

Jing Li

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127
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ext. citations

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#	Paper	IF	Citations
127	Band structure and fundamental optical transitions in wurtzite AlN. <i>Applied Physics Letters</i> , 2003 , 83, 5163-5165	3.4	282
126	InGaN/GaN multiple quantum well solar cells with long operating wavelengths. <i>Applied Physics Letters</i> , 2009 , 94, 063505	3.4	274
125	Unique optical properties of AlGaIn alloys and related ultraviolet emitters. <i>Applied Physics Letters</i> , 2004 , 84, 5264-5266	3.4	269
124	III-nitride blue microdisplays. <i>Applied Physics Letters</i> , 2001 , 78, 1303-1305	3.4	209
123	Mg acceptor level in AlN probed by deep ultraviolet photoluminescence. <i>Applied Physics Letters</i> , 2003 , 83, 878-880	3.4	204
122	III-Nitride full-scale high-resolution microdisplays. <i>Applied Physics Letters</i> , 2011 , 99, 031116	3.4	198
121	Epitaxially grown semiconducting hexagonal boron nitride as a deep ultraviolet photonic material. <i>Applied Physics Letters</i> , 2011 , 98, 211110	3.4	156
120	InGaIn/GaN multiple quantum well concentrator solar cells. <i>Applied Physics Letters</i> , 2010 , 97, 073115	3.4	147
119	200nm deep ultraviolet photodetectors based on AlN. <i>Applied Physics Letters</i> , 2006 , 89, 213510	3.4	146
118	GaN microdisk light emitting diodes. <i>Applied Physics Letters</i> , 2000 , 76, 631-633	3.4	140
117	Optical and electrical properties of Mg-doped p-type Al _x Ga _{1-x} N. <i>Applied Physics Letters</i> , 2002 , 80, 1210-1212	3.4	138
116	Temperature and compositional dependence of the energy band gap of AlGaIn alloys. <i>Applied Physics Letters</i> , 2005 , 87, 242104	3.4	122
115	Hydrogen generation by solar water splitting using p-InGaIn photoelectrochemical cells. <i>Applied Physics Letters</i> , 2010 , 96, 052110	3.4	116
114	Time-resolved photoluminescence studies of Al _x Ga _{1-x} N alloys. <i>Applied Physics Letters</i> , 2000 , 76, 1252-1254	3.4	110
113	Correlation between optoelectronic and structural properties and epilayer thickness of AlN. <i>Applied Physics Letters</i> , 2007 , 90, 241101	3.4	100
112	InGaIn/GaN quantum well interconnected microdisk light emitting diodes. <i>Applied Physics Letters</i> , 2000 , 77, 3236-3238	3.4	100
111	Enhanced p-type conduction in GaN and AlGaIn by Mg-doping. <i>Applied Physics Letters</i> , 2003 , 82, 3041-3043	3.4	99

