Piotr Perlin

List of Publications by Year
in descending order

252 papers	4,254 citations	159573 30 h-index	138468 58 g-index
258 all docs	258 docs citations	258 times ranked	2664 citing authors

#	Article	IF	Citations
1	Raman scattering and x-ray-absorption spectroscopy in gallium nitride under high pressure. Physical Review B, 1992, 45, 83-89.	3.2	544
2	â€œBlueâ€•temperature-induced shift and band-tail emission in InGaN-based light sources. Applied Physics Letters, 1997, 71, 569-571.	3.3	504
3	Lowâ€temperature study of current and electroluminescence in InGaN/AlGaN/GaN doubleâ€heterostructure blue lightâ€emitting diodes. Applied Physics Letters, 1996, 69, 1680-1682.	3.3	162
4	Raman-scattering studies of aluminum nitride at high pressure. Physical Review B, 1993, 47, 2874-2877.	3.2	131
5	Visible light communications using a directly modulated 422Ânm GaN laser diode. Optics Letters, 2013, 38, 3792.	3.3	110
6	InGaN/GaN quantum wells studied by high pressure, variable temperature, and excitation power spectroscopy. Applied Physics Letters, 1998, 73, 2778-2780.	3.3	97
7	Influence of pressure on photoluminescence and electroluminescence in GaN/InGaN/AlGaN quantum wells. Applied Physics Letters, 1997, 70, 2993-2995.	3.3	90
8	Reduction of the energy gap pressure coefficient of GaN due to the constraining presence of the sapphire substrate. Journal of Applied Physics, 1999, 85, 2385-2389.	2.5	87
9	Degradation mechanisms in InGaN laser diodes grown on bulk GaN crystals. Applied Physics Letters, 2006, 88, 201111.	3.3	75
10	Pressure and temperature dependence of the absorption edge of a thick Ga0.92In0.08As0.985N0.015 layer. Applied Physics Letters, 1998, 73, 3703-3705.	3.3	70
11	Interband optical absorption in free standing layer of Ga0.96In0.04As0.99N0.01. Applied Physics Letters, 2000, 76, 1279-1281.	3.3	68
12	Blue-violet InGaN laser diodes grown on bulk GaN substrates by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2005, 86, 011114.	3.3	66
13	Bulk GaN crystal growth by the high-pressure ammonothermal method. Journal of Crystal Growth, 2007, 300, 11-16.	1.5	66
14	Single-quantum well InGaN green light emitting diode degradation under high electrical stress. Microelectronics Reliability, 1999, 39, 1219-1227.	1.7	59
15	The effects of indium concentration and well-thickness on the mechanisms of radiative recombination in In_xGa_{1âˆ'x}N quantum wells. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 1.	1.0	52
16	Role of the electron blocking layer in the low-temperature collapse of electroluminescence in nitride light-emitting diodes. Applied Physics Letters, 2007, 90, 103507.	3.3	52
17	Growth of 1.3 Î¼m InGaAsN laser material on GaAs by molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1272.	1.6	51
18	Effect of internal absorption on cathodoluminescence from GaN. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	48

