

# Jingyu Lin

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7997269/jingyu-lin-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

370  
papers

15,413  
citations

66  
h-index

107  
g-index

407  
ext. papers

16,694  
ext. citations

3.2  
avg, IF

6.39  
L-index

#	Paper	IF	Citations
370	Deep ultraviolet photoluminescence of water-soluble self-passivated graphene quantum dots. <i>ACS Nano</i> , <b>2012</b> , 6, 5102-10	16.7	1323
369	Deep ultraviolet to near-infrared emission and photoresponse in layered N-doped graphene quantum dots. <i>ACS Nano</i> , <b>2014</b> , 8, 6312-20	16.7	384
368	Band structure and fundamental optical transitions in wurtzite AlN. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 5163-5165	3.4	282
367	III-nitride blue and ultraviolet photonic crystal light emitting diodes. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 466-468	3.4	279
366	InGaN/GaN multiple quantum well solar cells with long operating wavelengths. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 063505	3.4	274
365	Unique optical properties of AlGaN alloys and related ultraviolet emitters. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 5264-5266	3.4	269
364	Structural phase behavior in II-VI semiconductor nanoparticles. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 831-833	3.4	216
363	III-nitride blue microdisplays. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1303-1305	3.4	209
362	Mg acceptor level in AlN probed by deep ultraviolet photoluminescence. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 878-880	3.4	204
361	III-Nitride full-scale high-resolution microdisplays. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 031116	3.4	198
360	Fundamental optical transitions in GaN. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 2784-2786	3.4	165
359	Epitaxially grown semiconducting hexagonal boron nitride as a deep ultraviolet photonic material. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 211110	3.4	156
358	InGaN/GaN multiple quantum well concentrator solar cells. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 073115	3.4	147
357	200nm deep ultraviolet photodetectors based on AlN. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 213510	3.4	146
356	Time-resolved photoluminescence studies of In <sub>x</sub> Ga <sub>1-x</sub> As <sub>1-y</sub> N <sub>y</sub> . <i>Applied Physics Letters</i> , <b>2000</b> , 76, 188-190	3.4	146
355	Deep impurity transitions involving cation vacancies and complexes in AlGaN alloys. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 222108	3.4	143
354	Nitride deep-ultraviolet light-emitting diodes with microlens array. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 173504	3.4	142

353	GaN microdisk light emitting diodes. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 631-633	3.4	140
352	Optical and electrical properties of Mg-doped p-type Al <sub>x</sub> Ga <sub>1-x</sub> N. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1210-1212	3.4	138
351	Nitride micro-LEDs and beyond--a decade progress review. <i>Optics Express</i> , <b>2013</b> , 21 Suppl 3, A475-84	3.3	137
350	Metastability and persistent photoconductivity in Mg-doped p-type GaN. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1808-1810	3.4	137
349	Nature of Mg impurities in GaN. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 1474-1476	3.4	130
348	Dependence of Ni/AlGa <sub>n</sub> Schottky barrier height on Al mole fraction. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 801-804	2.5	126
347	Structure and Photoluminescence Study of TiO <sub>2</sub> Nanoneedle Texture along Vertically Aligned Carbon Nanofiber Arrays. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 17127-17132	3.8	122
346	Temperature and compositional dependence of the energy band gap of AlGa <sub>n</sub> alloys. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 242104	3.4	122
345	Photoluminescence studies of impurity transitions in Mg-doped AlGa <sub>n</sub> alloys. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 091903	3.4	120
344	Enhanced light extraction in III-nitride ultraviolet photonic crystal light-emitting diodes. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 142-144	3.4	117
343	Mechanisms of band-edge emission in Mg-doped p-type GaN. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1883-1885	3.4	117
342	Hydrogen generation by solar water splitting using p-InGa <sub>n</sub> photoelectrochemical cells. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 052110	3.4	116
341	III-nitride photonic crystals. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1231-1233	3.4	115
340	Time-resolved photoluminescence studies of Al <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1252-1254	3.4	110
339	Photoluminescence studies of impurity transitions in AlGa <sub>n</sub> alloys. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 092107	3.4	103
338	Correlation between optoelectronic and structural properties and epilayer thickness of AlN. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 241101	3.4	100
337	InGa <sub>n</sub> /GaN quantum well interconnected microdisk light emitting diodes. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 3236-3238	3.4	100
336	Transport properties of highly conductive n-type Al-rich Al <sub>x</sub> Ga <sub>1-x</sub> N (x>0.7). <i>Applied Physics Letters</i> , <b>2004</b> , 85, 3769-3771	3.4	99

- 335 Enhanced p-type conduction in GaN and AlGa<sub>N</sub> by Mg-doping. *Applied Physics Letters*, **2003**, 82, 3041-3043 99
- 334 Electrical and optical properties of Mg-doped Al<sub>0.7</sub>Ga<sub>0.3</sub>N alloys. *Applied Physics Letters*, **2005**, 86, 092108 99
- 333 Dielectric strength, optical absorption, and deep ultraviolet detectors of hexagonal boron nitride epilayers. *Applied Physics Letters*, **2012**, 101, 171112 3-4 95
- 332 Correlation between optical and electrical properties of Mg-doped AlN epilayers. *Applied Physics Letters*, **2006**, 89, 152120 3-4 95
- 331 Time-resolved photoluminescence studies of InGa<sub>N</sub> epilayers. *Applied Physics Letters*, **1996**, 69, 2837-2839 95
- 330 Hexagonal boron nitride for deep ultraviolet photonic devices. *Semiconductor Science and Technology*, **2014**, 29, 084003 1.8 93
- 329 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 1.2 93
- 328 Piezoelectric effects on the optical properties of GaN/Al<sub>x</sub>Ga<sub>1-x</sub>N multiple quantum wells. *Applied Physics Letters*, **1998**, 73, 3426-3428 3-4 93
- 327 Quantum-confined Stark effects in semiconductor quantum dots. *Physical Review B*, **1995**, 52, 5913-5923 3 93
- 326 Thermoelectric properties of In<sub>x</sub>Ga<sub>1-x</sub>N alloys. *Applied Physics Letters*, **2008**, 92, 042112 3-4 91
- 325 Persistent photoconductivity in a two-dimensional electron gas system formed by an AlGa<sub>N</sub>/Ga<sub>N</sub> heterostructure. *Journal of Applied Physics*, **1997**, 82, 1227-1230 2.5 89
- 324 Optical and electrical properties of Al-rich AlGa<sub>N</sub> alloys. *Applied Physics Letters*, **2001**, 79, 3245-3247 3-4 88
- 323 Polarization of III-nitride blue and ultraviolet light-emitting diodes. *Applied Physics Letters*, **2005**, 86, 091107 87
- 322 Band-edge photoluminescence of AlN epilayers. *Applied Physics Letters*, **2002**, 81, 3365-3367 3-4 87
- 321 Deep ultraviolet picosecond time-resolved photoluminescence studies of AlN epilayers. *Applied Physics Letters*, **2003**, 82, 1694-1696 3-4 86
- 320 Effects of tensile and compressive strain on the luminescence properties of Al<sub>0.5</sub>In<sub>0.5</sub>Ga<sub>N</sub>/InGa<sub>N</sub> quantum well structures. *Applied Physics Letters*, **2000**, 77, 821-823 3-4 85
- 319 Nature of deep center emissions in GaN. *Applied Physics Letters*, **2010**, 96, 151902 3-4 84
- 318 Relaxation of persistent photoconductivity in Al<sub>0.3</sub>Ga<sub>0.7</sub>As. *Physical Review B*, **1990**, 42, 5855-5858 3-3 83

