

Piotr Perlin

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200
papers

3,605
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27
h-index

54
g-index

258
ext. papers

3,995
ext. citations

2.4
avg, IF

4.55
L-index

#	Paper	IF	Citations
200	Raman scattering and x-ray-absorption spectroscopy in gallium nitride under high pressure. <i>Physical Review B</i> , 1992 , 45, 83-89	3.3	498
199	Blue-temperature-induced shift and band-tail emission in InGaN-based light sources. <i>Applied Physics Letters</i> , 1997 , 71, 569-571	3.4	455
198	Low-temperature study of current and electroluminescence in InGaN/AlGaIn/GaN double-heterostructure blue light-emitting diodes. <i>Applied Physics Letters</i> , 1996 , 69, 1680-1682	3.4	146
197	Raman-scattering studies of aluminum nitride at high pressure. <i>Physical Review B</i> , 1993 , 47, 2874-2877	3.3	116
196	InGaIn/GaN quantum wells studied by high pressure, variable temperature, and excitation power spectroscopy. <i>Applied Physics Letters</i> , 1998 , 73, 2778-2780	3.4	88
195	Visible light communications using a directly modulated 422 nm GaN laser diode. <i>Optics Letters</i> , 2013 , 38, 3792-4	3	86
194	Influence of pressure on photoluminescence and electroluminescence in GaN/InGaIn/AlGaIn quantum wells. <i>Applied Physics Letters</i> , 1997 , 70, 2993-2995	3.4	83
193	Reduction of the energy gap pressure coefficient of GaN due to the constraining presence of the sapphire substrate. <i>Journal of Applied Physics</i> , 1999 , 85, 2385-2389	2.5	78
192	Pressure and temperature dependence of the absorption edge of a thick Ga _{0.92} In _{0.08} As _{0.985} N _{0.015} layer. <i>Applied Physics Letters</i> , 1998 , 73, 3703-3705	3.4	66
191	Degradation mechanisms in InGaIn laser diodes grown on bulk GaN crystals. <i>Applied Physics Letters</i> , 2006 , 88, 2011-11	3.4	64
190	Bulk GaN crystal growth by the high-pressure ammonothermal method. <i>Journal of Crystal Growth</i> , 2007 , 300, 11-16	1.6	63
189	Blue-violet InGaIn laser diodes grown on bulk GaN substrates by plasma-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005 , 86, 0111-14	3.4	62
188	Interband optical absorption in free standing layer of Ga _{0.96} In _{0.04} As _{0.99} N _{0.01} . <i>Applied Physics Letters</i> , 2000 , 76, 1279-1281	3.4	62
187	Single-quantum well InGaIn green light emitting diode degradation under high electrical stress. <i>Microelectronics Reliability</i> , 1999 , 39, 1219-1227	1.2	51
186	Growth of 1.3 μ m InGaAsN laser material on GaAs by molecular beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999 , 17, 1272		48
185	The effects of indium concentration and well-thickness on the mechanisms of radiative recombination in In _x Ga _{1-x} N quantum wells. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 2000 , 5, 1		46
184	Effect of internal absorption on cathodoluminescence from GaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1998 , 3, 1		46