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19	60mW continuous-wave operation of InGaN laser diodes made by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2006, 88, 221108.	3.3	48
20	Optically pumped 500 nm InGaN green lasers grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2011, 110, .	2.5	44
21	Fully-screened polarization-induced electric fields in blueâˆ•violet InGaNâˆ•GaN light-emitting devices grown on bulk GaN. Applied Physics Letters, 2005, 87, 041109.	3.3	41
22	Tunneling current and electroluminescence in InGaN: Zn,Si/AlGaN/GaN blue light emitting diodes. Journal of Electronic Materials, 1997, 26, 311-319.	2.2	40
23	Indium incorporation into InGaN and InAlN layers grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2011, 318, 496-499.	1.5	39
24	True-blue laser diodes with tunnel junctions grown monolithically by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2018, 11, 034103.	2.4	39
25	Correlation between luminescence and compositional striations in InGaN layers grown on miscut GaN substrates. Applied Physics Letters, 2007, 91, .	3.3	37
26	High power blueâ€“violet InGaN laser diodes grown on bulk GaN substrates by plasma-assisted molecular beam epitaxy. Semiconductor Science and Technology, 2005, 20, 809-813.	2.0	36
27	Application of a composite plasmonic substrate for the suppression of an electromagnetic mode leakage in InGaN laser diodes. Applied Physics Letters, 2009, 95, .	3.3	36
28	Graded-index separate confinement heterostructure InGaN laser diodes. Applied Physics Letters, 2013, 103, .	3.3	33
29	Enhancement of optical confinement factor by InGaN waveguide in blue laser diodes grown by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2015, 8, 032103.	2.4	32
30	Substrate misorientation induced strong increase in the hole concentration in Mg doped GaN grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2008, 93, 172117.	3.3	31
31	Cavity suppression in nitride based superluminescent diodes. Journal of Applied Physics, 2012, 111, 083106.	2.5	31
32	Free and bound excitons in GaNâˆ•AlGaN homoepitaxial quantum wells grown on bulk GaN substrate along the nonpolar (112Â¯0) direction. Applied Physics Letters, 2005, 86, 162112.	3.3	29
33	InGaN Laser Diode Mini-Arrays. Applied Physics Express, 2011, 4, 062103.	2.4	29
34	High-Optical-Power InGaN Superluminescent Diodes with â€œj-shapeâ€•Waveguide. Applied Physics Express, 2013, 6, 092102.	2.4	29
35	Niâ€“Au contacts to p-type GaN â€“ Structure and properties. Solid-State Electronics, 2010, 54, 701-709.	1.4	28
36	Elimination of leakage of optical modes to GaN substrate in nitride laser diodes using a thick InGaN waveguide. Applied Physics Express, 2016, 9, 092103.	2.4	28

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37	Continuous-wave operation of (Al,In)GaN distributed-feedback laser diodes with high-order notched gratings. Applied Physics Express, 2018, 11, 112701.	2.4	28
38	Lateral Control of Indium Content and Wavelength of IIIâ€"Nitride Diode Lasers by Means of GaN Substrate Patterning. Applied Physics Express, 2012, 5, 021001.	2.4	26
39	Influence of hydrogen and TMIn on indium incorporation in MOVPE growth of InGaN layers. Journal of Crystal Growth, 2014, 402, 330-336.	1.5	26
40	Elimination of AlGaN epilayer cracking by spatially patterned AlN mask. Applied Physics Letters, 2006, 88, 121124.	3.3	25
41	Effect of hydrogen during growth of quantum barriers on the properties of InGaN quantum wells. Journal of Crystal Growth, 2015, 414, 38-41.	1.5	24
42	Hydrogen diffusion in GaN:Mg and GaN:Si. Journal of Alloys and Compounds, 2018, 747, 354-358.	5.5	24
43	Efficient radiative recombination and potential profile fluctuations in low-dislocation InGaNâ̂•GaN multiple quantum wells on bulk GaN substrates. Journal of Applied Physics, 2005, 97, 103507.	2.5	22
44	Anomalous temperature characteristics of single wide quantum well InGaN laser diode. Applied Physics Letters, 2006, 88, 071121.	3.3	22
45	Life tests and failure mechanisms of GaN/AlGaN/InGaN light-emitting diodes. , 1998, , .		21
46	Nitride superluminescent diodes with broadened emission spectrum fabricated using laterally patterned substrate. Optics Express, 2016, 24, 9673.	3.4	21
47	Spatial distribution of electron concentration and strain in bulk GaN single crystals - relation to growth mechanism. Materials Research Society Symposia Proceedings, 1996, 449, 519.	0.1	20
48	Role of dislocation-free GaN substrates in the growth of indium containing optoelectronic structures by plasma-assisted MBE. Journal of Crystal Growth, 2007, 305, 346-354.	1.5	20
49	Effect of efficiency â€œdroopâ€•in violet and blue InGaN laser diodes. Applied Physics Letters, 2009, 95, 071108.	3.3	20
50	GaN thin films by growth on Ga-rich GaN buffer layers. Journal of Applied Physics, 2000, 88, 6032-6036.	2.5	19
51	Degradation Mechanisms of InGaN Laser Diodes. Proceedings of the IEEE, 2010, 98, 1214-1219.	21.3	19
52	Temperature dependence of superluminescence in InGaN-based superluminescent light emitting diode structures. Journal of Applied Physics, 2010, 108, .	2.5	19
53	AlGaInN laser diode technology for GHz high-speed visible light communication through plastic optical fiber and water. Optical Engineering, 2016, 55, 026112.	1.0	19
54	Nitride-based quantum structures and devices on modified GaN substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1130-1134.	1.8	17