3 <sup>17</sup>	Recent developments of wide-bandgap semiconductor based UV sensors. <i>Diamond and Related Materials</i> , <b>2009</b> , 18, 860-864	3.5	80
3 <sup>16</sup>	III-nitride micro-emitter arrays: development and applications. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 094001	3	80
3 <sup>15</sup>	Percolation transition of persistent photoconductivity in II-VI mixed crystals. <i>Physical Review Letters</i> , <b>1990</b> , 64, 2547-2550	7.4	80
3 <sup>14</sup>	Quantum shift of band-edge stimulated emission in InGaN/GaN multiple quantum well light-emitting diodes. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 2978-2980	3.4	79
3 <sup>13</sup>	Direct hydrogen gas generation by using InGaN epilayers as working electrodes. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 162107	3.4	78
3 <sup>12</sup>	Epitaxial growth and demonstration of hexagonal BN/AlGaIn p-n junctions for deep ultraviolet photonics. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 061121	3.4	76
3 <sup>11</sup>	A study of the Au/Ni ohmic contact on p-GaN. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 4196	2.5	76
3 <sup>10</sup>	AlGaIn-based ultraviolet light-emitting diodes grown on AlN epilayers. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4777-4779	3.4	74
3 <sup>09</sup>	Development of microLED. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 100502	3.4	73
3 <sup>08</sup>	Band-edge exciton states in AlN single crystals and epitaxial layers. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4334	3.4	68
3 <sup>07</sup>	Growth and optical properties of In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N quaternary alloys. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 61-63	3.4	68
3 <sup>06</sup>	Growth of III-nitride photonic structures on large area silicon substrates. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 171909	3.4	67
3 <sup>05</sup>	Excitonic recombination in GaN grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 3387-3389	3.4	67
3 <sup>04</sup>	Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN band offsets determined by deep-level emission. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 1887-1890	2.5	64
3 <sup>03</sup>	Two-dimensional excitons in three-dimensional hexagonal boron nitride. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 191106	3.4	63
3 <sup>02</sup>	Achieving highly conductive AlGaIn alloys with high Al contents. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 1038-1040	3.4	63
3 <sup>01</sup>	The origin of deep-level impurity transitions in hexagonal boron nitride. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 021110	3.4	61
3 <sup>00</sup>	Electroluminescent properties of erbium-doped III-V light-emitting diodes. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1061-1063	3.4	61

299	Effects of well thickness and Si doping on the optical properties of GaN/AlGaN multiple quantum wells. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 1368-1370	3-4	58
298	Optical transitions in GaN/Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 2453-2455	3-4	58
297	Fabrication of n-type nickel doped B5C1+Inhomojunction and heterojunction diodes. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 1028-1030	3-4	57
296	Exciton localization in AlGaIn alloys. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 062103	3-4	57
295	Optical modes within III-nitride multiple quantum well microdisk cavities. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 1530-1532	3-4	57
294	Electrical and optical properties of p-type InGaIn. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 261904	3-4	56
293	Realization of highly efficient hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 072101	3-4	55
292	III-nitride ultraviolet light-emitting diodes with delta doping. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 566-568	3-4	54
291	Properties of Co-, Cr-, or Mn-implanted AlN. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 1592-1596	2-5	54
290	Optical resonance modes in GaN pyramid microcavities. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 763-765	3-4	54
289	Room temperature intrinsic optical transition in GaN epilayers: The band-to-band versus excitonic transitions. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 635-637	3-4	53
288	Exciton-phonon interaction in InGaIn/GaN and GaN/AlGaIn multiple quantum wells. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 2882-2884	3-4	53
287	Erbium-doped GaN epilayers synthesized by metal-organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 151903	3-4	53
286	Optical properties of AlN and GaN in elevated temperatures. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 3489-3491	3-4	53
285	GaN-based waveguide devices for long-wavelength optical communications. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1326-1328	3-4	51
284	Neutral-donor-bound exciton recombination dynamics in GaN grown by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 1653-1655	3-4	51
283	Persistent photoconductivity in Ga <sub>1-x</sub> In <sub>x</sub> NyAs <sub>1-y</sub> . <i>Applied Physics Letters</i> , <b>1999</b> , 75, 1899-1901	3-4	50
282	Photoluminescence studies of band-edge transitions in GaN epitaxial layers grown by plasma-assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 2675-2683	2-5	50

281	Persistent photoconductivity and related critical phenomena in Zn <sub>0.3</sub> Cd <sub>0.7</sub> Se. <i>Physical Review B</i> , <b>1989</b> , 40, 10025-10028	3-3	49
280	Comparison of optical transitions in InGaN quantum well structures and microdisks. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 4951-4954	2-5	48
279	Kinetics of persistent photoconductivity in Al <sub>0.3</sub> Ga <sub>0.7</sub> As and Zn <sub>0.3</sub> Cd <sub>0.7</sub> Se semiconductor alloys. <i>Physical Review B</i> , <b>1992</b> , 45, 13996-14004	3-3	48
278	Single phase In <sub>x</sub> Ga <sub>1-x</sub> N (0.25 ≤ x ≤ 0.63) alloys synthesized by metal organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 182107	3-4	47
277	Band structure of superlattice with graded interfaces. <i>Journal of Applied Physics</i> , <b>1987</b> , 61, 624-628	2-5	47
276	Review Hexagonal Boron Nitride Epilayers: Growth, Optical Properties and Device Applications. <i>ECS Journal of Solid State Science and Technology</i> , <b>2017</b> , 6, Q3012-Q3021	2	46
275	Mechanism of enhanced luminescence in In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N quaternary alloys. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 1397-1399	3-4	45
274	Free excitonic transitions in GaN, grown by metal-organic chemical-vapor deposition. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 7001-7004	2-5	45
273	Linewidths of excitonic luminescence transitions in AlGaIn alloys. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1829-1831	3-3	44
272	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> , <b>2015</b> , 783, 121-127	1-2	43
271	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> , <b>2014</b> , 748, 84-90	1-2	43
270	Optical and electrical properties of Mg-doped AlN nanowires grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 213105	3-4	43
269	Ultraviolet photoluminescence from Gd-implanted AlN epilayers. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 152107	3-4	43
268	Suppression of thermal conductivity in In <sub>x</sub> Ga <sub>1-x</sub> N alloys by nanometer-scale disorder. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 121906	3-4	42
267	1.54 μm emitters based on erbium doped InGaIn p-i-n junctions. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 141109	3-4	42
266	Erbium-doped GaN optical amplifiers operating at 1.54 μm. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 111109	3-4	42
265	Band-edge transitions in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 051110	3-4	42
264	Photoluminescence studies of Si-doped AlN epilayers. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 2787-2789	3-4	42

