum efficiencies of GaN/AlxGa1â^'xN multiple quantum wells. Applied Physics Letters, 2000, 76, 3040-3042.	3.3	41
133	Ultraviolet photoluminescence from ferromagnetic Fe-doped AlN nanorods. Applied Physics Letters, 2007, 90, 193118.	3.3	41
134	Excitation dynamics of the 1.54Î¼m emission in Er doped GaN synthesized by metal organic chemical vapor deposition. Applied Physics Letters, 2007, 90, 051110.	3.3	41
135	Electrical transport properties of Si-doped hexagonal boron nitride epilayers. AIP Advances, 2013, 3, .	1.3	41
136	Excitonic luminescence linewidths in AlGaN alloys with high aluminum concentrations. Applied Physics Letters, 2002, 80, 2907-2909.	3.3	40
137	Evolution of phase separation in In-rich InGaN alloys. Applied Physics Letters, 2010, 96, .	3.3	40
138	Origin of background electron concentration in In<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>N alloys. Physical Review B, 2011, 84, .	3.2	40
139	Hexagonal boron nitride neutron detectors with high detection efficiencies. Journal of Applied Physics, 2018, 123, .	2.5	40
140	Persistent photoconductivity in IIâ€VI and IIIâ€V semiconductor alloys and a novel infrared detector. Journal of Applied Physics, 1991, 69, 6701-6703.	2.5	39
141	Photoresponsivity of ultraviolet detectors based on InxAlyGa1â^'xâ^'yN quaternary alloys. Applied Physics Letters, 2000, 77, 791-793.	3.3	38
142	Effects of the wave function localization in AlInGaN quaternary alloys. Applied Physics Letters, 2007, 91, 061125.	3.3	38
143	Layer-structured hexagonal (BN)C semiconductor alloys with tunable optical and electrical properties. Journal of Applied Physics, 2014, 115, .	2.5	38
144	Cluster size and composition variations in yellow and red light-emitting InGaN thin films upon thermal annealing. Journal of Applied Physics, 2004, 95, 5388-5396.	2.5	37

#	Article	IF	Citations
145	High mobility InN epilayers grown on AlN epilayer templates. Applied Physics Letters, 2008, 92, .	3.3	37
146	Origin and roles of oxygen impurities in hexagonal boron nitride epilayers. Applied Physics Letters, 2018, 112, .	3.3	37
147	Optical properties of GaN/AlGaN multiple quantum well microdisks. Applied Physics Letters, 1997, 71, 2898-2900.	3.3	36
148	Unintentionally doped n-type Al0.67Ga0.33N epilayers. Applied Physics Letters, 2005, 86, 261902.	3.3	36
149	Si-doped high Al-content AlGaN epilayers with improved quality and conductivity using indium as a surfactant. Applied Physics Letters, 2008, 92, .	3.3	36
150	Probing carbon impurities in hexagonal boron nitride epilayers. Applied Physics Letters, 2017, 110, .	3.3	36
151	Investigation of radiative tunneling in GaN/InGaN single quantum well light-emitting diodes. Solid-State Electronics, 2002, 46, 2291-2294.	1.4	35
152	Correlation between biaxial stress and free exciton transition in AlN epilayers. Applied Physics Letters, 2007, 91, 121117.	3.3	35
153	A Simplified Method of Making Flexible Blue LEDs on a Plastic Substrate. IEEE Photonics Journal, 2015, 7, 1-7.	2.0	35
154	Relaxation of stored charge carriers in aZn0.3Cd0.7Se mixed crystal. Physical Review B, 1990, 41, 5178-5187.	3.2	34
155	Effective mass of two-dimensional electron gas in an Al0.2Ga0.8N/GaN heterojunction. Applied Physics Letters, 2001, 79, 66-68.	3.3	34
156	Optical properties of the nitrogen vacancy in AlN epilayers. Applied Physics Letters, 2004, 84, 1090-1092.	3.3	33
157	III-nitride-based planar lightwave circuits for long wavelength optical communications. IEEE Journal of Quantum Electronics, 2005, 41, 100-110.	1.9	33
158	Determination of energy-band offsets between GaN and AlN using excitonic luminescence transition in AlGaN alloys. Journal of Applied Physics, 2006, 99, 013705.	2.5	33
159	Growth and photoluminescence studies of Zn-doped AlN epilayers. Applied Physics Letters, 2006, 89, 192111.	3.3	33
160	Characterization of bulk hexagonal boron nitride single crystals grown by the metal flux technique. Journal of Crystal Growth, 2014, 403, 110-113.	1.5	33
161	Effects of persistent photoconductivity on the characteristic performance of an AlGaN/GaN heterostructure ultraviolet detector. Applied Physics Letters, 1998, 72, 2868-2870.	3.3	32
162	AlGaNâˆ•GaNâˆ•AlN quantum-well field-effect transistors with highly resistive AlN epilayers. Applied Physics Letters, 2006, 88, 073513.	3.3	32