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55	Hole carrier concentration and photoluminescence in magnesium doped InGaN and GaN grown on sapphire and GaN misoriented substrates. Journal of Applied Physics, 2010, 108, 023516.	2.5	17
56	True-Blue Nitride Laser Diodes Grown by Plasma-Assisted Molecular Beam Epitaxy. Applied Physics Express, 2012, 5, 112103.	2.4	17
57	InGaN laser diodes operating at 450â€“460 nm grown by rf-plasma MBE. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B102.	1.2	17
58	Mode dynamics of high power (InAl)GaN based laser diodes grown on bulk GaN substrate. Journal of Applied Physics, 2007, 101, 083109.	2.5	16
59	AlGaN-Free Laser Diodes by Plasma-Assisted Molecular Beam Epitaxy. Applied Physics Express, 2012, 5, 022104.	2.4	16
60	MBE fabrication of III-N-based laser diodes and its development to industrial system. Journal of Crystal Growth, 2013, 378, 278-282.	1.5	16
61	Design and optimization of InGaN superluminescent diodes. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 997-1004.	1.8	16
62	Switching of exciton character in double InGaN/GaN quantum wells. Physical Review B, 2018, 98, .	3.2	16
63	Optically pumped GaNâˆ•AlGaN separate-confinement heterostructure laser grown along the (112Â¯0) nonpolar direction. Applied Physics Letters, 2007, 90, 081104.	3.3	15
64	Universal behavior of photoluminescence in GaN-based quantum wells under hydrostatic pressure governed by built-in electric field. Journal of Applied Physics, 2012, 112, 053509.	2.5	15
65	Role of dislocations in nitride laser diodes with different indium content. Scientific Reports, 2021, 11, 21.	3.3	15
66	Comprehensive studies of light emission from GaN/InGaN/AlGaN single-quantum-well structures. Journal of Crystal Growth, 1998, 189-190, 803-807.	1.5	14
67	Effects of high electrical stress on GaN/InGaN/AlGaN single-quantum-well light-emitting diodes. Journal of Crystal Growth, 1998, 189-190, 808-811.	1.5	14
68	High-power laser structures grown on bulk GaN crystals. Journal of Crystal Growth, 2004, 272, 274-277.	1.5	14
69	Band-to-band character of photoluminescence from InN and In-rich InGaN revealed by hydrostatic pressure studies. Applied Physics Letters, 2006, 89, 121915.	3.3	14
70	Secondary ions mass spectroscopy measurements of dopant impurities in highly stressed InGaN laser diodes. Applied Physics Letters, 2011, 98, .	3.3	14
71	Determination of gain in AlGaN cladding free nitride laser diodes. Applied Physics Letters, 2013, 103, .	3.3	14
72	InGaN laser diodes with reduced AlGaN cladding thickness fabricated on GaN plasmonic substrate. Applied Physics Letters, 2013, 102, .	3.3	14