183	60mW continuous-wave operation of InGaN laser diodes made by plasma-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2006 , 88, 221108	3-4	45
182	Role of the electron blocking layer in the low-temperature collapse of electroluminescence in nitride light-emitting diodes. <i>Applied Physics Letters</i> , 2007 , 90, 103507	3-4	44
181	Optically pumped 500 nm InGaN green lasers grown by plasma-assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2011 , 110, 063110	2-5	39
180	Fully-screened polarization-induced electric fields in blue-violet InGaN/GaN light-emitting devices grown on bulk GaN. <i>Applied Physics Letters</i> , 2005 , 87, 041109	3-4	37
179	Correlation between luminescence and compositional striations in InGaN layers grown on miscut GaN substrates. <i>Applied Physics Letters</i> , 2007 , 91, 211904	3-4	35
178	Tunneling current and electroluminescence in InGaN: Zn,Si/AlGaIn/GaN blue light emitting diodes. <i>Journal of Electronic Materials</i> , 1997 , 26, 311-319	1-9	34
177	True-blue laser diodes with tunnel junctions grown monolithically by plasma-assisted molecular beam epitaxy. <i>Applied Physics Express</i> , 2018 , 11, 034103	2-4	34
176	Indium incorporation into InGaIn and InAlIn layers grown by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2011 , 318, 496-499	1-6	32
175	High power blue-violet InGaIn laser diodes grown on bulk GaN substrates by plasma-assisted molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , 2005 , 20, 809-813	1-8	30
174	Cavity suppression in nitride based superluminescent diodes. <i>Journal of Applied Physics</i> , 2012 , 111, 083105	1-5	27
173	Substrate misorientation induced strong increase in the hole concentration in Mg doped GaN grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2008 , 93, 172117	3-4	26
172	High-Optical-Power InGaIn Superluminescent Diodes with U-shape Waveguide. <i>Applied Physics Express</i> , 2013 , 6, 092102	2-4	25
171	Ni/Au contacts to p-type GaIn structure and properties. <i>Solid-State Electronics</i> , 2010 , 54, 701-709	1-7	25
170	Free and bound excitons in GaIn/AlGaIn homoepitaxial quantum wells grown on bulk GaIn substrate along the nonpolar (1120) direction. <i>Applied Physics Letters</i> , 2005 , 86, 162112	3-4	25
169	Graded-index separate confinement heterostructure InGaIn laser diodes. <i>Applied Physics Letters</i> , 2013 , 103, 261107	3-4	24
168	Application of a composite plasmonic substrate for the suppression of an electromagnetic mode leakage in InGaIn laser diodes. <i>Applied Physics Letters</i> , 2009 , 95, 261108	3-4	24
167	Enhancement of optical confinement factor by InGaIn waveguide in blue laser diodes grown by plasma-assisted molecular beam epitaxy. <i>Applied Physics Express</i> , 2015 , 8, 032103	2-4	23
166	Elimination of AlGaIn epilayer cracking by spatially patterned AlN mask. <i>Applied Physics Letters</i> , 2006 , 88, 121124	3-4	22

165	Elimination of leakage of optical modes to GaN substrate in nitride laser diodes using a thick InGaN waveguide. <i>Applied Physics Express</i> , 2016 , 9, 092103	2.4	21
164	Lateral Control of Indium Content and Wavelength of III-Nitride Diode Lasers by Means of GaN Substrate Patterning. <i>Applied Physics Express</i> , 2012 , 5, 021001	2.4	21
163	Effect of hydrogen during growth of quantum barriers on the properties of InGaN quantum wells. <i>Journal of Crystal Growth</i> , 2015 , 414, 38-41	1.6	20
162	InGaN Laser Diode Mini-Arrays. <i>Applied Physics Express</i> , 2011 , 4, 062103	2.4	20
161	Efficient radiative recombination and potential profile fluctuations in low-dislocation InGaN/GaN multiple quantum wells on bulk GaN substrates. <i>Journal of Applied Physics</i> , 2005 , 97, 103507	2.5	20
160	Influence of hydrogen and TMIn on indium incorporation in MOVPE growth of InGaN layers. <i>Journal of Crystal Growth</i> , 2014 , 402, 330-336	1.6	19
159	Effect of efficiency droop in violet and blue InGaN laser diodes. <i>Applied Physics Letters</i> , 2009 , 95, 071108	3.4	19
158	Anomalous temperature characteristics of single wide quantum well InGaN laser diode. <i>Applied Physics Letters</i> , 2006 , 88, 071121	3.4	19
157	Spatial distribution of electron concentration and strain in bulk GaN single crystals - relation to growth mechanism. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 449, 519		19
156	Continuous-wave operation of (Al,In)GaN distributed-feedback laser diodes with high-order notched gratings. <i>Applied Physics Express</i> , 2018 , 11, 112701	2.4	19
155	Hydrogen diffusion in GaN:Mg and GaN:Si. <i>Journal of Alloys and Compounds</i> , 2018 , 747, 354-358	5.7	18
154	Role of dislocation-free GaN substrates in the growth of indium containing optoelectronic structures by plasma-assisted MBE. <i>Journal of Crystal Growth</i> , 2007 , 305, 346-354	1.6	18
153	Temperature dependence of superluminescence in InGaN-based superluminescent light emitting diode structures. <i>Journal of Applied Physics</i> , 2010 , 108, 013110	2.5	17
152	GaN thin films by growth on Ga-rich GaN buffer layers. <i>Journal of Applied Physics</i> , 2000 , 88, 6032-6036	2.5	17
151	Nitride superluminescent diodes with broadened emission spectrum fabricated using laterally patterned substrate. <i>Optics Express</i> , 2016 , 24, 9673-82	3.3	17
150	True-Blue Nitride Laser Diodes Grown by Plasma-Assisted Molecular Beam Epitaxy. <i>Applied Physics Express</i> , 2012 , 5, 112103	2.4	16
149	Nitride-based quantum structures and devices on modified GaN substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 1130-1134	1.6	15
148	AlGaIn-Free Laser Diodes by Plasma-Assisted Molecular Beam Epitaxy. <i>Applied Physics Express</i> , 2012 , 5, 022104	2.4	15