263	Nitride microlens arrays for blue and ultraviolet wavelength applications. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 3692-3694	3-4	42
262	Characterization of AlN metal-semiconductor-metal diodes in the spectral range of 440-600nm: Photoemission assessments. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 022108	3-4	41
261	Silicon doping dependence of highly conductive n-type Al <sub>0.7</sub> Ga <sub>0.3</sub> N. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4669-4671	3-4	41
260	The origins of leaky characteristics of Schottky diodes on p-GaN. <i>IEEE Transactions on Electron Devices</i> , <b>2003</b> , 50, 292-296	2-9	41
259	The incorporation of Nickel and Phosphorus dopants into Boron-Carbon alloy thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 67, 335-342	2-6	40
258	Excitonic luminescence linewidths in AlGaN alloys with high aluminum concentrations. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 2907-2909	3-4	40
257	Optical properties of GaN pyramids. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 1227-1229	3-4	40
256	Optical resonance modes in InGaN/GaN multiple-quantum-well microring cavities. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 2563-2565	3-4	40
255	Dynamics of a band-edge transition in GaN grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 3474-3476	3-4	40
254	Optical polarization in c-plane Al-rich AlN/Al <sub>x</sub> Ga <sub>1-x</sub> N single quantum wells. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 042103	3-4	39
253	The origin of 2.78 eV emission and yellow coloration in bulk AlN substrates. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 262104	3-4	38
252	Nature of optical transitions involving cation vacancies and complexes in AlN and AlGaN. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 221107	3-4	38
251	Size dependence of III-nitride microdisk light-emitting diode characteristics. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 3532-3534	3-4	38
250	Photoresponsivity of ultraviolet detectors based on In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N quaternary alloys. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 791-793	3-4	38
249	Well-width dependence of the quantum efficiencies of GaN/Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 3040-3042	3-4	38
248	Origin of the significantly enhanced optical transitions in layered boron nitride. <i>Physical Review B</i> , <b>2012</b> , 86,	3-3	37
247	Hexagonal boron nitride and 6H-SiC heterostructures. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 213505	3-4	37
246	High quality AlN for deep UV photodetectors. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 054101	3-4	37

245	AlN avalanche photodetectors. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 243503	3-4	37
244	Hybrid AlN/SiC deep ultraviolet Schottky barrier photodetectors. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 263505	3-4	37
243	Excitation dynamics of the 1.54 $\mu$ m emission in Er doped GaN synthesized by metal organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 051110	3-4	37
242	Mechanism of enhanced luminescence in In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N quaternary epilayers. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1480-1482	3-4	37
241	The origins of near band-edge transitions in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 052106	3-4	37
240	Evolution of phase separation in In-rich InGaN alloys. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 232105	3-4	36
239	Effects of plasma treatment on the Ohmic characteristics of Ti/Al/Ti/Au contacts to n-AlGaIn. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 082109	3-4	36
238	Persistent photoconductivity in II-VI and III-V semiconductor alloys and a novel infrared detector. <i>Journal of Applied Physics</i> , <b>1991</b> , 69, 6701-6703	2-5	36
237	Annealing of dry etch damage in metallized and bare (-201) Ga <sub>2</sub> O <sub>3</sub> . <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 051201	1-3	35
236	Optical properties of strain-free AlN nanowires grown by molecular beam epitaxy on Si substrates. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 223107	3-4	35
235	High mobility InN epilayers grown on AlN epilayer templates. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 172101	3-4	35
234	Ultraviolet photoluminescence from ferromagnetic Fe-doped AlN nanorods. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 193118	3-4	35
233	Cluster size and composition variations in yellow and red light-emitting InGaIn thin films upon thermal annealing. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 5388-5396	2-5	35
232	Charge storage and persistent photoconductivity in a Cd <sub>0.5</sub> Se <sub>0.5</sub> semiconductor alloy. <i>Physical Review B</i> , <b>1991</b> , 44, 13343-13348	3-3	35
231	Correlation between biaxial stress and free exciton transition in AlN epilayers. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 121117	3-4	34
230	Investigation of radiative tunneling in GaN/InGaIn single quantum well light-emitting diodes. <i>Solid-State Electronics</i> , <b>2002</b> , 46, 2291-2294	1-7	34
229	Origin of background electron concentration in In <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Physical Review B</i> , <b>2011</b> , 84,	3-3	33
228	Si-doped high Al-content AlGaIn epilayers with improved quality and conductivity using indium as a surfactant. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 092105	3-4	33