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73	Effects of MOVPE Growth Conditions on GaN Layers Doped with Germanium. Materials, 2021, 14, 354.	2.9	14
74	Ultraviolet laser diodes grown on semipolar (202Â¯1) GaN substrates by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2013, 102, .	3.3	13
75	High power nitride laser diodes grown by plasma assisted molecular beam epitaxy. Journal of Crystal Growth, 2015, 425, 398-400.	1.5	13
76	InAlGaN superluminescent diodes fabricated on patterned substrates: an alternative semiconductor broadband emitter. Photonics Research, 2017, 5, A30.	7.0	13
77	450 nm (Al,In)GaN optical amplifier with double â€˜j-shapeâ€™ waveguide for master oscillator power amplifier systems. Optics Express, 2018, 26, 7351.	3.4	13
78	Fabrication and properties of GaN-based lasers. Journal of Crystal Growth, 2008, 310, 3979-3982.	1.5	12
79	Tilt of InGaN layers on miscut GaN substrates. Physica Status Solidi - Rapid Research Letters, 2010, 4, 142-144.	2.4	12
80	Highly doped GaN: a material for plasmonic claddings for blue/green InGaN laser diodes. Proceedings of SPIE, 2012, , .	0.8	12
81	AlGaInN laser-diode technology for optical clocks and atom interferometry. , 2017, , .		12
82	Reviewâ€"Review on Optimization and Current Status of (Al,In)GaN Superluminescent Diodes. ECS Journal of Solid State Science and Technology, 2020, 9, 015010.	1.8	12
83	Distributed feedback InGaN/GaN laser diodes. , 2018, , .		12
84	Emission wavelength dependence of characteristic temperature of InGaN laser diodes. Applied Physics Letters, 2013, 103, .	3.3	11
85	Cyan laser diode grown by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2014, 104, 023503.	3.3	11
86	AlGaInN laser diode technology for defence, security and sensing applications. , 2014, , .		11
87	Assessment of laser tracking and data transfer for underwater optical communications. , 2014, , .		11
88	Photo-etching of GaN: Revealing nano-scale non-homogeneities. Journal of Crystal Growth, 2015, 426, 153-158.	1.5	11
89	Waveguide Design for Long Wavelength InGaN Based Laser Diodes. Acta Physica Polonica A, 2012, 122, 1031-1033.	0.5	11
90	GaN Laser Diode Technology for Visible-Light Communications. Electronics (Switzerland), 2022, 11, 1430.	3.1	11

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91	Optical and Electrical Characteristics of Single-Quantum-Well InGaN Light-Emitting Diodes. Materials Research Society Symposia Proceedings, 1996, 449, 1173.	0.1	10
92	Low dislocation density, high power InGaN laser diodes. MRS Internet Journal of Nitride Semiconductor Research, 2004, 9, 1.	1.0	9
93	Why InGaN laser-diode degradation is accompanied by the improvement of its thermal stability. Proceedings of SPIE, 2008, , .	0.8	9
94	Integrated RGB laser light module for autostereoscopic outdoor displays. , 2015, , .		9
95	Influence of the growth method on degradation of InGaN laser diodes. Applied Physics Express, 2017, 10, 091001.	2.4	9
96	Extremely long lifetime of III-nitride laser diodes grown by plasma assisted molecular beam epitaxy. Materials Science in Semiconductor Processing, 2019, 91, 387-391.	4.0	9
97	Properties of InGaN blue laser diodes grown on bulk GaN substrates. Journal of Crystal Growth, 2005, 281, 107-114.	1.5	8
98	Negative-T0 InGaN laser diodes and their degradation. Applied Physics Letters, 2015, 106, 171107.	3.3	8
99	High speed visible light communication using blue GaN laser diodes. Proceedings of SPIE, 2016, , .	0.8	8
100	Screening of quantum-confined Stark effect in nitride laser diodes and superluminescent diodes. Applied Physics Express, 2019, 12, 044001.	2.4	8
101	Degradation of Single-Quantum Well InGaN Green Light Emitting Diodes Under High Electrical Stress. Materials Research Society Symposia Proceedings, 1996, 449, 1179.	0.1	7
102	Broad-area high-power CW operated InGaN laser diodes. , 2006, 6133, 168.		7
103	Capture kinetics at deep-level electron traps in GaN-based laser diode. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2878-2882.	0.8	7
104	Aluminum-free nitride laser diodes: waveguiding, electrical and degradation properties. Optics Express, 2017, 25, 33113.	3.4	7
105	Role of the electron blocking layer in the graded-index separate confinement heterostructure nitride laser diodes. Superlattices and Microstructures, 2018, 116, 114-121.	3.1	7
106	Thin Film ZnO as Sublayer for Electric Contact for Bulk GaN with Low Electron Concentration. Acta Physica Polonica A, 2011, 119, 672-674.	0.5	7
107	Semiconductor Pressure Sensors as Seen by a Physicist. Japanese Journal of Applied Physics, 1993, 32, 328.	1.5	6
108	Observation of localization effects in InGaN/GaN quantum structures by means of the application of hydrostatic pressure. Physica Status Solidi (B): Basic Research, 2004, 241, 3285-3292.	1.5	6