#	Article	IF	Citations
163	Optical transitions in Pr-implanted GaN. Applied Physics Letters, 1999, 75, 790-792.	3.3	31
164	Time-resolved photoluminescence studies of an ionized donor-bound exciton in GaN. Applied Physics Letters, 1999, 74, 513-515.	3.3	31
165	Growth and photoluminescence studies of Al-rich AlNâˆ•AlxGa1âˆ’xN quantum wells. Applied Physics Letters, 2006, 89, 131922.	3.3	31
166	Toward achieving flexible and high sensitivity hexagonal boron nitride neutron detectors. Applied Physics Letters, 2017, 111, .	3.3	31
167	Effects of tensile, compressive, and zero strain on localized states in AlInGaN/InGaN quantum-well structures. Applied Physics Letters, 2002, 80, 3099-3101.	3.3	30
168	Temperature-dependent photoluminescence and electron field emission properties of AlN nanotip arrays. Applied Physics Letters, 2009, 94, .	3.3	30
169	Thermoelectric Properties of In0.3Ga0.7N Alloys. Journal of Electronic Materials, 2009, 38, 1132-1135.	2.2	30
170	Growth and deep ultraviolet picosecond time-resolved photoluminescence studies of AlN/GaN multiple quantum wells. Applied Physics Letters, 2001, 78, 3690-3692.	3.3	29
171	Realizing InGaN monolithic solar-photoelectrochemical cells for artificial photosynthesis. Applied Physics Letters, 2014, 104, .	3.3	29
172	Optical and magnetic behavior of erbium-doped GaN epilayers grown by metal-organic chemical vapor deposition. Applied Physics Letters, 2007, 91, .	3.3	28
173	Photoluminescence properties of AlN homoepilayers with different orientations. Applied Physics Letters, 2008, 93, .	3.3	28
174	Charge carrier transport properties in layer structured hexagonal boron nitride. AIP Advances, 2014, 4, .	1.3	28
175	Acceptorâ€bound exciton recombination dynamics in pâ€type GaN. Applied Physics Letters, 1995, 67, 3295-3297.	3.3	27
176	Synthesis and properties of Cd1âˆ’xMnxS diluted magnetic semiconductor ultrafine particles. Journal of Magnetism and Magnetic Materials, 1997, 169, 289-302.	2.3	27
177	MOCVD growth of GaBN on 6H-SiC (0001) substrates. Journal of Electronic Materials, 2000, 29, 452-456.	2.2	27
178	Full-scale self-emissive blue and green microdisplays based on GaN micro-LED arrays. Proceedings of SPIE, 2012, , .	0.8	27
179	High efficiency hexagonal boron nitride neutron detectors with 1â€‰cm2 detection areas. Applied Physics Letters, 2020, 116, .	3.3	27
180	Strong-perturbation theory for impurities in semiconductors. Physical Review B, 1987, 35, 9287-9290.	3.2	26

#	Article	IF	Citations
181	Two-dimensional electron gas in AlGaN/GaN heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1117.	1.6	26
182	Collective effects of interface roughness and alloy disorder in InxGa1â^'xN/GaN multiple quantum wells. Applied Physics Letters, 1998, 73, 1724-1726.	3.3	26
183	Mg acceptor level in InN epilayers probed by photoluminescence. Applied Physics Letters, 2007, 91, .	3.3	26
184	Mode spacing â€œanomalyâ€•in InGaN blue lasers. Applied Physics Letters, 1999, 74, 1066-1068.	3.3	25
185	Thermal annealing effects on an InGaN film with an average indium mole fraction of 0.31. Applied Physics Letters, 2003, 83, 3906-3908.	3.3	25
186	Enhancing erbium emission by strain engineering in GaN heteroepitaxial layers. Applied Physics Letters, 2010, 96, .	3.3	25
187	Dry etching techniques for active devices based on hexagonal boron nitride epilayers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 061517.	2.1	25
188	Growth and device processing of hexagonal boron nitride epilayers for thermal neutron and deep ultraviolet detectors. AIP Advances, 2016, 6, .	1.3	25
189	Dynamics of exciton transfer between the bound and the continuum states in GaAs-AlxGa1â^'xAs multiple quantum wells. Physical Review B, 1990, 41, 12949-12952.	3.2	24
190	Threeâ€‰step growth method for high quality AlN epilayers. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 126-129.	1.8	24
191	Layer number dependent optical properties of multilayer hexagonal BN epilayers. Applied Physics Letters, 2017, 110, .	3.3	24
192	Localized vibrational modes of carbon-hydrogen complexes in GaN. Applied Physics Letters, 1999, 75, 659-661.	3.3	23
193	Transition metal ion implantation into AlGaN. Journal of Applied Physics, 2003, 94, 4956.	2.5	23
194	Current-injected 1.54Î¼m light emitting diodes based on erbium-doped GaN. Applied Physics Letters, 2008, 93, 033502.	3.3	23
195	Probing exciton-phonon interaction in AlN epilayers by photoluminescence. Applied Physics Letters, 2009, 95, .	3.3	23
196	Excitation mechanisms of Er optical centers in GaN epilayers. Applied Physics Letters, 2015, 107, 171105.	3.3	23
197	Lattice relaxed impurity and persistent photoconductivity in nitrogen doped 6Hâ€‰SiC. Applied Physics Letters, 1992, 61, 2048-2050.	3.3	22
198	Effect of charge-carrier screening on the exciton binding energy in GaAs/AlxGa1â^'xAs quantum wells. Physical Review B, 1993, 47, 2101-2106.	3.2	22