- 227 Optical properties of GaN/AlGa<sub>N</sub> multiple quantum well microdisks. *Applied Physics Letters*, **1997**, 71, 2898-2900 3.4 32
- 226 Effects of the wave function localization in AlInGa<sub>N</sub> quaternary alloys. *Applied Physics Letters*, **2007**, 91, 061125 3.4 32
- 225 Unintentionally doped n-type Al<sub>0.67</sub>Ga<sub>0.33</sub>N epilayers. *Applied Physics Letters*, **2005**, 86, 261902 3.4 32
- 224 Hexagonal boron nitride neutron detectors with high detection efficiencies. *Journal of Applied Physics*, **2018**, 123, 044501 2.5 31
- 223 Optical properties of the nitrogen vacancy in AlN epilayers. *Applied Physics Letters*, **2004**, 84, 1090-1092 3.4 31
- 222 Relaxation of stored charge carriers in a Zn<sub>0.3</sub>Cd<sub>0.7</sub>Se mixed crystal. *Physical Review B*, **1990**, 41, 5178-5187 3.7 31
- 221 Bandgap and exciton binding energies of hexagonal boron nitride probed by photocurrent excitation spectroscopy. *Applied Physics Letters*, **2016**, 109, 122101 3.4 31
- 220 A Simplified Method of Making Flexible Blue LEDs on a Plastic Substrate. *IEEE Photonics Journal*, **2015**, 7, 1-7 1.8 30
- 219 Layer-structured hexagonal (BN)C semiconductor alloys with tunable optical and electrical properties. *Journal of Applied Physics*, **2014**, 115, 093509 2.5 30
- 218 Electrical transport properties of Si-doped hexagonal boron nitride epilayers. *AIP Advances*, **2013**, 3, 122115 3.6 30
- 217 Growth and photoluminescence studies of Zn-doped AlN epilayers. *Applied Physics Letters*, **2006**, 89, 192111 3.4 30
- 216 Growth and photoluminescence studies of Al-rich Al<sub>N-1-x</sub>Ga<sub>1-x</sub>N quantum wells. *Applied Physics Letters*, **2006**, 89, 131922 3.4 30
- 215 Time-resolved photoluminescence studies of an ionized donor-bound exciton in GaN. *Applied Physics Letters*, **1999**, 74, 513-515 3.4 30
- 214 Large-Scale Growth of High-Quality Hexagonal Boron Nitride Crystals at Atmospheric Pressure from an FeCl<sub>3</sub> Flux. *Crystal Growth and Design*, **2017**, 17, 4932-4935 3.5 29
- 213 Determination of energy-band offsets between GaN and AlN using excitonic luminescence transition in AlGa<sub>N</sub> alloys. *Journal of Applied Physics*, **2006**, 99, 013705 2.5 29
- 212 Temperature-dependent photoluminescence and electron field emission properties of AlN nanotip arrays. *Applied Physics Letters*, **2009**, 94, 173106 3.4 28
- 211 Photoluminescence properties of AlN homoepilayers with different orientations. *Applied Physics Letters*, **2008**, 93, 041905 3.4 28
- 210 AlGa<sub>N</sub>/Ga<sub>N</sub>/AlN quantum-well field-effect transistors with highly resistive AlN epilayers. *Applied Physics Letters*, **2006**, 88, 073513 3.4 28

209	Effective mass of two-dimensional electron gas in an Al <sub>0.2</sub> Ga <sub>0.8</sub> N/GaN heterojunction. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 66-68	3-4	28
208	Effects of persistent photoconductivity on the characteristic performance of an AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructure ultraviolet detector. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2868-2870	3-4	28
207	Origin and roles of oxygen impurities in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 162103	3-4	27
206	Optical and magnetic behavior of erbium-doped Ga <sub>N</sub> epilayers grown by metal-organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 054106	3-4	27
205	III-nitride-based planar lightwave circuits for long wavelength optical communications. <i>IEEE Journal of Quantum Electronics</i> , <b>2005</b> , 41, 100-110	2	27
204	Effects of tensile, compressive, and zero strain on localized states in AlInGa <sub>N</sub> /InGa <sub>N</sub> quantum-well structures. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 3099-3101	3-4	26
203	Toward achieving flexible and high sensitivity hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 033507	3-4	25
202	Growth and deep ultraviolet picosecond time-resolved photoluminescence studies of AlN/GaN multiple quantum wells. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 3690-3692	3-4	25
201	Collective effects of interface roughness and alloy disorder in In <sub>x</sub> Ga <sub>1-x</sub> N/GaN multiple quantum wells. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 1724-1726	3-4	25
200	Probing carbon impurities in hexagonal boron nitride epilayers. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 182107	3-4	24
199	Realizing InGa <sub>N</sub> monolithic solar-photoelectrochemical cells for artificial photosynthesis. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 143901	3-4	24
198	Characterization of bulk hexagonal boron nitride single crystals grown by the metal flux technique. <i>Journal of Crystal Growth</i> , <b>2014</b> , 403, 110-113	1.6	24
197	Thermoelectric Properties of In <sub>0.3</sub> Ga <sub>0.7</sub> N Alloys. <i>Journal of Electronic Materials</i> , <b>2009</b> , 38, 1132-1135	1.9	24
196	Two-dimensional electron gas in AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1997</b> , 15, 1117		24
195	Mg acceptor level in InN epilayers probed by photoluminescence. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 012101	3-4	24
194	Optical transitions in Pr-implanted Ga <sub>N</sub> . <i>Applied Physics Letters</i> , <b>1999</b> , 75, 790-792	3-4	24
193	Enhancing erbium emission by strain engineering in Ga <sub>N</sub> heteroepitaxial layers. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 031908	3-4	23
192	Thermal annealing effects on an InGa <sub>N</sub> film with an average indium mole fraction of 0.31. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 3906-3908	3-4	23

- 191 MOCVD growth of GaBN on 6H-SiC (0001) substrates. *Journal of Electronic Materials*, **2000**, 29, 452-456 1.9 23
- 190 Dynamics of exciton transfer between the bound and the continuum states in GaAs-Al<sub>x</sub>Ga<sub>1-x</sub>As multiple quantum wells. *Physical Review B*, **1990**, 41, 12949-12952 3.3 23
- 189 Synthesis and properties of Cd<sub>1-x</sub>Mn<sub>x</sub>S diluted magnetic semiconductor ultrafine particles. *Journal of Magnetism and Magnetic Materials*, **1997**, 169, 289-302 2.8 22
- 188 Localized vibrational modes of carbon-hydrogen complexes in GaN. *Applied Physics Letters*, **1999**, 75, 659-661 3.4 22
- 187 Charge carrier transport properties in layer structured hexagonal boron nitride. *AIP Advances*, **2014**, 4, 107126 1.5 21
- 186 Optical enhancement of room temperature ferromagnetism in Er-doped GaN epilayers. *Applied Physics Letters*, **2009**, 95, 022510 3.4 21
- 185 Current-injected 1.54 $\mu$ m light emitting diodes based on erbium-doped GaN. *Applied Physics Letters*, **2008**, 93, 033502 3.4 21
- 184 Acceptor-bound exciton recombination dynamics in p-type GaN. *Applied Physics Letters*, **1995**, 67, 3295-3297 3.4 21
- 183 Probing exciton-phonon interaction in AlN epilayers by photoluminescence. *Applied Physics Letters*, **2009**, 95, 061106 3.4 20
- 182 Transition metal ion implantation into AlGa<sub>N</sub>. *Journal of Applied Physics*, **2003**, 94, 4956 2.5 20
- 181 Growth and device processing of hexagonal boron nitride epilayers for thermal neutron and deep ultraviolet detectors. *AIP Advances*, **2016**, 6, 075213 1.5 20
- 180 Excitation mechanisms of Er optical centers in GaN epilayers. *Applied Physics Letters*, **2015**, 107, 171105 3.4 19
- 179 Three-step growth method for high quality AlN epilayers. *Physica Status Solidi (A) Applications and Materials Science*, **2012**, 209, 126-129 1.6 19
- 178 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 2.9 19
- 177 Full-scale self-emissive blue and green microdisplays based on GaN micro-LED arrays **2012**, 19
- 176 High quality AlN grown on double layer AlN buffers on SiC substrate for deep ultraviolet photodetectors. *Applied Physics Letters*, **2012**, 101, 192106 3.4 19
- 175 Growth and photoluminescence studies of a-plane Al<sub>N-1-x</sub>Ga<sub>1-x</sub>N quantum wells. *Applied Physics Letters*, **2007**, 90, 221105 3.4 19
- 174 Thermally stable Schottky contacts on n-type GaN using ZrB<sub>2</sub>. *Applied Physics Letters*, **2006**, 88, 183505 3.4 19