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109	Role of band potential roughness on the luminescence properties of InGaN quantum wells grown by MBE on bulk GaN substrates. Physica Status Solidi (B): Basic Research, 2006, 243, 1614-1618.	1.5	6
110	Strong electric field and nonuniformity effects in GaNâˆ•AlN quantum dots revealed by high pressure studies. Applied Physics Letters, 2006, 89, 051902.	3.3	6
111	Violet blue laser miniâ€bars. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S837.	0.8	6
112	Optical optimization of InGaN/GaN edge-emitting lasers with reduced AlGaN cladding thickness. Japanese Journal of Applied Physics, 2014, 53, 032701.	1.5	6
113	A multi-wavelength (u.v. to visible) laser system for early detection of oral cancer. , 2015, , .		6
114	Development of the Nitride Laser Diode Arrays for Video and Movie Projectors. MRS Advances, 2016, 1, 103-108.	0.9	6
115	Suppression of extended defects propagation in a laser diodes structure grown on (20-21) GaN. Semiconductor Science and Technology, 2016, 31, 035001.	2.0	6
116	Examination of thermal properties and degradation of InGaN - based diode lasers by thermoreflectance spectroscopy and focused ion beam etching. AIP Advances, 2017, 7, 075107.	1.3	6
117	Refractive Index of Heavily Germanium-Doped Gallium Nitride Measured by Spectral Reflectometry and Ellipsometry. Materials, 2021, 14, 7364.	2.9	6
118	Towards identification of degradation mechanisms in InGaN laser diodes grown on bulk GaN crystals. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1778-1782.	1.8	5
119	Mechanism of Hydrogen Sensing by AlGaN/GaN Pt-Gate Field Effect Transistors: Magnetoresistance Studies. IEEE Sensors Journal, 2015, 15, 123-127.	4.7	5
120	High-resolution mirror temperature mapping in GaN-based diode lasers by thermoreflectance spectroscopy. Japanese Journal of Applied Physics, 2017, 56, 020302.	1.5	5
121	Recent progress in distributed feedback InGaN/GaN laser diodes. , 2019, , .		5
122	InGaN blue light emitting micro-diodes with current path defined by tunnel junction. Optics Letters, 2020, 45, 4332.	3.3	5
123	Radiation-induced effects research in emerging photonic technologies: vertical cavity surface emitting lasers, GaN light-emitting diodes, and microelectromechanical devices. , 1997, , .		4
124	(GaMg)N new semiconductor grown at high pressure of nitrogen. Journal of Crystal Growth, 1999, 207, 27-29.	1.5	4
125	Properties of violet laser diodes grown on bulk GaN substrates. , 2005, , .		4
126	Hydrostatic pressure dependence of polarization-induced interface charge in AlGaNâˆ•GaN heterostructures determined by means of capacitance-voltage characterization. Journal of Applied Physics, 2006, 100, 113712.	2.5	4