#	Article	IF	Citations
199	Optical enhancement of room temperature ferromagnetism in Er-doped GaN epilayers. Applied Physics Letters, 2009, 95, 022510.	3.3	22
200	Excitonic transitions in GaAs-AlxGa1â^'xAs multiple quantum wells affected by interface roughness. Physical Review B, 1989, 40, 11862-11867.	3.2	21
201	Electrical transport properties of (BN)-rich hexagonal (BN)C semiconductor alloys. AIP Advances, 2014, 4, 087141.	1.3	21
202	High sensitivity hexagonal boron nitride lateral neutron detectors. Applied Physics Letters, 2019, 114, .	3.3	21
203	Quantum-confined Stark effects inCdS1â^'xSexquantum dots. Physical Review B, 1995, 51, 5457-5460.	3.2	20
204	Zone-folding effect on optical phonon in GaN/Al0.2Ga0.8N superlattices. Applied Physics Letters, 2001, 78, 3035-3037.	3.3	20
205	Thermally stable Schottky contacts on n-type GaN using ZrB2. Applied Physics Letters, 2006, 88, 183505.	3.3	20
206	Surface chemical and electronic properties of plasmaâ€treated nâ€type Al_{0.5}Ga_{0.5}N. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3410-3416.	1.8	20
207	Effects of double layer AlN buffer layers on properties of Si-doped AlxGa1â^'xN for improved performance of deep ultraviolet light emitting diodes. Journal of Applied Physics, 2013, 113, 123501.	2.5	20
208	Effects of Mg-doped AlN/AlGaN superlattices on properties of p-GaN contact layer and performance of deep ultraviolet light emitting diodes. AIP Advances, 2014, 4, 047122.	1.3	20
209	Crystal field analysis of rare-earth ions energy levels in GaN. Optical Materials, 2014, 37, 165-174.	3.6	20
210	Carbon-rich hexagonal (BN)C alloys. Journal of Applied Physics, 2015, 117, .	2.5	20
211	Fabrication and optical studies of AlGaN/GaN quantum-well waveguides. Applied Physics Letters, 2001, 79, 12-14.	3.3	19
212	Quantum well intermixing in GaInNAs/GaAs structures. Journal of Applied Physics, 2003, 94, 7581.	2.5	19
213	III-Nitride Quantum Devicesâ€"Microphotonics. Critical Reviews in Solid State and Materials Sciences, 2003, 28, 131-183.	12.3	19
214	Growth and photoluminescence studies of a-plane AlNâ•AlxGa1â^'xN quantum wells. Applied Physics Letters, 2007, 90, 221105.	3.3	19
215	Probing the relationship between structural and optical properties of Si-doped AlN. Applied Physics Letters, 2010, 96, 131906.	3.3	19
216	High quality AlN grown on double layer AlN buffers on SiC substrate for deep ultraviolet photodetectors. Applied Physics Letters, 2012, 101, .	3.3	19

#	Article	IF	Citations
217	Dynamics of exciton localization in aCdSe0.5S0.5mixed crystal. Physical Review B, 1990, 42, 7284-7287.	3.2	18
218	Acceptor-bound exciton transition in Mg-doped AlN epilayer. Applied Physics Letters, 2004, 85, 2271-2273.	3.3	18
219	Sublimation growth of aluminum nitride crystals. Journal of Crystal Growth, 2006, 297, 105-110.	1.5	18
220	Nature of exciton transitions in hexagonal boron nitride. Applied Physics Letters, 2016, 108, .	3.3	18
221	Superlattice with multiple layers per period. Physical Review B, 1986, 33, 5851-5853.	3.2	17
222	Growth and optical studies of two-dimensional electron gas of Al-rich AlGaN/GaN heterostructures. Applied Physics Letters, 2002, 81, 1809-1811.	3.3	17
223	Strong green luminescence in quaternary InAlGaN thin films. Applied Physics Letters, 2003, 82, 1377-1379.	3.3	17
224	Time-resolved electroluminescence studies of III-nitride ultraviolet photonic-crystal light-emitting diodes. Applied Physics Letters, 2004, 85, 2104-2106.	3.3	17
225	Carrier lifetime in erbium-doped GaN waveguide emitting in 1540 nm wavelength. Applied Physics Letters, 2010, 97, 241105.	3.3	17
226	SiO2/TiO2 distributed Bragg reflector near 1.5 Î¼m fabricated by e-beam evaporation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	2.1	17
227	Correlation between the optical loss and crystalline quality in erbium-doped GaN optical waveguides. Applied Optics, 2013, 52, 5426.	1.8	16
228	Room-Temperature Lasing Action in GaN Quantum Wells in the Infrared 1.5 Î¼m Region. ACS Photonics, 2018, 5, 1303-1309.	6.6	16
229	Lateral charge carrier transport properties of B-10 enriched hexagonal BN thick epilayers. Applied Physics Letters, 2019, 115, 072108.	3.3	16
230	Band-tail states in aZn0.3Cd0.7Se semiconductor alloy probed by persistent photoconductivity. Physical Review B, 1992, 45, 4520-4523.	3.2	15
231	Persistent photoconductivity inZn0.04Cd0.96Te semiconductor thin films. Physical Review B, 1993, 48, 8145-8151.	3.2	15
232	Optical properties of a high-quality insulating GaN epilayer. Applied Physics Letters, 1999, 74, 3821-3823.	3.3	15
233	Effects of alloy disorder on the transport properties of AlxGa1â^'xN epilayers probed by persistent photoconductivity. Applied Physics Letters, 2000, 76, 1728-1730.	3.3	15
234	Beryllium acceptor binding energy in AlN. Applied Physics Letters, 2008, 93, .	3.3	15