110	Dielectric strength, optical absorption, and deep ultraviolet detectors of hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , 2012 , 101, 171112	3-4	95
109	Hexagonal boron nitride epitaxial layers as neutron detector materials. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011 , 654, 417-420	1.2	93
108	Optical and electrical properties of Al-rich AlGa _N alloys. <i>Applied Physics Letters</i> , 2001 , 79, 3245-3247	3-4	88
107	Polarization of III-nitride blue and ultraviolet light-emitting diodes. <i>Applied Physics Letters</i> , 2005 , 86, 091107	3-4	87
106	Band-edge photoluminescence of AlN epilayers. <i>Applied Physics Letters</i> , 2002 , 81, 3365-3367	3-4	87
105	Deep ultraviolet picosecond time-resolved photoluminescence studies of AlN epilayers. <i>Applied Physics Letters</i> , 2003 , 82, 1694-1696	3-4	86
104	Nature of deep center emissions in GaN. <i>Applied Physics Letters</i> , 2010 , 96, 151902	3-4	84
103	Direct hydrogen gas generation by using InGa _N epilayers as working electrodes. <i>Applied Physics Letters</i> , 2008 , 93, 162107	3-4	78
102	Epitaxial growth and demonstration of hexagonal BN/AlGa _N p-n junctions for deep ultraviolet photonics. <i>Applied Physics Letters</i> , 2012 , 100, 061121	3-4	76
101	Growth and optical properties of In _x Al _y Ga _{1-x-y} N quaternary alloys. <i>Applied Physics Letters</i> , 2001 , 78, 61-63	3-4	68
100	Growth of III-nitride photonic structures on large area silicon substrates. <i>Applied Physics Letters</i> , 2006 , 88, 171909	3-4	67
99	Achieving highly conductive AlGa _N alloys with high Al contents. <i>Applied Physics Letters</i> , 2002 , 81, 1038-1040	3-4	63
98	The origin of deep-level impurity transitions in hexagonal boron nitride. <i>Applied Physics Letters</i> , 2015 , 106, 021110	3-4	61
97	Exciton localization in AlGa _N alloys. <i>Applied Physics Letters</i> , 2006 , 88, 062103	3-4	57
96	Electrical and optical properties of p-type InGa _N . <i>Applied Physics Letters</i> , 2009 , 95, 261904	3-4	56
95	Realization of highly efficient hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , 2016 , 109, 072101	3-4	55
94	III-nitride ultraviolet light-emitting diodes with delta doping. <i>Applied Physics Letters</i> , 2003 , 83, 566-568	3-4	54
93	Optical properties of AlN and GaN in elevated temperatures. <i>Applied Physics Letters</i> , 2004 , 85, 3489-3491	3-4	53

92	GaN-based waveguide devices for long-wavelength optical communications. <i>Applied Physics Letters</i> , 2003 , 82, 1326-1328	3-4	51
91	Single phase In _x Ga _{1-x} N (0.25 ≤ x ≤ 0.63) alloys synthesized by metal organic chemical vapor deposition. <i>Applied Physics Letters</i> , 2008 , 93, 182107	3-4	47
90	Linewidths of excitonic luminescence transitions in AlGa _x N alloys. <i>Applied Physics Letters</i> , 2001 , 78, 1829-1831	3-4	44
89	Hexagonal boron nitride thin film thermal neutron detectors with high energy resolution of the reaction products. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015 , 783, 121-127	1.2	43
88	Fabrication and characterization of solid-state thermal neutron detectors based on hexagonal boron nitride epilayers. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2014 , 748, 84-90	1.2	43
87	Band-edge transitions in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , 2012 , 101, 051110	3-4	42
86	Photoluminescence studies of Si-doped AlN epilayers. <i>Applied Physics Letters</i> , 2003 , 83, 2787-2789	3-4	42
85	Excitonic luminescence linewidths in AlGa _x N alloys with high aluminum concentrations. <i>Applied Physics Letters</i> , 2002 , 80, 2907-2909	3-4	40
84	Effects of compressive strain on optical properties of In _x Ga _{1-x} N/AlGa _x N quantum wells. <i>Applied Physics Letters</i> , 2006 , 89, 151916	3-4	38
83	Photoresponsivity of ultraviolet detectors based on In _x Al _y Ga _{1-x-y} N quaternary alloys. <i>Applied Physics Letters</i> , 2000 , 77, 791-793	3-4	38
82	Well-width dependence of the quantum efficiencies of GaN/Al _x Ga _{1-x} N multiple quantum wells. <i>Applied Physics Letters</i> , 2000 , 76, 3040-3042	3-4	38
81	Hexagonal boron nitride and 6H-SiC heterostructures. <i>Applied Physics Letters</i> , 2013 , 102, 213505	3-4	37
80	The origins of near band-edge transitions in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , 2016 , 108, 052106	3-4	37
79	Evolution of phase separation in In-rich InGa _x N alloys. <i>Applied Physics Letters</i> , 2010 , 96, 232105	3-4	36
78	Effects of plasma treatment on the Ohmic characteristics of Ti/Al/Ti/Au contacts to n-AlGa _x N. <i>Applied Physics Letters</i> , 2006 , 89, 082109	3-4	36
77	Correlation between biaxial stress and free exciton transition in AlN epilayers. <i>Applied Physics Letters</i> , 2007 , 91, 121117	3-4	34
76	Hexagonal boron nitride neutron detectors with high detection efficiencies. <i>Journal of Applied Physics</i> , 2018 , 123, 044501	2.5	31
75	Bandgap and exciton binding energies of hexagonal boron nitride probed by photocurrent excitation spectroscopy. <i>Applied Physics Letters</i> , 2016 , 109, 122101	3-4	31