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127	Nitride based laser diodes on substrates with patterned AlN mask. Applied Physics Letters, 2007, 91, 221103.	3.3	4
128	Carrier recombination mechanisms in nitride single quantum well light-emitting diodes revealed by photo- and electroluminescence. Journal of Applied Physics, 2008, 104, 094504.	2.5	4
129	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. Opto-electronics Review, 2015, 23, .	2.4	4
130	Free-space and underwater GHz data transmission using AlGaInN laser diode technology. Proceedings of SPIE, 2016, , .	0.8	4
131	Influence of hydrogen pre-growth flow on indium incorporation into InGaN layers. Journal of Crystal Growth, 2017, 464, 123-126.	1.5	4
132	Impact of dislocations on DLTS spectra and degradation of InGaN-based laser diodes. Microelectronics Reliability, 2018, 88-90, 864-867.	1.7	4
133	Surface Photochemical Corrosion as a Mechanism for Fast Degradation of InGaN UV Laser Diodes. ACS Applied Materials & Interfaces, 2020, 12, 52089-52094.	8.0	4
134	Highly stable GaN-based betavoltaic structures grown on different dislocation density substrates. Solid-State Electronics, 2020, 167, 107784.	1.4	4
135	Dynamic Device Characteristics and Linewidth Measurement of InGaN/GaN Laser Diodes. IEEE Photonics Journal, 2021, 13, 1-10.	2.0	4
136	Analysis of impurity-related blue emission in Zn-doped GaN/InGaN/AlGaN double heterostructure. , 1996, 2693, 97.		3
137	<title>Life testing and failure analysis of GaN/AlGaN/InGaN light-emitting diodes</title>. , 1997, 3004, 113.		3
138	The influence of the sapphire substrate on the temperature dependence of the GaN bandgap. Materials Research Society Symposia Proceedings, 1999, 572, 289.	0.1	3
139	Spontaneous and stimulated emission in quantum structures grown over bulk GaN and sapphire. Journal of Crystal Growth, 2005, 281, 183-187.	1.5	3
140	Screening of polarization induced electric fields in blue/violet InGaN/GaN laser diodes by Si doping in quantum barriers revealed by hydrostatic pressure. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2303-2306.	0.8	3
141	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. Semiconductor Science and Technology, 2007, 22, 736-741.	2.0	3
142	Investigation of polarization-induced electric field screening in InGaN light emitting diodes by means of hydrostatic pressure. Physica Status Solidi (B): Basic Research, 2007, 244, 32-37.	1.5	3
143	New approach to cathodoluminescence studies in application to InGaN/GaN laser diode degradation. Journal of Microscopy, 2009, 236, 137-142.	1.8	3
144	Different behavior of semipolar and polar InGaN/GaN quantum wells: Pressure studies of photoluminescence. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1526-1528.	1.8	3

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145	InGaN miniâ€laser diode arrays with cw output power of 500 mW. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2348-2350.	0.8	3
146	InGaN tapered laser diodes. Electronics Letters, 2012, 48, 1232.	1.0	3
147	Cavity-Free Lasing and 2D Plasma Oscillations in Optically Excited InGaN Heterostructures. Journal of Russian Laser Research, 2014, 35, 447-456.	0.6	3
148	Trueâ€blue laser diodes grown by plasmaâ€assisted MBE on bulk GaN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 666-669.	0.8	3
149	Thermal conductivity of donor-doped GaN measured with 3Ï‰ and stationary methods. Low Temperature Physics, 2015, 41, 563-566.	0.6	3
150	Multi-gigabit data transmission using a directly modulated GaN laser diode for visible light communication through plastic optical fiber and water. , 2015, , .		3
151	Long-term degradation of InGaN-based laser diodes: Role of defects. Microelectronics Reliability, 2017, 76-77, 584-587.	1.7	3
152	Direct evidence of photoluminescence broadening enhancement by local electric field fluctuations in polar InGaN/GaN quantum wells. Japanese Journal of Applied Physics, 2018, 57, 020305.	1.5	3
153	InGaN/GaN Laser Diodes and their Applications. , 2018, , .		3
154	InAlGaN superluminescent diodes fabricated on patterned substrates: an alternative semiconductor broadband emitter: publisherâ€™s note. Photonics Research, 2018, 6, 652.	7.0	3
155	Nitride-based laser diodes and superluminescent diodes. Photonics Letters of Poland, 2014, 6, .	0.4	3
156	<title>Current transport and emission mechanisms in high-brightness green InGaN/AlGaN/GaN single-quantum-well light-emitting diodes</title>. , 1997, 3002, 15.		2
157	High-pressure investigation of InGan quantum wells.. Materials Research Society Symposia Proceedings, 1998, 512, 399.	0.1	2
158	Localization Effects in InGaN/GaN Double Heterostructure Laser Diode Structures Grown on Bulk GaN Crystals. Japanese Journal of Applied Physics, 2005, 44, 7244-7249.	1.5	2
159	Profiling of light emission of GaN-based laser diodes with cathodoluminescence. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1811-1814.	1.8	2
160	InGaN Laser Diode Degradation. Surface and Bulk Processes. Materials Research Society Symposia Proceedings, 2009, 1195, 52.	0.1	2
161	Nitride laser diode arrays. Proceedings of SPIE, 2009, , .	0.8	2
162	GaN substrates with variable vicinal angles for laser diode applications. , 2012, , .		2