#	Article	IF	Citations
235	Lowâ€temperature epitaxial growth and photoluminescence characterization of GaN. Applied Physics Letters, 1994, 65, 2317-2319.	3.3	14
236	Barrier-width dependence of quantum efficiencies of GaN/AlxGa1â^'xN multiple quantum wells. Applied Physics Letters, 2000, 77, 1170-1172.	3.3	14
237	Propagation properties of light in AlGaN/GaN quantum-well waveguides. Applied Physics Letters, 2001, 79, 2511-2513.	3.3	14
238	Delta-doped AlGaN/GaN metalâ€“oxideâ€“semiconductor heterostructure field-effect transistors with high breakdown voltages. Applied Physics Letters, 2002, 81, 4649-4651.	3.3	14
239	Persistent photoconductivity in InxAlyGa1â^'xâ^'yN quaternary alloys. Applied Physics Letters, 2003, 82, 1884-1886.	3.3	14
240	Spectroscopic studies of Er-centers in MOCVD grown GaN layers highly doped with Er. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 146, 193-195.	3.5	14
241	Semiconducting hexagonal boron nitride for deep ultraviolet photonics. Proceedings of SPIE, 2012, , .	0.8	14
242	Temperature dependence of the energy bandgap of two-dimensional hexagonal boron nitride probed by excitonic photoluminescence. Journal of Applied Physics, 2014, 115, 053503.	2.5	14
243	Toward the realization of erbium-doped GaN bulk crystals as a gain medium for high energy lasers. Applied Physics Letters, 2016, 109, .	3.3	14
244	Resonant tunneling of double-barrier quantum wells affected by interface roughness. Physical Review B, 1989, 40, 11792-11798.	3.2	13
245	Effects of electron mass anisotropy on Hall factors in 6Hâ€SiC. Applied Physics Letters, 1996, 68, 1341-1343.	3.3	13
246	Plasma heating in highly excited GaN/AlGaN multiple quantum wells. Applied Physics Letters, 1998, 73, 2476-2478.	3.3	13
247	Formation and dissolution of microcrystalline graphite in carbon-implanted GaN. Journal of Applied Physics, 2000, 88, 5662-5665.	2.5	13
248	Optimizing growth conditions for GaN/AlxGa1â^'xN multiple quantum well structures. Applied Physics Letters, 2000, 76, 864-866.	3.3	13
249	Bulk AlN crystal growth by direct heating of the source using microwaves. Journal of Crystal Growth, 2004, 262, 168-174.	1.5	13
250	AlN MSM and Schottky photodetectors. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2148-2151.	0.8	13
251	Photonic properties of erbium doped InGaN alloys grown on Si (001) substrates. Applied Physics Letters, 2011, 98, 081102.	3.3	13
252	Dramatic enhancement of 1.54â€‰Î¼m emission in Er doped GaN quantum well structures. Applied Physics Letters, 2015, 106, 121106.	3.3	13

#	Article	IF	Citations
253	Effects of surface recombination on the charge collection in h-BN neutron detectors. Journal of Applied Physics, 2019, 125, 104501.	2.5	13
254	Dynamics of localized excitons in InGaN/GaN quantum wells. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2215.	1.6	12
255	Enhanced magnetization in erbium doped GaN thin films due to strain induced electric fields. Applied Physics Letters, 2011, 99, 122506.	3.3	12
256	Surfactant effects of gallium on quality of AlN epilayers grown via metal-organic chemical-vapour deposition on SiC substrates. Journal Physics D: Applied Physics, 2012, 45, 285103.	2.8	12
257	Formation energy of optically active Er³⁺ centers in Er doped GaN. Applied Physics Letters, 2012, 101, 051114.	3.3	12
258	Optical excitation cross section of erbium in GaN. Applied Optics, 2013, 52, 1132.	1.8	12
259	Synthesis and properties of Cd/sub 1-x/Mn/sub x/S diluted magnetic semiconductor nanoparticles. IEEE Transactions on Magnetics, 1994, 30, 4930-4932.	2.1	11
260	Evidence for bistable defects in 6H-SiC. Solid State Communications, 1994, 89, 995-998.	1.9	11
261	Emission and absorption cross-sections of an Er:GaN waveguide prepared with metal organic chemical vapor deposition. Applied Physics Letters, 2011, 99, .	3.3	11
262	Electric-field-enhanced persistent photoconductivity in aZn0.02Cd0.98Te semiconductor alloy. Physical Review B, 1992, 46, 3810-3816.	3.2	10
263	Deep ultraviolet photoluminescence studies of AlN photonic crystals. Applied Physics Letters, 2006, 88, 133113.	3.3	10
264	Growth and fabrication of GaN/Er:GaN/GaN core-cladding planar waveguides. Applied Physics Letters, 2019, 114, 222105.	3.3	10
265	Anisotropic index of refraction and structural properties of hexagonal boron nitride epilayers probed by spectroscopic ellipsometry. Journal of Applied Physics, 2020, 127, .	2.5	10
266	High-Quality Al-Rich AlGaN Alloys. Springer Series in Materials Science, 2012, , 29-81.	0.6	10
267	Temperature dependence of the energy bandgap of multi-layer hexagonal boron nitride. Applied Physics Letters, 2017, 111, 132106.	3.3	10
268	Semiconductor superlattices with periodic disorder. Journal of Applied Physics, 1988, 63, 1984-1989.	2.5	9
269	Relaxation of spin-glass magnetization inCd1â^'xMnxTe diluted magnetic semiconductors. Physical Review B, 1994, 49, 4514-4524.	3.2	9
270	Optical transitions in InGaN/AlGaN single quantum wells. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1139.	1.6	9