74	Layer-structured hexagonal (BN)C semiconductor alloys with tunable optical and electrical properties. <i>Journal of Applied Physics</i> , 2014 , 115, 093509	2.5	30
73	Electrical transport properties of Si-doped hexagonal boron nitride epilayers. <i>AIP Advances</i> , 2013 , 3, 122116	1.6	30
72	Time-resolved photoluminescence studies of an ionized donor-bound exciton in GaN. <i>Applied Physics Letters</i> , 1999 , 74, 513-515	3.4	30
71	Erbium-Doped AlInGaN Alloys as High-Temperature Thermoelectric Materials. <i>Applied Physics Express</i> , 2011 , 4, 051001	2.4	29
70	AlGaInGaN/AlN quantum-well field-effect transistors with highly resistive AlN epilayers. <i>Applied Physics Letters</i> , 2006 , 88, 073513	3.4	28
69	Origin and roles of oxygen impurities in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , 2018 , 112, 162103	3.4	27
68	III-nitride-based planar lightwave circuits for long wavelength optical communications. <i>IEEE Journal of Quantum Electronics</i> , 2005 , 41, 100-110	2	27
67	Toward achieving flexible and high sensitivity hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , 2017 , 111, 033507	3.4	25
66	Growth and deep ultraviolet picosecond time-resolved photoluminescence studies of AlN/GaN multiple quantum wells. <i>Applied Physics Letters</i> , 2001 , 78, 3690-3692	3.4	25
65	Probing carbon impurities in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , 2017 , 110, 182103	3.4	24
64	Realizing InGaN monolithic solar-photoelectrochemical cells for artificial photosynthesis. <i>Applied Physics Letters</i> , 2014 , 104, 143901	3.4	24
63	Thermoelectric Properties of In _{0.3} Ga _{0.7} N Alloys. <i>Journal of Electronic Materials</i> , 2009 , 38, 1132-1135	1.9	24
62	Enhancing erbium emission by strain engineering in GaN heteroepitaxial layers. <i>Applied Physics Letters</i> , 2010 , 96, 031908	3.4	23
61	Charge carrier transport properties in layer structured hexagonal boron nitride. <i>AIP Advances</i> , 2014 , 4, 107126	1.5	21
60	Probing exciton-phonon interaction in AlN epilayers by photoluminescence. <i>Applied Physics Letters</i> , 2009 , 95, 061106	3.4	20
59	Growth and device processing of hexagonal boron nitride epilayers for thermal neutron and deep ultraviolet detectors. <i>AIP Advances</i> , 2016 , 6, 075213	1.5	20
58	Dry etching techniques for active devices based on hexagonal boron nitride epilayers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 061517	2.9	19
57	Full-scale self-emissive blue and green microdisplays based on GaN micro-LED arrays 2012 ,		19

