

Markus Weyers

List of Publications by Year in descending order

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530
papers

11,118
citations

46984

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536
all docs

536
docs citations

536
times ranked

5757
citing authors

#	ARTICLE	IF	CITATIONS
1	Red Shift of Photoluminescence and Absorption in Dilute GaAsN Alloy Layers. Japanese Journal of Applied Physics, 1992, 31, L853-L855.	0.8	715
2	Advances in group III-nitride-based deep UV light-emitting diode technology. Semiconductor Science and Technology, 2011, 26, 014036.	1.0	593
3	Application of GaN-based ultraviolet-C light emitting diodes "UV LEDs" for water disinfection. Water Research, 2011, 45, 1481-1489.	5.3	367
4	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
5	Recognition and imitation of pantomimed motor acts after unilateral parietal and premotor lesions: a perspective on apraxia. Neuropsychologia, 2001, 39, 200-216.	0.7	199
6	Growth of GaAsN alloys by low-pressure metalorganic chemical vapor deposition using plasma-cracked NH ₃ . Applied Physics Letters, 1993, 62, 1396-1398.	1.5	196
7	A comparative study of Ga(CH ₃) ₃ and Ga(C ₂ H ₅) ₃ in the growth of GaAs. Journal of Crystal Growth, 1986, 74, 292-300.	0.7	177
8	AlGaIn-based deep UV LEDs grown on sputtered and high temperature annealed AlN/sapphire. Applied Physics Letters, 2018, 112, .	1.5	171
9	Optical polarization characteristics of ultraviolet (In)(Al)GaIn multiple quantum well light emitting diodes. Applied Physics Letters, 2010, 97, .	1.5	145
10	Selective growth of GaAs in the MOCVD and MBE systems. Journal of Crystal Growth, 1986, 77, 303-309.	0.7	131
11	Indium incorporation and emission wavelength of polar, nonpolar and semipolar InGaIn quantum wells. Semiconductor Science and Technology, 2012, 27, 024014.	1.0	129
12	Pulse repetition rate up to 92 GHz or pulse duration shorter than 110 fs from a mode-locked semiconductor disk laser. Applied Physics Letters, 2011, 98, .	1.5	123
13	Efficient charge carrier injection into sub-250-nm AlGaIn multiple quantum well light emitting diodes. Applied Physics Letters, 2014, 105, .	1.5	103
14	Performance Characteristics of UV-C AlGaIn-Based Lasers Grown on Sapphire and Bulk AlN Substrates. IEEE Photonics Technology Letters, 2014, 26, 342-345.	1.3	99
15	High gain ultraviolet photodetectors based on AlGaIn/GaN heterostructures for optical switching. Applied Physics Letters, 2011, 98, .	1.5	90
16	High quality AlGaIn grown on ELO AlN/sapphire templates. Journal of Crystal Growth, 2013, 377, 32-36.	0.7	89
17	Highly conductive n-Al _x Ga _{1-x} N layers with aluminum mole fractions above 80%. Applied Physics Letters, 2013, 103, .	1.5	86
18	Intentional $\bar{\Gamma}$ -type doping by carbon in metalorganic MBE of GaAs. Journal of Electronic Materials, 1986, 15, 57-59.	1.0	82

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19	Passively mode-locked Yb:KLu(WO ₄) ₂ oscillators. Optics Express, 2005, 13, 3465.	1.7	81
20	12 W continuous-wave diode lasers at 1120 nm with InGaAs quantum wells. Applied Physics Letters, 2001, 79, 1965-1967.	1.5	79
21	High-power 808 nm lasers with a super-large optical cavity. Semiconductor Science and Technology, 2005, 20, 621-624.	1.0	79
22	Strongly transverse-electric-polarized emission from deep ultraviolet AlGaIn quantum well light emitting diodes. Applied Physics Letters, 2015, 107, .	1.5	79
23	Effect of the AlN nucleation layer growth on AlN material quality. Journal of Crystal Growth, 2008, 310, 4932-4934.	0.7	76
24	High-power tensile-strained GaAsP-AlGaAs quantum-well lasers emitting between 715 and 790 nm. IEEE Journal of Selected Topics in Quantum Electronics, 1999, 5, 780-784.	1.9	68
25	Effective Thermal Management in Ultraviolet Light-Emitting Diodes With Micro-LED Arrays. IEEE Transactions on Electron Devices, 2013, 60, 782-786.	1.6	68
26	Enhancement of light extraction in ultraviolet light-emitting diodes using nanopixel contact design with Al reflector. Applied Physics Letters, 2010, 96, .	1.5	62
27	Composition of selectively grown In _x Ga _{1-x} As structures from locally resolved Raman spectroscopy. Journal of Crystal Growth, 1991, 107, 151-155.	0.7	61
28	Structural and optical properties of nonpolar GaN thin films. Applied Physics Letters, 2008, 92, .	1.5	61
29	Growth of AlGaIn and AlN on patterned AlN/sapphire templates. Journal of Crystal Growth, 2011, 315, 200-203.	0.7	61
30	Carbon incorporation in MOMBE-grown Ga _{0.47} In _{0.53} As. Journal of Crystal Growth, 1989, 95, 154-157.	0.7	59
31	Gaseous dopant sources in MOMBE/CBE. Journal of Crystal Growth, 1990, 105, 383-392.	0.7	58
32	Correlation of InGaP(001) surface structure during growth and bulk ordering. Physical Review B, 1999, 60, 8185-8190.	1.1	57
33	Reactor and growth process optimization for growth of thick GaN layers on sapphire substrates by HVPE. Journal of Crystal Growth, 2005, 277, 6-12.	0.7	57
34	Mode-locked InGaAs-AlGaAs disk laser generating sub-200-fs pulses, pulse picking and amplification by a tapered diode amplifier. Optics Express, 2009, 17, 10820.	1.7	56
35	Degradation effects of the active region in UV-C light-emitting diodes. Journal of Applied Physics, 2018, 123, .	1.1	55
36	Real-time monitoring of MOVPE device growth by reflectance anisotropy spectroscopy and related optical techniques. Journal of Crystal Growth, 1998, 195, 151-162.	0.7	54