173	Quantum-confined Stark effects in CdS <sub>1-x</sub> Se <sub>x</sub> quantum dots. <i>Physical Review B</i> , <b>1995</b> , 51, 5457-5460	3.3	19
172	Crystal field analysis of rare-earth ions energy levels in GaN. <i>Optical Materials</i> , <b>2014</b> , 37, 165-174	3.3	18
171	Probing the relationship between structural and optical properties of Si-doped AlN. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 131906	3.4	18
170	Sublimation growth of aluminum nitride crystals. <i>Journal of Crystal Growth</i> , <b>2006</b> , 297, 105-110	1.6	18
169	Dynamics of exciton localization in a CdSe <sub>0.5</sub> S <sub>0.5</sub> mixed crystal. <i>Physical Review B</i> , <b>1990</b> , 42, 7284-7287	3.3	18
168	Effects of Mg-doped AlN/AlGa <sub>0.5</sub> N superlattices on properties of p-GaN contact layer and performance of deep ultraviolet light emitting diodes. <i>AIP Advances</i> , <b>2014</b> , 4, 047122	1.5	17
167	Surface chemical and electronic properties of plasma-treated n-type Al <sub>0.5</sub> Ga <sub>0.5</sub> N. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2007</b> , 204, 3410-3416	1.6	17
166	III-Nitride Quantum Devices/Microphotonics. <i>Critical Reviews in Solid State and Materials Sciences</i> , <b>2003</b> , 28, 131-183	10.1	17
165	Acceptor-bound exciton transition in Mg-doped AlN epilayer. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 2271-2273	3.4	17
164	Fabrication and optical studies of AlGa <sub>0.5</sub> N/GaN quantum-well waveguides. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 12-14	3.4	17
163	Electrical transport properties of (BN)-rich hexagonal (BN)C semiconductor alloys. <i>AIP Advances</i> , <b>2014</b> , 4, 087141	1.5	16
162	Correlation between the optical loss and crystalline quality in erbium-doped GaN optical waveguides. <i>Applied Optics</i> , <b>2013</b> , 52, 5426-9	1.7	16
161	Carrier lifetime in erbium-doped GaN waveguide emitting in 1540 nm wavelength. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 241105	3.4	16
160	Quantum well intermixing in GaInNAs/GaAs structures. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 7581	2.5	16
159	Growth and optical studies of two-dimensional electron gas of Al-rich AlGa <sub>0.5</sub> N/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 1809-1811	3.4	16
158	Mode spacing anomaly in InGa <sub>0.5</sub> N blue lasers. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 1066-1068	3.4	16
157	Superlattice with multiple layers per period. <i>Physical Review B</i> , <b>1986</b> , 33, 5851-5853	3.3	16
156	Carbon-rich hexagonal (BN)C alloys. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 215703	2.5	15

155	Strong green luminescence in quaternary InAlGaN thin films. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1377-1379	3.4	15
154	Optical properties of a high-quality insulating GaN epilayer. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 3821-3823	3.4	15
153	Band-tail states in a Zn <sub>0.3</sub> Cd <sub>0.7</sub> Se semiconductor alloy probed by persistent photoconductivity. <i>Physical Review B</i> , <b>1992</b> , 45, 4520-4523	3.3	15
152	Layer number dependent optical properties of multilayer hexagonal BN epilayers. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 092102	3.4	14
151	High sensitivity hexagonal boron nitride lateral neutron detectors. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 222102	3.4	14
150	Temperature dependence of the energy bandgap of two-dimensional hexagonal boron nitride probed by excitonic photoluminescence. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 053503	2.5	14
149	Spectroscopic studies of Er-centers in MOCVD grown GaN layers highly doped with Er. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2008</b> , 146, 193-195	3.1	14
148	Time-resolved electroluminescence studies of III-nitride ultraviolet photonic-crystal light-emitting diodes. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 2104-2106	3.4	14
147	Nature of exciton transitions in hexagonal boron nitride. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 122101	3.4	14
146	Effects of double layer AlN buffer layers on properties of Si-doped Al <sub>x</sub> Ga <sub>1-x</sub> N for improved performance of deep ultraviolet light emitting diodes. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 123501	2.5	13
145	Photonic properties of erbium doped InGaN alloys grown on Si (001) substrates. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 081102	3.4	13
144	Effects of alloy disorder on the transport properties of Al <sub>x</sub> Ga <sub>1-x</sub> N epilayers probed by persistent photoconductivity. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1728-1730	3.4	13
143	Formation and dissolution of microcrystalline graphite in carbon-implanted GaN. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 5662-5665	2.5	13
142	Barrier-width dependence of quantum efficiencies of GaN/Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 1170-1172	3.4	13
141	Persistent photoconductivity in Zn <sub>0.04</sub> Cd <sub>0.96</sub> Te semiconductor thin films. <i>Physical Review B</i> , <b>1993</b> , 48, 8145-8151	3.3	13
140	Low-temperature epitaxial growth and photoluminescence characterization of GaN. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 2317-2319	3.4	13
139	Toward the realization of erbium-doped GaN bulk crystals as a gain medium for high energy lasers. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 052101	3.4	13
138	Formation energy of optically active Er <sup>3+</sup> centers in Er doped GaN. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 051114	3.4	12