56	Probing the relationship between structural and optical properties of Si-doped AlN. <i>Applied Physics Letters</i> , 2010 , 96, 131906	3.4	18
55	Surface chemical and electronic properties of plasma-treated n-type Al _{0.5} Ga _{0.5} N. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007 , 204, 3410-3416	1.6	17
54	Electrical transport properties of (BN)-rich hexagonal (BN)C semiconductor alloys. <i>AIP Advances</i> , 2014 , 4, 087141	1.5	16
53	Correlation between the optical loss and crystalline quality in erbium-doped GaN optical waveguides. <i>Applied Optics</i> , 2013 , 52, 5426-9	1.7	16
52	Growth and optical studies of two-dimensional electron gas of Al-rich AlGa _N /Ga _N heterostructures. <i>Applied Physics Letters</i> , 2002 , 81, 1809-1811	3.4	16
51	Carbon-rich hexagonal (BN)C alloys. <i>Journal of Applied Physics</i> , 2015 , 117, 215703	2.5	15
50	Layer number dependent optical properties of multilayer hexagonal BN epilayers. <i>Applied Physics Letters</i> , 2017 , 110, 092102	3.4	14
49	High sensitivity hexagonal boron nitride lateral neutron detectors. <i>Applied Physics Letters</i> , 2019 , 114, 222102	3.4	14
48	Nature of exciton transitions in hexagonal boron nitride. <i>Applied Physics Letters</i> , 2016 , 108, 122101	3.4	14
47	Photonic properties of erbium doped InGa _N alloys grown on Si (001) substrates. <i>Applied Physics Letters</i> , 2011 , 98, 081102	3.4	13
46	Formation and dissolution of microcrystalline graphite in carbon-implanted GaN. <i>Journal of Applied Physics</i> , 2000 , 88, 5662-5665	2.5	13
45	Barrier-width dependence of quantum efficiencies of Ga _N /Al _x Ga _{1-x} N multiple quantum wells. <i>Applied Physics Letters</i> , 2000 , 77, 1170-1172	3.4	13
44	Toward the realization of erbium-doped GaN bulk crystals as a gain medium for high energy lasers. <i>Applied Physics Letters</i> , 2016 , 109, 052101	3.4	13
43	SiO ₂ /TiO ₂ distributed Bragg reflector near 1.5 μ m fabricated by e-beam evaporation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 061514	2.9	12
42	Beryllium acceptor binding energy in AlN. <i>Applied Physics Letters</i> , 2008 , 93, 141104	3.4	12
41	Delta-doped AlGa _N /Ga _N metaloxide semiconductor heterostructure field-effect transistors with high breakdown voltages. <i>Applied Physics Letters</i> , 2002 , 81, 4649-4651	3.4	12
40	High efficiency hexagonal boron nitride neutron detectors with 1 cm ² detection areas. <i>Applied Physics Letters</i> , 2020 , 116, 142102	3.4	11
39	Enhanced magnetization in erbium doped GaN thin films due to strain induced electric fields. <i>Applied Physics Letters</i> , 2011 , 99, 122506	3.4	11

38	Effects of surface recombination on the charge collection in h-BN neutron detectors. <i>Journal of Applied Physics</i> , 2019 , 125, 104501	2.5	10
37	Dramatic enhancement of 1.54 μm emission in Er doped GaN quantum well structures. <i>Applied Physics Letters</i> , 2015 , 106, 121106	3.4	10
36	Surfactant effects of gallium on quality of AlN epilayers grown via metal-organic chemical-vapour deposition on SiC substrates. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 285103	3	10
35	Optimizing growth conditions for GaN/Al _x Ga _{1-x} N multiple quantum well structures. <i>Applied Physics Letters</i> , 2000 , 76, 864-866	3.4	10
34	Lateral charge carrier transport properties of B-10 enriched hexagonal BN thick epilayers. <i>Applied Physics Letters</i> , 2019 , 115, 072108	3.4	9
33	Optical excitation cross section of erbium in GaN. <i>Applied Optics</i> , 2013 , 52, 1132-5	1.7	9
32	Effects of growth pressure on erbium doped GaN infrared emitters synthesized by metal organic chemical vapor deposition. <i>Optical Materials Express</i> , 2012 , 2, 1095	2.6	9
31	Semiconducting hexagonal boron nitride for deep ultraviolet photonics 2012 ,		9
30	Refractive index of erbium doped GaN thin films. <i>Applied Physics Letters</i> , 2014 , 105, 081104	3.4	8
29	Higher lying conduction band in GaN and AlN probed by photoluminescence spectroscopy. <i>Applied Physics Letters</i> , 2006 , 88, 261919	3.4	8
28	Growth and fabrication of GaN/Er:GaN/GaN core-cladding planar waveguides. <i>Applied Physics Letters</i> , 2019 , 114, 222105	3.4	7
27	Erbium doped GaN synthesized by hydride vapor-phase epitaxy. <i>Optical Materials Express</i> , 2015 , 5, 596	2.6	7
26	Enhancement of 1.5 μm emission under 980 nm resonant excitation in Er and Yb co-doped GaN epilayers. <i>Applied Physics Letters</i> , 2016 , 109, 152103	3.4	7
25	Observation of electronic Raman scattering from Mg-doped wurtzite GaN. <i>Applied Physics Letters</i> , 2000 , 76, 2889-2891	3.4	7
24	Temperature dependence of the energy bandgap of multi-layer hexagonal boron nitride. <i>Applied Physics Letters</i> , 2017 , 111, 132106	3.4	7
23	Excitation and emission mechanisms of Er:GaN gain medium in 1.5 μm region. <i>Applied Physics Letters</i> , 2017 , 111, 072109	3.4	6
22	Birefringence of GaN/AlGaIn optical waveguides. <i>Applied Physics Letters</i> , 2003 , 83, 1698-1700	3.4	6
21	Anisotropic index of refraction and structural properties of hexagonal boron nitride epilayers probed by spectroscopic ellipsometry. <i>Journal of Applied Physics</i> , 2020 , 127, 053103	2.5	5