147	InGaN laser diodes operating at 450-60 nm grown by rf-plasma MBEa). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012 , 30, 02B102	1.3	15
146	. <i>Proceedings of the IEEE</i> , 2010 , 98, 1214-1219	14.3	15
145	Design and optimization of InGaN superluminescent diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 997-1004	1.6	14
144	AlGaInN laser diode technology for GHz high-speed visible light communication through plastic optical fiber and water. <i>Optical Engineering</i> , 2016 , 55, 026112	1.1	14
143	Hole carrier concentration and photoluminescence in magnesium doped InGaN and GaN grown on sapphire and GaN misoriented substrates. <i>Journal of Applied Physics</i> , 2010 , 108, 023516	2.5	14
142	Optically pumped GaN/AlGaIn separate-confinement heterostructure laser grown along the (112̄0) nonpolar direction. <i>Applied Physics Letters</i> , 2007 , 90, 081104	3.4	14
141	High power nitride laser diodes grown by plasma assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2015 , 425, 398-400	1.6	13
140	Universal behavior of photoluminescence in GaN-based quantum wells under hydrostatic pressure governed by built-in electric field. <i>Journal of Applied Physics</i> , 2012 , 112, 053509	2.5	13
139	MBE fabrication of III-N-based laser diodes and its development to industrial system. <i>Journal of Crystal Growth</i> , 2013 , 378, 278-282	1.6	13
138	Comprehensive studies of light emission from GaN/InGaIn/AlGaIn single-quantum-well structures. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 803-807	1.6	13
137	Band-to-band character of photoluminescence from InN and In-rich InGaIn revealed by hydrostatic pressure studies. <i>Applied Physics Letters</i> , 2006 , 89, 121915	3.4	13
136	Life tests and failure mechanisms of GaN/AlGaIn/InGaIn light-emitting diodes 1998 ,		13
135	Determination of gain in AlGaIn cladding free nitride laser diodes. <i>Applied Physics Letters</i> , 2013 , 103, 061102	3.4	12
134	InAlGaIn superluminescent diodes fabricated on patterned substrates: an alternative semiconductor broadband emitter. <i>Photonics Research</i> , 2017 , 5, A30	6	12
133	Ultraviolet laser diodes grown on semipolar (202̄1) GaN substrates by plasma-assisted molecular beam epitaxy. <i>Applied Physics Letters</i> , 2013 , 102, 251101	3.4	12
132	Secondary ions mass spectroscopy measurements of dopant impurities in highly stressed InGaIn laser diodes. <i>Applied Physics Letters</i> , 2011 , 98, 241115	3.4	12
131	Effects of high electrical stress on GaN/InGaIn/AlGaIn single-quantum-well light-emitting diodes. <i>Journal of Crystal Growth</i> , 1998 , 189-190, 808-811	1.6	12
130	Mode dynamics of high power (InAl)GaIn based laser diodes grown on bulk GaN substrate. <i>Journal of Applied Physics</i> , 2007 , 101, 083109	2.5	12