#	Article	IF	Citations
271	Studies of field-induced nonequilibrium electron transport in an InxGa1â^'xN (xâ‰…0.6) epilayer grown on GaN. Applied Physics Letters, 2003, 82, 1413-1415.	3.3	9
272	Valence band structure of AlN probed by photoluminescence. Applied Physics Letters, 2008, 92, 041114.	3.3	9
273	Effects of growth pressure on erbium doped GaN infrared emitters synthesized by metal organic chemical vapor deposition. Optical Materials Express, 2012, 2, 1095.	3.0	9
274	Refractive index of erbium doped GaN thin films. Applied Physics Letters, 2014, 105, 081104.	3.3	9
275	Photoluminescence quantum efficiency of Er optical centers in GaN epilayers. Scientific Reports, 2017, 7, 39997.	3.3	9
276	Precession of Keplerâ€™s orbit. American Journal of Physics, 1985, 53, 694-695.	0.7	8
277	DX centers in Al0.34Ga0.66As amorphous thin films. Solid State Communications, 1993, 87, 787-790.	1.9	8
278	Near-field optical study of AlGaN/GaN quantum-well waveguide. Applied Physics Letters, 2004, 84, 1832-1834.	3.3	8
279	Optical properties of GaN/AlN multiple quantum wells. Solid State Communications, 2004, 131, 389-392.	1.9	8
280	Higher lying conduction band in GaN and AlN probed by photoluminescence spectroscopy. Applied Physics Letters, 2006, 88, 261919.	3.3	8
281	Deep ultraviolet photoluminescence of Tm-doped AlGaN alloys. Applied Physics Letters, 2009, 94, 111103.	3.3	8
282	Enhancement of 1.5â€‰Î¼m emission under 980â€‰nm resonant excitation in Er and Yb co-doped GaN epilayers. Applied Physics Letters, 2016, 109, .	3.3	8
283	Hyperspectral Nonlinear Optical Light Generation from a Monolithic GaN Microcavity. Advanced Optical Materials, 2017, 5, 1600804.	7.3	8
284	Boron nitride neutron detector with the ability for detecting both thermal and fast neutrons. Applied Physics Letters, 2022, 120, .	3.3	8
285	Metal-insulator transition in semiconductor alloys probed by persistent photoconductivity. Physical Review B, 1995, 51, 4132-4136.	3.2	7
286	Observation of electronic Raman scattering from Mg-doped wurtzite GaN. Applied Physics Letters, 2000, 76, 2889-2891.	3.3	7
287	Annealing behavior of luminescence from erbium-implanted GaN films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 127-131.	3.5	7
288	Birefringence of GaN/AlGaN optical waveguides. Applied Physics Letters, 2003, 83, 1698-1700.	3.3	7

#	Article	IF	Citations
289	Free nucleation of aluminum nitride single crystals in HPBN crucible by sublimation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 117, 99-104.	3.5	7
290	Erbium doped GaN synthesized by hydride vapor-phase epitaxy. Optical Materials Express, 2015, 5, 596.	3.0	7
291	Excitation and emission mechanisms of Er:GaN gain medium in 1.5â€‰Î¼m region. Applied Physics Letters, 2017, 111, .	3.3	7
292	Optical properties of GaN/Er:GaN/GaN coreâ€“cladding planar waveguides. Applied Physics Express, 2019, 12, 075505.	2.4	7
293	Probing the surface oxidation process in hexagonal boron nitride epilayers. AIP Advances, 2020, 10, 025213.	1.3	7
294	Charge collection in h-BN neutron detectors at elevated temperatures. Applied Physics Letters, 2021, 118, 092102.	3.3	7
295	Band structure of a periodic potential with two wells and two barriers per period. American Journal of Physics, 1987, 55, 462-465.	0.7	6
296	Raman spectra of tetramethylammonium-trimethylammonium mixed ion vermiculite clay intercalation compounds. Journal of Raman Spectroscopy, 1990, 21, 103-107.	2.5	6
297	Optical Transitions and Recombination Lifetimes in GaN and InGaN Epilayers, and InGaN/GaN and GaN/AlGaN Multiple Quantum Wells. Materials Research Society Symposia Proceedings, 1996, 449, 829.	0.1	6
298	Surface emission of InxGa1â^'xN epilayers under strong optical excitation. Applied Physics Letters, 1997, 70, 984-986.	3.3	6
299	Achieving conductive high Al-content AlGaN alloys for deep UV photonics. , 2007, 6479, 265.		6
300	Er-Doped GaN and InxGa1-xN for Optical Communications. Topics in Applied Physics, 2010, , 115-157.	0.8	6
301	Excitation cross section of erbium-doped GaN waveguides under 980â€‰nm optical pumping. Applied Physics Letters, 2014, 105, 051106.	3.3	6
302	Direct detection of rare earth ion distributions in gallium nitride and its influence on growth morphology. Journal of Applied Physics, 2020, 127, 013102.	2.5	6
303	Band structure of non-ideal semiconductor superlattices. Superlattices and Microstructures, 1987, 3, 689-695.	3.1	5
304	Disorder and persistent photoconductivity inZnxCd1â^'xSe semiconductor alloys. Physical Review B, 1996, 54, 1471-1473.	3.2	5
305	Optical properties of Pr implanted GaN epilayers and Al Ga1â^'N alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 167-170.	3.5	5
306	Epitaxial growth and time-resolved photoluminescence studies of AlN epilayers. , 2003, 4992, 202.		5