137	SiO <sub>2</sub> /TiO <sub>2</sub> distributed Bragg reflector near 1.5 $\mu$ m fabricated by e-beam evaporation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2013</b> , 31, 061514	2.9	12
136	Beryllium acceptor binding energy in AlN. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 141104	3.4	12
135	Delta-doped AlGa <sub>x</sub> N/GaN metal-oxide-semiconductor heterostructure field-effect transistors with high breakdown voltages. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4649-4651	3.4	12
134	Plasma heating in highly excited GaN/AlGa <sub>x</sub> N multiple quantum wells. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2476-2478	3.4	12
133	High efficiency hexagonal boron nitride neutron detectors with 1 cm <sup>2</sup> detection areas. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 142102	3.4	11
132	Room-Temperature Lasing Action in GaN Quantum Wells in the Infrared 1.5 $\mu$ m Region. <i>ACS Photonics</i> , <b>2018</b> , 5, 1303-1309	6.3	11
131	Enhanced magnetization in erbium doped GaN thin films due to strain induced electric fields. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 122506	3.4	11
130	AlN MSM and Schottky photodetectors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 2148-2151		11
129	Persistent photoconductivity in In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N quaternary alloys. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1884-1886	3.4	11
128	Propagation properties of light in AlGa <sub>x</sub> N/GaN quantum-well waveguides. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2511-2513	3.4	11
127	Effects of surface recombination on the charge collection in h-BN neutron detectors. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 104501	2.5	10
126	Dramatic enhancement of 1.54 $\mu$ m emission in Er doped GaN quantum well structures. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 121106	3.4	10
125	Emission and absorption cross-sections of an Er:GaN waveguide prepared with metal organic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 121106	3.4	10
124	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> , <b>2012</b> , 45, 285103	3	10
123	Bulk AlN crystal growth by direct heating of the source using microwaves. <i>Journal of Crystal Growth</i> , <b>2004</b> , 262, 168-174	1.6	10
122	Optimizing growth conditions for GaN/Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum well structures. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 864-866	3.4	10
121	Effects of electron mass anisotropy on Hall factors in 6H-SiC. <i>Applied Physics Letters</i> , <b>1996</b> , 68, 1341-1343	3.4	10
120	. <i>IEEE Transactions on Magnetics</i> , <b>1994</b> , 30, 4930-4932	2	10

119	Lateral charge carrier transport properties of B-10 enriched hexagonal BN thick epilayers. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 072108	3.4	9
118	Optical excitation cross section of erbium in GaN. <i>Applied Optics</i> , <b>2013</b> , 52, 1132-5	1.7	9
117	Near infrared photonic devices based on Er-doped GaN and InGaN. <i>Optical Materials</i> , <b>2011</b> , 33, 1066-1070	3.3	9
116	Effects of growth pressure on erbium doped GaN infrared emitters synthesized by metal organic chemical vapor deposition. <i>Optical Materials Express</i> , <b>2012</b> , 2, 1095	2.6	9
115	Semiconducting hexagonal boron nitride for deep ultraviolet photonics <b>2012</b> ,		9
114	Optical transitions in InGaN/AlGaIn single quantum wells. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1997</b> , 15, 1139		9
113	Deep ultraviolet photoluminescence studies of AlN photonic crystals. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 133113	3.4	9
112	Dynamics of localized excitons in InGaIn/GaN quantum wells. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1998</b> , 16, 2215		9
111	Electric-field-enhanced persistent photoconductivity in a Zn <sub>0.02</sub> Cd <sub>0.98</sub> Te semiconductor alloy. <i>Physical Review B</i> , <b>1992</b> , 46, 3810-3816	3.3	9
110	Refractive index of erbium doped GaN thin films. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 081104	3.4	8
109	Valence band structure of AlN probed by photoluminescence. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 041114	3.4	8
108	Higher lying conduction band in GaN and AlN probed by photoluminescence spectroscopy. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 261919	3.4	8
107	Optical properties of GaN/AlN multiple quantum wells. <i>Solid State Communications</i> , <b>2004</b> , 131, 389-392	1.6	8
106	Studies of field-induced nonequilibrium electron transport in an In <sub>x</sub> Ga <sub>1-x</sub> N (x>0.6) epilayer grown on GaN. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1413-1415	3.4	8
105	Evidence for bistable defects in 6H-SiC. <i>Solid State Communications</i> , <b>1994</b> , 89, 995-998	1.6	8
104	DX centers in Al <sub>0.34</sub> Ga <sub>0.66</sub> As amorphous thin films. <i>Solid State Communications</i> , <b>1993</b> , 87, 787-790	1.6	8
103	High-Quality Al-Rich AlGaIn Alloys. <i>Springer Series in Materials Science</i> , <b>2012</b> , 29-81	0.9	8
102	Photoluminescence quantum efficiency of Er optical centers in GaN epilayers. <i>Scientific Reports</i> , <b>2017</b> , 7, 39997	4.9	7

101	Growth and fabrication of GaN/Er:GaN/GaN core-cladding planar waveguides. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 222105	3.4	7
100	Erbium doped GaN synthesized by hydride vapor-phase epitaxy. <i>Optical Materials Express</i> , <b>2015</b> , 5, 596	2.6	7
99	Enhancement of 1.5 $\mu$ m emission under 980 nm resonant excitation in Er and Yb co-doped GaN epilayers. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 152103	3.4	7
98	Near-field optical study of AlGaN/GaN quantum-well waveguide. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1832-1834	3.4	7
97	Free nucleation of aluminum nitride single crystals in HPBN crucible by sublimation. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2005</b> , 117, 99-104	3.1	7
96	Annealing behavior of luminescence from erbium-implanted GaN films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 81, 127-131	3.1	7
95	Observation of electronic Raman scattering from Mg-doped wurtzite GaN. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 2889-2891	3.4	7
94	Metal-insulator transition in semiconductor alloys probed by persistent photoconductivity. <i>Physical Review B</i> , <b>1995</b> , 51, 4132-4136	3.3	7
93	Semiconductor superlattices with periodic disorder. <i>Journal of Applied Physics</i> , <b>1988</b> , 63, 1984-1989	2.5	7
92	Temperature dependence of the energy bandgap of multi-layer hexagonal boron nitride. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 132106	3.4	7
91	Hyperspectral Nonlinear Optical Light Generation from a Monolithic GaN Microcavity. <i>Advanced Optical Materials</i> , <b>2017</b> , 5, 1600804	8.1	6
90	Excitation and emission mechanisms of Er:GaN gain medium in 1.5 $\mu$ m region. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 072109	3.4	6
89	Excitation cross section of erbium-doped GaN waveguides under 980 nm optical pumping. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 051106	3.4	6
88	Er-Doped GaN and In <sub>x</sub> Ga <sub>1-x</sub> N for Optical Communications. <i>Topics in Applied Physics</i> , <b>2010</b> , 115-157	0.5	6
87	Deep ultraviolet photoluminescence of Tm-doped AlGaIn alloys. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 111103	3.4	6
86	Optical and magneto-optical properties of erbium doped InGaIn and GaN epilayers. <i>Optical Materials</i> , <b>2011</b> , 33, 1059-1062	3.3	6
85	Achieving conductive high Al-content AlGaIn alloys for deep UV photonics <b>2007</b> , 6479, 265		6
84	Birefringence of GaN/AlGaIn optical waveguides. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1698-1700	3.4	6