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163	High optical power ultraviolet superluminescent InGaN diodes. Proceedings of SPIE, 2013, , .	0.8	2
164	Thermal properties of InGaN laser diodes and arrays. , 2013, , .		2
165	Properties of InGaN/GaN multiquantum wells grown on semipolar (20-21) substrates with different miscuts. Journal of Crystal Growth, 2015, 423, 28-33.	1.5	2
166	Advances in single mode and high power AlGaInN laser diode technology for systems applications. , 2015, , .		2
167	AlGaInN laser diode technology for systems applications. , 2016, , .		2
168	Kinetics of the radiative and nonradiative recombination in polar and semipolar InGaN quantum wells. Scientific Reports, 2020, 10, 1235.	3.3	2
169	Homoepitaxial ZnO/ZnMgO Laser Structures and Their Properties. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, .	1.8	2
170	Tapered waveguide high power AlGaInN laser diodes and amplifiers for optical integration and quantum technologies. , 2017, , .		2
171	GaN-based distributed feedback laser diodes for optical communications. , 2019, , .		2
172	Deep-Level Defects in MBE-Grown GaN-Based Laser Structure. Acta Physica Polonica A, 2007, 112, 331-337.	0.5	2
173	Sub-ppb NO_xdetection by a cavity enhanced absorption spectroscopy system with blue and infrared diode lasers. WIT Transactions on Modelling and Simulation, 2009, , .	0.0	2
174	GaN lasers for quantum technologies. , 2019, , .		2
175	Electrical Properties of Nichia AlGaN/InGaN/GaN Blue LEDs in a Wide Current/Temperature Range. Materials Research Society Symposia Proceedings, 1995, 395, 937.	0.1	1
176	<title>Nonlinear optical characterization of single-crystalline GaN by Z-scan technique</title>. , 2001, , .		1
177	Epitaxy on GaN bulk crystals. , 2001, , .		1
178	<title>Luminescence of nonthermalized electron-hole plasma in GaN epilayers</title>. , 2001, , .		1
179	High-power pulse-current-operated violet light emitting lasers grown on bulk GaN substrates. , 2004, , .		1
180	Surface and electronic structure of Ga0.92In0.08N thin film investigated by photoelectron spectroscopy. Thin Solid Films, 2005, 476, 396-404.	1.8	1

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181	Screening of built-in electric fields in group III-nitride laser diodes observed by means of hydrostatic pressure. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1019-1022.	0.8	1
182	Comprehensive study of reliability of InGaN-based laser diodes. , 2007, , .		1
183	Thermal analysis of InGaN/GaN (GaN substrate) laser diodes using transient interferometric mapping. Microelectronics Reliability, 2007, 47, 1649-1652.	1.7	1
184	Optical gain and saturation behavior in homoepitaxially grown InGaN/GaN/AlGaN laser structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 82-85.	0.8	1
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