#	Article	IF	Citations
307	Deep bandtail states picosecond intensity-dependent carrier dynamics of GaN epilayer under high excitation. Applied Physics B: Lasers and Optics, 2005, 80, 521-526.	2.2	5
308	Photoluminescence properties of erbium doped InGaN epilayers. Applied Physics Letters, 2009, 95, 041113.	3.3	5
309	Metal-semiconductor-metal neutron detectors based on hexagonal boron nitride epitaxial layers. Proceedings of SPIE, 2012, , .	0.8	5
310	Resonant excitation cross-sections of erbium in freestanding GaN bulk crystals. Applied Physics Letters, 2018, 112, .	3.3	5
311	Critical thickness of hexagonal GaBN/BN heterostructures. Journal of Applied Physics, 2019, 125, .	2.5	5
312	Band structure and infrared optical transitions in ErN. Applied Physics Letters, 2020, 116, 171104.	3.3	5
313	Electrical transport properties of hexagonal boron nitride epilayers. Semiconductors and Semimetals, 2021, 107, 393-454.	0.7	5
314	Dynamics and spatial distribution of edge luminescence generators in CDS from time-resolved excitation spectroscopy. Journal of Luminescence, 1988, 40-41, 557-558.	3.1	4
315	Structure and spin-glass properties of Cd/sub 0.5/Mn/sub 0.5/S diluted magnetic semiconductor quantum dots. IEEE Transactions on Magnetics, 1995, 31, 3761-3763.	2.1	4
316	X-ray diffraction analysis of the defect structure in Al_xGa_{1 - x}N films grown by metalorganic chemical vapor deposition. Journal of Materials Science, 2004, 39, 1853-1855.	3.7	4
317	Time-Resolved Photoluminescence Studies of Indium-Rich InGaN Alloys. Chinese Physics Letters, 2005, 22, 472-474.	3.3	4
318	Metastable Giant Moments in Gd-Implanted GaN, Si, and Sapphire. Journal of Superconductivity and Novel Magnetism, 2011, 24, 2123-2128.	1.8	4
319	Optoelectronic properties of hexagonal boron nitride epilayers. Proceedings of SPIE, 2013, , .	0.8	4
320	Probing of local alloy disorder in InGaN using Er3+ ions. Optical Materials, 2014, 36, 1730-1733.	3.6	4
321	Current injection 154 Âµm light-emitting devices based on Er-doped GaN/AlGaN multiple quantum wells. Optical Materials Express, 2016, 6, 3476.	3.0	4
322	Synthesis and photoluminescence properties of hexagonal BGaN alloys and quantum wells. Applied Physics Express, 2019, 12, 011002.	2.4	4
323	Effects of unique band structure of h-BN probed by photocurrent excitation spectroscopy. Applied Physics Express, 2022, 15, 051005.	2.4	4
324	Correlation of excitation spectroscopy of edge luminescence and persistent photoconductivity in CDS. Journal of Luminescence, 1988, 40-41, 119-120.	3.1	3

#	Article	IF	Citations
325	Dynamics of bound-exciton energy transformation to edge-luminescence centers in CdS. Journal of Luminescence, 1990, 45, 251-253.	3.1	3
326	MOVPE growth of GaN and LED on (111) MgAl2O4. Journal of Crystal Growth, 1998, 189-190, 197-201.	1.5	3
327	Measurement of the Al mole fraction of bulk AlGaN and AlGaN/GaN heterostructure by photoconductance method. Journal of Applied Physics, 1999, 86, 2696-2699.	2.5	3
328	Synthesis and optical characterization of erbium-doped III-N double heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 105, 118-121.	3.5	3
329	Non-Equilibrium Acceptor Concentration in GaN:Mg Grown by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2003, 798, 448.	0.1	3
330	Thermoelectric Properties of Er-doped InGaN Alloys for High Temperature Applications. Materials Research Society Symposia Proceedings, 2011, 1325, 41.	0.1	3
331	Erbium-doped a-plane GaN epilayers synthesized by metal-organic chemical vapor deposition. Optical Materials Express, 2015, 5, 274.	3.0	3
332	Erbium-doped AlN epilayers synthesized by metal-organic chemical vapor deposition. Optical Materials Express, 2015, 5, 648.	3.0	3
333	Thermal neutron detectors based on hexagonal boron nitride epilayers. , 2016, , .		3
334	Neutral donor-acceptor-pair recombination under a uniform electric field. Physical Review B, 1988, 37, 4126-4131.	3.2	2
335	Band structure of compensated n-i-p-i superlattices. Physical Review B, 1988, 37, 6425-6428.	3.2	2
336	Electronic structure and dispersion of compensatedn-i-p-isuperlattices with small period lengths. Physical Review B, 1989, 40, 5561-5566.	3.2	2
337	Photoluminescence Properties Of Gan/AlGaN Multiple Quantum Well Microdisks. Materials Research Society Symposia Proceedings, 1997, 482, 684.	0.1	2
338	Growth and Characterization of BxGal-xN on 6H-SiC (0001) by MOVPE. Materials Research Society Symposia Proceedings, 1998, 537, 1.	0.1	2
339	Growth and Characterization of BxGa1â˜'xN on 6H-SiC (0001) by Movpe. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 429-434.	1.0	2
340	Advances in III-nitride micro-size light emitters. III-Vs Review, 2001, 14, 32-37.	0.0	2
341	Mechanism of photoluminescence in GaN/Al0.2Ga0.8N superlattices. Applied Physics Letters, 2001, 79, 3806-3808.	3.3	2
342	Exciton-polariton propagation in AlGaN/GaN quantum-well waveguides probe by time-resolved photoluminescence. , 2002, , .		2