83	Optical Transitions and Recombination Lifetimes in GaN and InGaN Epilayers, and InGaN/GaN and GaN/AlGaN Multiple Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 449, 829		6
82	Band structure of a periodic potential with two wells and two barriers per period. <i>American Journal of Physics</i> , <b>1987</b> , 55, 462-465	0.7	6
81	Anisotropic index of refraction and structural properties of hexagonal boron nitride epilayers probed by spectroscopic ellipsometry. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 053103	2.5	5
80	Optical properties of GaN/Er:GaN/GaN core-cladding planar waveguides. <i>Applied Physics Express</i> , <b>2019</b> , 12, 075505	2.4	5
79	Surface emission of In <sub>x</sub> Ga <sub>1-x</sub> N epilayers under strong optical excitation. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 984-986	3.4	5
78	Epitaxial growth and time-resolved photoluminescence studies of AlN epilayers <b>2003</b> , 4992, 202		5
77	Optical properties of Pr implanted GaN epilayers and Al <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 81, 167-170	3.1	5
76	Band structure of non-ideal semiconductor superlattices. <i>Superlattices and Microstructures</i> , <b>1987</b> , 3, 689-695		5
75	Critical thickness of hexagonal GaBN/BN heterostructures. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 205703	2.5	4
74	Band structure and infrared optical transitions in ErN. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 171104	3.4	4
73	Probing of local alloy disorder in InGaN using Er <sup>3+</sup> ions. <i>Optical Materials</i> , <b>2014</b> , 36, 1730-1733	3.3	4
72	Optoelectronic properties of hexagonal boron nitride epilayers <b>2013</b> ,		4
71	Metastable Giant Moments in Gd-Implanted GaN, Si, and Sapphire. <i>Journal of Superconductivity and Novel Magnetism</i> , <b>2011</b> , 24, 2123-2128	1.5	4
70	Photoluminescence properties of erbium doped InGaN epilayers. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 041113	3.4	4
69	X-ray diffraction analysis of the defect structure in Al <sub>x</sub> Ga <sub>1-x</sub> N films grown by metalorganic chemical vapor deposition. <i>Journal of Materials Science</i> , <b>2004</b> , 39, 1853-1855	4.3	4
68	Deep bandtail states picosecond intensity-dependent carrier dynamics of GaN epilayer under high excitation. <i>Applied Physics B: Lasers and Optics</i> , <b>2005</b> , 80, 521-526	1.9	4
67	Time-Resolved Photoluminescence Studies of Indium-Rich InGaN Alloys. <i>Chinese Physics Letters</i> , <b>2005</b> , 22, 472-474	1.8	4
66	Structure and spin-glass properties of Cd/sub 0.5/Mn/sub 0.5/S diluted magnetic semiconductor quantum dots. <i>IEEE Transactions on Magnetics</i> , <b>1995</b> , 31, 3761-3763	2	4

65	Disorder and persistent photoconductivity in ZnxCd1-xSe semiconductor alloys. <i>Physical Review B</i> , <b>1996</b> , 54, 1471-1473	3.3	4
64	Precession of Kepler's orbit. <i>American Journal of Physics</i> , <b>1985</b> , 53, 694-695	0.7	4
63	Direct detection of rare earth ion distributions in gallium nitride and its influence on growth morphology. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 013102	2.5	4
62	Current injection 154 nm light-emitting devices based on Er-doped GaN/AlGaIn multiple quantum wells. <i>Optical Materials Express</i> , <b>2016</b> , 6, 3476	2.6	4
61	Resonant excitation cross-sections of erbium in freestanding GaN bulk crystals. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 202103	3.4	4
60	Erbium-doped a-plane GaN epilayers synthesized by metal-organic chemical vapor deposition. <i>Optical Materials Express</i> , <b>2015</b> , 5, 274	2.6	3
59	Erbium-doped AlN epilayers synthesized by metal-organic chemical vapor deposition. <i>Optical Materials Express</i> , <b>2015</b> , 5, 648	2.6	3
58	Synthesis and optical characterization of erbium-doped III-N double heterostructures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2003</b> , 105, 118-121	3.1	3
57	Non-Equilibrium Acceptor Concentration in GaN:Mg Grown by Metalorganic Chemical Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 798, 448		3
56	Measurement of the Al mole fraction of bulk AlGaIn and AlGaIn/GaN heterostructure by photoconductance method. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 2696-2699	2.5	3
55	Direct observation of edge luminescence excited by long-lived-exciton-polariton propagation in CdS. <i>Physical Review B</i> , <b>1989</b> , 40, 1385-1387	3.3	3
54	Dynamics of bound-exciton energy transformation to edge-luminescence centers in CdS. <i>Journal of Luminescence</i> , <b>1990</b> , 45, 251-253	3.8	3
53	Charge collection in h-BN neutron detectors at elevated temperatures. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 092102	3.4	3
52	Probing the surface oxidation process in hexagonal boron nitride epilayers. <i>AIP Advances</i> , <b>2020</b> , 10, 025213		3
51	Thermal neutron detectors based on hexagonal boron nitride epilayers <b>2016</b> ,		2
50	Metal-semiconductor-metal neutron detectors based on hexagonal boron nitride epitaxial layers <b>2012</b> ,		2
49	GaN Light-Emitting Triodes for High-Efficiency Hole Injection. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, G734	3.9	2
48	Mg-doped Al-rich AlGaIn alloys for deep UV emitters <b>2004</b> ,		2