129	InGaN laser diodes with reduced AlGaIn cladding thickness fabricated on GaN plasmonic substrate. <i>Applied Physics Letters</i> , 2013 , 102, 151102	3.4	11
128	450 nm (Al,In)GaIn optical amplifier with double 'j-shape' waveguide for master oscillator power amplifier systems. <i>Optics Express</i> , 2018 , 26, 7351-7357	3.3	10
127	Highly doped GaN: a material for plasmonic claddings for blue/green InGaIn laser diodes 2012 ,		10
126	Fabrication and properties of GaN-based lasers. <i>Journal of Crystal Growth</i> , 2008 , 310, 3979-3982	1.6	10
125	Photo-etching of GaN: Revealing nano-scale non-homogeneities. <i>Journal of Crystal Growth</i> , 2015 , 426, 153-158	1.6	9
124	Emission wavelength dependence of characteristic temperature of InGaIn laser diodes. <i>Applied Physics Letters</i> , 2013 , 103, 071102	3.4	9
123	Tilt of InGaIn layers on miscut GaN substrates. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 142-144	1.4	9
122	Low dislocation density, high power InGaIn laser diodes. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 2004 , 9, 1		9
121	High-power laser structures grown on bulk GaN crystals. <i>Journal of Crystal Growth</i> , 2004 , 272, 274-277	1.6	9
120	Optical and electrical characteristics of single-quantum-well InGaIn light-emitting diodes. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 449, 1173		9
119	Extremely long lifetime of III-nitride laser diodes grown by plasma assisted molecular beam epitaxy. <i>Materials Science in Semiconductor Processing</i> , 2019 , 91, 387-391	4.3	9
118	Influence of the growth method on degradation of InGaIn laser diodes. <i>Applied Physics Express</i> , 2017 , 10, 091001	2.4	8
117	Cyan laser diode grown by plasma-assisted molecular beam epitaxy. <i>Applied Physics Letters</i> , 2014 , 104, 023503	3.4	8
116	Switching of exciton character in double InGaIn/GaN quantum wells. <i>Physical Review B</i> , 2018 , 98,	3.3	8
115	Negative-T ₀ InGaIn laser diodes and their degradation. <i>Applied Physics Letters</i> , 2015 , 106, 171107	3.4	7
114	AlGaInN laser diode technology for defence, security and sensing applications 2014 ,		7
113	Why InGaIn laser-diode degradation is accompanied by the improvement of its thermal stability 2008 ,		7
112	Degradation of Single-Quantum Well InGaIn Green Light Emitting Diodes Under High Electrical Stress. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 449, 1179		7

111	Waveguide Design for Long Wavelength InGaN Based Laser Diodes. <i>Acta Physica Polonica A</i> , 2012 , 122, 1031-1033	0.6	7
110	Screening of quantum-confined Stark effect in nitride laser diodes and superluminescent diodes. <i>Applied Physics Express</i> , 2019 , 12, 044001	2.4	7
109	High speed visible light communication using blue GaN laser diodes 2016 ,		6
108	Suppression of extended defects propagation in a laser diodes structure grown on (20-21) GaN. <i>Semiconductor Science and Technology</i> , 2016 , 31, 035001	1.8	6
107	Capture kinetics at deep-level electron traps in GaN-based laser diode. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007 , 4, 2878-2882		6
106	Strong electric field and nonuniformity effects in GaN/AlN quantum dots revealed by high pressure studies. <i>Applied Physics Letters</i> , 2006 , 89, 051902	3.4	6
105	Role of band potential roughness on the luminescence properties of InGaN quantum wells grown by MBE on bulk GaN substrates. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 1614-1618	1.3	6
104	Properties of InGaN blue laser diodes grown on bulk GaN substrates. <i>Journal of Crystal Growth</i> , 2005 , 281, 107-114	1.6	6
103	Semiconductor Pressure Sensors as Seen by a Physicist. <i>Japanese Journal of Applied Physics</i> , 1993 , 32, 328	1.4	6
102	Review on Optimization and Current Status of (Al,In)GaN Superluminescent Diodes. <i>ECS Journal of Solid State Science and Technology</i> , 2020 , 9, 015010	2	6
101	High-resolution mirror temperature mapping in GaN-based diode lasers by thermoreflectance spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 020302	1.4	5
100	Aluminum-free nitride laser diodes: waveguiding, electrical and degradation properties. <i>Optics Express</i> , 2017 , 25, 33113	3.3	5
99	Optical optimization of InGaN/GaN edge-emitting lasers with reduced AlGaIn cladding thickness. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 032701	1.4	5
98	Broad-area high-power CW operated InGaN laser diodes 2006 , 6133, 168		5
97	Observation of localization effects in InGaN/GaN quantum structures by means of the application of hydrostatic pressure. <i>Physica Status Solidi (B): Basic Research</i> , 2004 , 241, 3285-3292	1.3	5
96	Thin Film ZnO as Sublayer for Electric Contact for Bulk GaN with Low Electron Concentration. <i>Acta Physica Polonica A</i> , 2011 , 119, 672-674	0.6	5
95	Development of the Nitride Laser Diode Arrays for Video and Movie Projectors. <i>MRS Advances</i> , 2016 , 1, 103-108	0.7	5
94	AlGaInN laser-diode technology for optical clocks and atom interferometry 2017 ,		4