#	ARTICLE	IF	CITATIONS
343	Mg-doped Al-rich AlGaN alloys for deep UV emitters. , 2004, , .		2
344	GaN Light-Emitting Triodes for High-Efficiency Hole Injection. Journal of the Electrochemical Society, 2006, 153, G734.	2.9	2
345	Expanding into blue and green. Nature Photonics, 2011, 5, 521-522.	31.4	2
346	Response of alpha particles in hexagonal boron nitride neutron detectors. Applied Physics Letters, 2017, 110, .	3.3	2
347	Temperature dependence studies of Er optical centers in GaN epilayers grown by MOCVD. MRS Advances, 2017, 2, 135-140.	0.9	2
348	Polarization-resolved Er emission in Er doped GaN bulk crystals. Journal of Applied Physics, 2020, 127, 243107.	2.5	2
349	Band structure and ultraviolet optical transitions in ErN. Applied Physics Letters, 2021, 118, .	3.3	2
350	Development of nitride microLEDs and displays. Semiconductors and Semimetals, 2021, , 1-56.	0.7	2
351	High-efficiency and high-sensitivity thermal neutron detectors based on hexagonal BN epilayers. , 2017, , .		2
352	Erbium energy levels in GaN grown by hydride vapor phase epitaxy. AIP Advances, 2020, 10, .	1.3	2
353	Persistent photoconductivity in Cd0.7Zn0.3Se mixed crystals. Journal of Luminescence, 1990, 45, 198-200.	3.1	1
354	Persistent Photoconductivity in p-Type GaN Epilayers and n-Type AlGaN/GaN Heterostructures. Materials Research Society Symposia Proceedings, 1996, 449, 537.	0.1	1
355	Transient characteristics of AlxGa1â^'xN/GaN heterojunction field-effect transistors. Applied Physics Letters, 2000, 77, 4046-4048.	3.3	1
356	<title>Growth and optoelectronic properties of III-nitride quaternary alloys</title>. , 2001, 4280, 27.		1
357	III-Nitride Photonic Crystals for Blue and UV Emitters. Materials Research Society Symposia Proceedings, 2003, 798, 424.	0.1	1
358	III-nitrate ultraviolet photonic materials: epitaxial growth, optical and electrical properties, and applications. , 2003, , .		1
359	Field-induced non-equilibrium electron transport in an In0.4Ga0.6N epilayer grown on GaN studied by subpicosecond Raman spectroscopy. Semiconductor Science and Technology, 2004, 19, S427-S429.	2.0	1
360	III-nitride blue and UV photonic-crystal light-emitting diodes. , 2004, , .		1

#	Article	IF	Citations
361	Carrier dynamics in AlN and GaN epilayers at the elevated temperatures. , 2005, , .		1
362	Comment on â€œSpectral identification of thin film coated and solid form semiconductor neutron detectorsâ€•by McGregor and Shultis. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 536, 228-231.	1.6	1
363	III-nitride deep ultraviolet micro- and nano-photonics. , 2006, , .		1
364	Photoluminescence from Gd-implanted AlN and GaN Epilayers. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	1
365	Growth and optical properties of a-plane AlN and Al rich AlN/AlxGa1â€“xN quantum wells grown on r-plane sapphire substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1568-1570.	0.8	1
366	1.54 Î¼m emitter and optical amplifier based on Er doped InGaN/GaN. , 2010, , .		1
367	Erbium-doped GaN bulk crystals as a gain medium for eye-safe high energy lasers. , 2018, , .		1
368	AlN. , 2011, , 21-68.		1
369	Piezoelectric Effects in GaN/AlGaN Multiple Quantum Wells Probed by Picosecond Time-Resolved Photoluminescence. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 130-135.	1.0	1
370	Charge collection and trapping mechanisms in hexagonal boron nitride epilayers. Applied Physics Letters, 2021, 119, .	3.3	1
371	ZnSeTe Rediscovered: From Isoelectronic Centers to Quantum Dots. , 0, , 145-178.		1
372	The ground state of a particle under the influence of a uniformly charged sphere. American Journal of Physics, 1986, 54, 1046-1048.	0.7	0
373	Relaxation of magnetization in Cd1â^'xMnxTe diluted magnetic semiconductors under illumination. Journal of Applied Physics, 1994, 75, 5734-5736.	2.5	0
374	Optical Properties of Mg-GaN, GaN/AlGaN SCH structures, and GaN on ZnO Substrates. Materials Research Society Symposia Proceedings, 1995, 395, 527.	0.1	0
375	Optical transitions and dynamic processes in III-nitride epilayers and multiple quantum wells. , 1997, , .		0
376	Well Thickness And Doping Effects, And Room Temperature emission mechanisms in InGaN/GaN And GaN/AlGaN Multiple Quantum Wells. Materials Research Society Symposia Proceedings, 1997, 482, 678.	0.1	0
377	Dynamics of fundamental optical transitions in group III nitrides. , 1998, , .		0
378	Piezoelectric Effects in GaN/AlGaN Multiple Quantum Wells Probed by Picosecond Time-Resolved Photoluminescence. Materials Research Society Symposia Proceedings, 1998, 537, 1.	0.1	0