47	Advances in III-nitride micro-size light emitters. <i>III-Vs Review</i> , <b>2001</b> , 14, 32-37		2
46	Mechanism of photoluminescence in GaN/Al <sub>0.2</sub> Ga <sub>0.8</sub> N superlattices. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3806-3808	3-4	2
45	Growth and Characterization of BxGa <sub>1-x</sub> N on 6H-SiC (0001) by MOVPE. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 537, 1		2
44	Growth and Characterization of BxGa <sub>1-x</sub> N on 6H-SiC (0001) by Movpe. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 429-434		2
43	Electronic structure and dispersion of compensated n-i-p-i superlattices with small period lengths. <i>Physical Review B</i> , <b>1989</b> , 40, 5561-5566	3-3	2
42	High-efficiency and high-sensitivity thermal neutron detectors based on hexagonal BN epilayers <b>2017</b> ,		2
41	Polarization-resolved Er emission in Er doped GaN bulk crystals. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 243107	2.5	2
40	Band structure and ultraviolet optical transitions in ErN. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 131108	3-4	2
39	Synthesis and photoluminescence properties of hexagonal BGaN alloys and quantum wells. <i>Applied Physics Express</i> , <b>2019</b> , 12, 011002	2.4	2
38	Electrical transport properties of hexagonal boron nitride epilayers. <i>Semiconductors and Semimetals</i> , <b>2021</b> , 107, 393-454	0.6	2
37	Thermoelectric Properties of Er-doped InGaN Alloys for High Temperature Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1325, 41		1
36	Photoluminescence Properties Of Gan/AlGa <sub>x</sub> N Multiple Quantum Well Microdisks. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 482, 684		1
35	Growth and optical properties of a-plane AlN and Al rich AlN/Al <sub>x</sub> Ga <sub>1-x</sub> N quantum wells grown on r-plane sapphire substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 1568-1570		1
34	III-Nitride Photonic Crystals for Blue and UV Emitters. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 798, 424		1
33	Field-induced non-equilibrium electron transport in an In <sub>0.4</sub> Ga <sub>0.6</sub> N epilayer grown on GaN studied by subpicosecond Raman spectroscopy. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S427-S429	1.8	1
32	Comment on Spectral identification of thin film coated and solid form semiconductor neutron detectors by McGregor and Shultis. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2005</b> , 536, 228-231	1.2	1
31	Transient characteristics of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterojunction field-effect transistors. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 4046-4048	3-4	1
30	Persistent Photoconductivity in p-Type GaN Epilayers and n-Type AlGa <sub>x</sub> N/GaN Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1996</b> , 449, 537		1

29	Persistent photoconductivity in Cd <sub>0.7</sub> Zn <sub>0.3</sub> Se mixed crystals. <i>Journal of Luminescence</i> , <b>1990</b> , 45, 198-200,8		1
28	Erbium-doped GaN bulk crystals as a gain medium for eye-safe high energy lasers <b>2018</b> ,		1
27	Erbium energy levels in GaN grown by hydride vapor phase epitaxy. <i>AIP Advances</i> , <b>2020</b> , 10, 125006	1.5	1
26	Response of alpha particles in hexagonal boron nitride neutron detectors. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 213502	3.4	0
25	Temperature dependence studies of Er optical centers in GaN epilayers grown by MOCVD. <i>MRS Advances</i> , <b>2017</b> , 2, 135-140	0.7	0
24	Piezoelectric Effects in GaN/AlGa <sub>n</sub> Multiple Quantum Wells Probed by Picosecond Time-Resolved Photoluminescence. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 130-135		0
23	Effects of unique band structure of h-BN probed by photocurrent excitation spectroscopy. <i>Applied Physics Express</i> , <b>2022</b> , 15, 051005	2.4	0
22	Well Thickness and Doping Effects, and Room Temperature Emission Mechanisms in InGa <sub>n</sub> /Ga <sub>n</sub> and GaN/AlGa <sub>n</sub> Multiple Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 482, 678		
21	Al rich AlN/AlGa <sub>n</sub> Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 955, 1		
20	Erbium-doped GaN epilayers synthesized by metal-organic chemical vapor deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 955, 1		
19	Investigation of The Electrical and Chemical Properties of Plasma-Treated AlGa <sub>n</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 955, 1		
18	Optical resonant modes in InGa <sub>n</sub> MQW/Ga <sub>n</sub> micro-cone. <i>Current Applied Physics</i> , <b>2002</b> , 2, 383-387	2.6	
17	Compositional changes in erbium-implanted GaN films due to annealing. <i>Journal of Electronic Materials</i> , <b>2003</b> , 32, 382-387	1.9	
16	Thermal annealing effects on the optical properties of high-indium InGa <sub>n</sub> epi-layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 2654-2657		
15	Delta-doped AlGa <sub>n</sub> /Ga <sub>n</sub> Heterostructure Field-Effect Transistors with Incorporation of AlN Epilayers. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 798, 102		
14	Visible and Infrared Emission from Er-doped III-N Light Emitting Diodes. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 866, 76		
13	AlGa <sub>n</sub> /Ga <sub>n</sub> Metal-Oxide-Semiconductor Heterostructure Field-Effect Transistors (MOSHFETs) with the Delta-Doped Barrier Layer. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 743, L9.11.1		
12	Fabrication and Characterization of In <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N Ultraviolet Detectors. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 639, 1071		

- 11 Piezoelectric effects on the dynamics of optical transitions in GaN/Al<sub>x</sub>Ga<sub>1-x</sub>N multiple quantum wells **1999**, 3624, 198
- 10 Correlation between Sheet Carrier Density-Mobility Product and Persistent Photoconductivity in ALGAN/GAN Modulation Doped Heterostructures. *Materials Research Society Symposia Proceedings*, **1999**, 595, 1
- 9 Time-Resolved Photoluminescence Studies of In<sub>x</sub>Ga<sub>1-x</sub>As<sub>1-y</sub>N<sub>y</sub>. *Materials Research Society Symposia Proceedings*, **1999**, 607, 153
- 8 Optical Properties of Mg-GaN, GaN/AlGa<sub>N</sub> SCH structures, and GaN on ZnO Substrates. *Materials Research Society Symposia Proceedings*, **1995**, 395, 527
- 7 The ground state of a particle under the influence of a uniformly charged sphere. *American Journal of Physics*, **1986**, 54, 1046-1048 0.7
- 6 Formation energy and optical excitation mechanisms of Er in GaN semi-bulk crystals. *Applied Physics Letters*, **2022**, 120, 052103 3.4
- 5 Charge collection and trapping mechanisms in hexagonal boron nitride epilayers. *Applied Physics Letters*, **2021**, 119, 221111 3.4
- 4 Correlation Between Sheet Carrier Density-Mobility Product and Persistent Photoconductivity in AlGa<sub>N</sub>/Ga<sub>N</sub> Modulation Doped Heterostructures. *MRS Internet Journal of Nitride Semiconductor Research*, **2000**, 5, 626-632
- 3 AlN **2011**, 21-68
- 2 Development of nitride microLEDs and displays. *Semiconductors and Semimetals*, **2021**, 1-56 0.6
- 1 A conductive AFM study of carbon-rich hexagonal (BN)C semiconductor alloys. *MRS Communications*, **1** 2.7