93	Integrated RGB laser light module for autostereoscopic outdoor displays 2015 ,		4
92	A multi-wavelength (u.v. to visible) laser system for early detection of oral cancer 2015 ,		4
91	Examination of thermal properties and degradation of InGaN - based diode lasers by thermoreflectance spectroscopy and focused ion beam etching. <i>AIP Advances</i> , 2017 , 7, 075107	1.5	4
90	Assessment of laser tracking and data transfer for underwater optical communications 2014 ,		4
89	Violet blue laser mini-bars. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S837-S839		4
88	Nitride based laser diodes on substrates with patterned AlN mask. <i>Applied Physics Letters</i> , 2007 , 91, 221103	1.03	4
87	Hydrostatic pressure dependence of polarization-induced interface charge in AlGaN/GaN heterostructures determined by means of capacitance-voltage characterization. <i>Journal of Applied Physics</i> , 2006 , 100, 113712	2.5	4
86	Towards identification of degradation mechanisms in InGaN laser diodes grown on bulk GaN crystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1778-1782	1.6	4
85	Properties of violet laser diodes grown on bulk GaN substrates 2005 ,		4
84	(GaMg)N new semiconductor grown at high pressure of nitrogen. <i>Journal of Crystal Growth</i> , 1999 , 207, 27-29	1.6	4
83	Impact of dislocations on DLTS spectra and degradation of InGaN-based laser diodes. <i>Microelectronics Reliability</i> , 2018 , 88-90, 864-867	1.2	4
82	Role of dislocations in nitride laser diodes with different indium content. <i>Scientific Reports</i> , 2021 , 11, 21	4.9	4
81	. <i>IEEE Sensors Journal</i> , 2015 , 15, 123-127	4	3
80	Direct evidence of photoluminescence broadening enhancement by local electric field fluctuations in polar InGaN/GaN quantum wells. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 020305	1.4	3
79	InAlGaN superluminescent diodes fabricated on patterned substrates: an alternative semiconductor broadband emitter: publisher's note. <i>Photonics Research</i> , 2018 , 6, 652	6	3
78	Different behavior of semipolar and polar InGaN/GaN quantum wells: Pressure studies of photoluminescence. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011 , 208, 1526-1528	1.6	3
77	New approach to cathodoluminescence studies in application to InGaN/GaN laser diode degradation. <i>Journal of Microscopy</i> , 2009 , 236, 137-42	1.9	3
76	InGaN tapered laser diodes. <i>Electronics Letters</i> , 2012 , 48, 1232	1.1	3

75	Radiation-induced effects research in emerging photonic technologies: vertical cavity surface emitting lasers, GaN light-emitting diodes, and microelectromechanical devices 1997 ,		3
74	Carrier recombination mechanisms in nitride single quantum well light-emitting diodes revealed by photo- and electroluminescence. <i>Journal of Applied Physics</i> , 2008 , 104, 094504	2.5	3
73	Investigation of polarization-induced electric field screening in InGaN light emitting diodes by means of hydrostatic pressure. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 32-37	1.3	3
72	Comparison of gain in group-III-nitride laser structures grown by metalorganic vapour phase epitaxy and plasma-assisted molecular beam epitaxy on bulk GaN substrates. <i>Semiconductor Science and Technology</i> , 2007 , 22, 736-741	1.8	3
71	Screening of polarization induced electric fields in blue/violet InGaN/GaN laser diodes by Si doping in quantum barriers revealed by hydrostatic pressure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006 , 3, 2303-2306		3
70	Effects of MOVPE Growth Conditions on GaN Layers Doped with Germanium. <i>Materials</i> , 2021 , 14,	3.5	3
69	Influence of hydrogen pre-growth flow on indium incorporation into InGaN layers. <i>Journal of Crystal Growth</i> , 2017 , 464, 123-126	1.6	2
68	Properties of InGaN/GaN multiquantum wells grown on semipolar (20-21) substrates with different miscuts. <i>Journal of Crystal Growth</i> , 2015 , 423, 28-33	1.6	2
67	Advances in single mode and high power AlGaInN laser diode technology for systems applications 2015 ,		2
66	Surface Photochemical Corrosion as a Mechanism for Fast Degradation of InGaN UV Laser Diodes. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 52089-52094	9.5	2
65	Highly stable GaN-based betavoltaic structures grown on different dislocation density substrates. <i>Solid-State Electronics</i> , 2020 , 167, 107784	1.7	2
64	Role of the electron blocking layer in the graded-index separate confinement heterostructure nitride laser diodes. <i>Superlattices and Microstructures</i> , 2018 , 116, 114-121	2.8	2
63	Free-space and underwater GHz data transmission using AlGaInN laser diode technology 2016 ,		2
62	AlGaInN laser diode technology for systems applications 2016 ,		2
61	Numerical investigation of an impact of a top gold metallization on output power of a p-up III-N-based blue-violet edge-emitting laser diode. <i>Opto-electronics Review</i> , 2015 , 23,	2.4	2
60	Cavity-Free Lasing and 2D Plasma Oscillations in Optically Excited InGaN Heterostructures. <i>Journal of Russian Laser Research</i> , 2014 , 35, 447-456	0.7	2
59	GaN substrates with variable vicinal angles for laser diode applications 2012 ,		2
58	High optical power ultraviolet superluminescent InGaN diodes 2013 ,		2