20	Epitaxial growth and time-resolved photoluminescence studies of AlN epilayers 2003 , 4992, 202		5
19	Optical properties of Pr implanted GaN epilayers and Al _x Ga _{1-x} N alloys. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001 , 81, 167-170	3-1	5
18	Critical thickness of hexagonal GaBN/BN heterostructures. <i>Journal of Applied Physics</i> , 2019 , 125, 205703	2.5	4
17	Band structure and infrared optical transitions in ErN. <i>Applied Physics Letters</i> , 2020 , 116, 171104	3-4	4
16	Optoelectronic properties of hexagonal boron nitride epilayers 2013 ,		4
15	Resonant excitation cross-sections of erbium in freestanding GaN bulk crystals. <i>Applied Physics Letters</i> , 2018 , 112, 202103	3-4	4
14	Erbium-doped a-plane GaN epilayers synthesized by metal-organic chemical vapor deposition. <i>Optical Materials Express</i> , 2015 , 5, 274	2.6	3
13	Charge collection in h-BN neutron detectors at elevated temperatures. <i>Applied Physics Letters</i> , 2021 , 118, 092102	3-4	3
12	Probing the surface oxidation process in hexagonal boron nitride epilayers. <i>AIP Advances</i> , 2020 , 10, 025213	1.3	3
11	Metal-semiconductor-metal neutron detectors based on hexagonal boron nitride epitaxial layers 2012 ,		2
10	Polarization-resolved Er emission in Er doped GaN bulk crystals. <i>Journal of Applied Physics</i> , 2020 , 127, 243107	2.5	2
9	Band structure and ultraviolet optical transitions in ErN. <i>Applied Physics Letters</i> , 2021 , 118, 131108	3-4	2
8	Thermoelectric Properties of Er-doped InGaN Alloys for High Temperature Applications. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1325, 41		1
7	III-Nitride Photonic Crystals for Blue and UV Emitters. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 798, 424		1
6	Erbium energy levels in GaN grown by hydride vapor phase epitaxy. <i>AIP Advances</i> , 2020 , 10, 125006	1.5	1
5	Response of alpha particles in hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , 2017 , 110, 213502	3-4	0
4	AlGaIn/GaN Metal-Oxide-Semiconductor Heterostructure Field-Effect Transistors (MOSHFETs) with the Delta-Doped Barrier Layer. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 743, L9.11.1		
3	Correlation between Sheet Carrier Density-Mobility Product and Persistent Photoconductivity in AlGaIn/GaN Modulation Doped Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 595, 1		

- 2 Formation energy and optical excitation mechanisms of Er in GaN semi-bulk crystals. *Applied Physics Letters*, **2022**, 120, 052103 3-4
- 1 Charge collection and trapping mechanisms in hexagonal boron nitride epilayers. *Applied Physics Letters*, **2021**, 119, 221111 3-4