#	ARTICLE	IF	CITATIONS
379	<title>Piezoelectric effects on the dynamics of optical transitions in GaN/Al<formula><inf><roman>x</roman></inf></formula>Ga<formula><inf><roman>1-x</roman></inf></formula>N multiple quantum wells</title>. , 1999, 3624, 198.		0
380	Correlation between Sheet Carrier Density-Mobility Product and Persistent Photoconductivity in ALGAN/GAN Modulation Doped Heterostructures. Materials Research Society Symposia Proceedings, 1999, 595, 1.	0.1	0
381	Time-Resolved Photoluminescence Studies of InxGa1â^'xAs1â^'yNy. Materials Research Society Symposia Proceedings, 1999, 607, 153.	0.1	0
382	Optical properties of III-nitride microcavities. , 1999, , .		0
383	<title>Exciton localization dynamics in AlxGa1-xN alloys</title>. , 2000, 3940, 139.		0
384	Fabrication and Characterization of InxAlyGa1â^'xâ^'yN Ultraviolet Detectors. Materials Research Society Symposia Proceedings, 2000, 639, 1071.	0.1	0
385	Time-resolved photoluminescence studies of Al-rich AlGaN alloys. , 2002, , .		0
386	AlGaN/GaN Metal-Oxide-Semiconductor Heterostructure Field-Effect Transistors (MOSHFETs) with the Delta-Doped Barrier Layer. Materials Research Society Symposia Proceedings, 2002, 743, L9.11.1.	0.1	0
387	Optical resonant modes in InGaN MQW/GaN micro-cone. Current Applied Physics, 2002, 2, 383-387.	2.4	0
388	Compositional changes in erbium-implanted GaN films due to annealing. Journal of Electronic Materials, 2003, 32, 382-387.	2.2	0
389	Thermal annealing effects on the optical properties of high-indium InGaN epi-layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2654-2657.	0.8	0
390	Delta-doped AlGaN/GaN Heterostructure Field-Effect Transistors with Incorporation of AlN Epilayers. Materials Research Society Symposia Proceedings, 2003, 798, 102.	0.1	0
391	Defect Reduction in AlxGa1-xN Films Grown by Metal Organic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2003, 42, 1231-1232.	1.5	0
392	Time-resolved photoluminescence studies of Si- and Mg-doped AlN epilayers. , 2004, , .		0
393	Optical Reflectance of Bulk AlN Crystals and AlN Epitaxial Films. AIP Conference Proceedings, 2005, , .	0.4	0
394	Visible and Infrared Emission from Er-doped III-N Light Emitting Diodes. Materials Research Society Symposia Proceedings, 2005, 866, 76.	0.1	0
395	III-Nitride Wide Bandgap Semiconductors for Optical Communications. , 2006, , .		0
396	Al rich AlN/AlGaN Quantum Wells. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	0

#	Article	IF	Citations
397	Erbium-doped GaN epilayers synthesized by metal-organic chemical vapor deposition. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	0
398	Time-resolved photoluminescence studies of Mg-doped AlN epilayers. , 2006, , .		0
399	Investigation of The Electrical and Chemical Properties of Plasma-Treated AlGaN. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	0
400	Nitride Emittersâ€“ Recent Progress. , 0, , 109-144.		0
401	Achieving p-In x Ga1 -x N alloys with high In contents. , 2010, , .		0
402	III-nitride nanostructures for energy generation. , 2010, , .		0
403	Impurities and conductivity control in Al-rich AlGaN alloys. , 2011, , .		0
404	Optical and magneto-optical properties of neodymium and erbium doped gallium nitride epilayers. , 2011, , .		0
405	p-Type AlN nanowires and AlN nanowire light emitting diodes on Si. , 2015, , .		0
406	Hexagonal boron nitride for deep UV photonics. , 2015, , .		0
407	Optical excitation of Er centers in GaN epilayers grown by MOCVD. , 2016, , .		0
408	Hexagonal boron nitride epilayers for deep UV photonics. , 2017, , .		0
409	Development of Micro-LEDs and Applications. , 2019, , .		0
410	Correlation Between Sheet Carrier Density-Mobility Product and Persistent Photoconductivity in AlGaN/GaN Modulation Doped Heterostructures. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 626-632.	1.0	0
411	<title>Optimizing GaN/AlGaN multiple quantum well structures by time-resolved photoluminescence</title>. , 2001, , .		0
412	Current Injection Emitters at 1.54 Âµm Based on Erbium Doped GaN p-i-n Structures. , 2012, , .		0
413	Nitride MicroLEDs and Beyond - A Decade Progress Review. , 2012, , .		0
414	Rare Earth doped GaN for photonic devices. , 2017, , .		0

#	Article	IF	Citations
415	Telecommunication-Wavelength Lasing in Er-doped GaN Multiple Quantum Wells at Room Temperature. , 2018, , .		0
416	Formation energy and optical excitation mechanisms of Er in GaN semi-bulk crystals. Applied Physics Letters, 2022, 120, 052103.	3.3	0
417	Effects of polarization field on optical transitions and selection rules in Er doped GaN. Optical Materials Express, 0, , .	3.0	0
418	A conductive AFM study of carbon-rich hexagonal (BN)C semiconductor alloys. MRS Communications, 0, , 1.	1.8	0