57	InGaN mini-laser diode arrays with cw output power of 500 mW. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2348-2350		2
56	InGaN Laser Diode Degradation. Surface and Bulk Processes. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1195, 52		2
55	Nitride laser diode arrays 2009 ,		2
54	Life testing and failure analysis of GaN/AlGaIn/InGaIn light-emitting diodes 1997 , 3004, 113		2
53	Spontaneous and stimulated emission in quantum structures grown over bulk GaN and sapphire. <i>Journal of Crystal Growth</i> , 2005 , 281, 183-187	1.6	2
52	Localization Effects in InGaIn/GaN Double Heterostructure Laser Diode Structures Grown on Bulk GaN Crystals. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 7244-7249	1.4	2
51	High-pressure investigation of InGaIn quantum wells. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 512, 399		2
50	Tapered waveguide high power AlGaInN laser diodes and amplifiers for optical integration and quantum technologies 2017 ,		2
49	GaN-based distributed feedback laser diodes for optical communications 2019 ,		2
48	Deep-Level Defects in MBE-Grown GaN-Based Laser Structure. <i>Acta Physica Polonica A</i> , 2007 , 112, 331-336		2
47	Refractive Index of Heavily Germanium-Doped Gallium Nitride Measured by Spectral Reflectometry and Ellipsometry. <i>Materials</i> , 2021 , 14,	3.5	2
46	Nitride-based laser diodes and superluminescent diodes. <i>Photonics Letters of Poland</i> , 2014 , 6,	2.1	2
45	Dynamic Device Characteristics and Linewidth Measurement of InGaIn/GaN Laser Diodes. <i>IEEE Photonics Journal</i> , 2021 , 13, 1-10	1.8	2
44	Lateral grating DFB AlGaInN laser diodes for optical communications and atomic clocks.. <i>Journal of Physics: Conference Series</i> , 2017 , 810, 012053	0.3	1
43	Kinetics of the radiative and nonradiative recombination in polar and semipolar InGaIn quantum wells. <i>Scientific Reports</i> , 2020 , 10, 1235	4.9	1
42	True-blue laser diodes grown by plasma-assisted MBE on bulk GaN substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014 , 11, 666-669		1
41	Long-term degradation of InGaIn-based laser diodes: Role of defects. <i>Microelectronics Reliability</i> , 2017 , 76-77, 584-587	1.2	1
40	AlGaInN diode-laser technology for optical clocks and atom interferometry. <i>Journal of Physics: Conference Series</i> , 2017 , 810, 012052	0.3	1

39	Thermal conductivity of donor-doped GaN measured with 3 $\bar{\lambda}$ and stationary methods. <i>Low Temperature Physics</i> , 2015 , 41, 563-566	0.7	1
38	Semipolar (202 $\bar{1}$) GaN laser diodes operating at 388 nm grown by plasma-assisted molecular beam epitaxy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014 , 32, 02C115	1.3	1
37	Unambiguous relationship between photoluminescence energy and its pressure evolution in InGaN/GaN quantum wells. <i>Physica Status Solidi (B): Basic Research</i> , 2012 , 249, 476-479	1.3	1
36	Analysis of impurity-related blue emission in Zn-doped GaN/InGaN/AlGaIn double heterostructure 1996 , 2693, 97		1
35	Thermal analysis of InGaN/GaN (GaN substrate) laser diodes using transient interferometric mapping. <i>Microelectronics Reliability</i> , 2007 , 47, 1649-1652	1.2	1
34	Profiling of light emission of GaN-based laser diodes with cathodoluminescence. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1811-1814	1.6	1
33	Surface and electronic structure of Ga _{0.92} In _{0.08} N thin film investigated by photoelectron spectroscopy. <i>Thin Solid Films</i> , 2005 , 476, 396-404	2.2	1
32	Screening of built-in electric fields in group III-nitride laser diodes observed by means of hydrostatic pressure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 1019-1022		1
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