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37	MOVPE growth of highly strained InGaAs/GaAs quantum wells. Journal of Crystal Growth, 1998, 183, 511-518.	0.7	54
38	Passively cooled 940-nm laser bars with 73% wall-plug efficiency at 70-W and 25°C. Electronics Letters, 2005, 41, 250.	0.5	53
39	Defect analysis in AlGaIn layers on AlN templates obtained by epitaxial lateral overgrowth. Journal of Crystal Growth, 2014, 402, 222-229.	0.7	53
40	Quantitative analysis of in situ wafer bowing measurements for III-nitride growth on sapphire. Journal of Crystal Growth, 2008, 310, 2432-2438.	0.7	51
41	Optical in-well pumping of a semiconductor disk laser with high optical efficiency. IEEE Journal of Quantum Electronics, 2005, 41, 1439-1449.	1.0	50
42	Effect of the barrier composition on the polarization fields in near UV InGaIn light emitting diodes. Applied Physics Letters, 2008, 92, 1919-1922.	1.5	50
43	Reliability issues of GaN based high voltage power devices. Microelectronics Reliability, 2011, 51, 1710-1716.	0.9	50
44	Modulated Epitaxial Lateral Overgrowth of AlN for Efficient UV LEDs. IEEE Photonics Technology Letters, 2012, 24, 1603-1605.	1.3	49
45	Improved performance of UVC-LEDs by combination of high-temperature annealing and epitaxially laterally overgrown AlN/sapphire. Photonics Research, 2020, 8, 589.	3.4	49
46	Semipolar GaN grown on c-plane sapphire using MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1815-1817.	0.8	48
47	290-fs pulses from a semiconductor disk laser. Optics Express, 2008, 16, 5770.	1.7	48
48	Degradation of (InAlGa)N-based UV-B light emitting diodes stressed by current and temperature. Journal of Applied Physics, 2015, 118, .	1.1	47
49	Low absorption loss p-AlGaIn superlattice cladding layer for current-injection deep ultraviolet laser diodes. Applied Physics Letters, 2016, 108, .	1.5	47
50	Carbon in III-V Compounds: A Theoretical Approach. Japanese Journal of Applied Physics, 1992, 31, 2483-2487.	0.8	46
51	High-power 810-nm GaAsP-AlGaAs diode lasers with narrow beam divergence. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 334-339.	1.9	46
52	Impact of band structure and transition matrix elements on polarization properties of the photoluminescence of semipolar and nonpolar InGaIn quantum wells. Physica Status Solidi (B): Basic Research, 2011, 248, 638-646.	0.7	46
53	Current-induced degradation and lifetime prediction of 310-nm ultraviolet light-emitting diodes. Photonics Research, 2019, 7, B36.	3.4	46
54	Doping of GaAs in metalorganic MBE using gaseous sources. Journal of Crystal Growth, 1987, 81, 270-275.	0.7	45

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55	Passively mode-locked Yb:LuVO ₄ oscillator. <i>Optics Express</i> , 2006, 14, 11668.	1.7	45
56	High-temperature growth of AlN in a production scale 11 Å– 2 Å ² MOVPE reactor. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1799-1801.	0.8	45
57	Proton and Heavy Ion Irradiation Effects on AlGaIn/GaN HFET Devices. <i>IEEE Transactions on Nuclear Science</i> , 2006, 53, 3661-3666.	1.2	43
58	1.9 W continuous-wave single transverse mode emission from 1060 nm edge-emitting lasers with vertically extended lasing area. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	43
59	Gas Sensing of Nitrogen Oxide Utilizing Spectrally Pure Deep UV LEDs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 29-36.	1.9	43
60	Degradation of (In)AlGaIn-Based UVB LEDs and Migration of Hydrogen. <i>IEEE Photonics Technology Letters</i> , 2019, 31, 529-532.	1.3	43
61	Design and realization of high-power DFB lasers. , 2004, , .		42
62	Determination of band offsets in strained In _x Ga _{1-x} As/GaAs quantum wells by capacitance-voltage profiling and Schrödinger-Poisson self-consistent simulation. <i>Physical Review B</i> , 2004, 70, .	1.1	42
63	High-power red laser diodes grown by MOVPE. <i>Journal of Crystal Growth</i> , 2007, 298, 667-671.	0.7	42
64	Orientation control of GaN and grown on sapphire by metal-organic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2010, 312, 2171-2174.	0.7	42
65	MOVPE-grown AlGaIn-based tunnel heterojunctions enabling fully transparent UVC LEDs. <i>Photonics Research</i> , 2019, 7, B7.	3.4	42
66	(Al,Ga)N overgrowth over AlN ridges oriented in [1120] and [1100] direction. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2022-2024.	0.8	41
67	High-power UV-B LEDs with long lifetime. <i>Proceedings of SPIE</i> , 2015, , .	0.8	41
68	AlN growth on nano-patterned sapphire: A route for cost efficient pseudo substrates for deep UV LEDs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 3178-3185.	0.8	41
69	Stabilization of sputtered AlN/sapphire templates during high temperature annealing. <i>Journal of Crystal Growth</i> , 2019, 512, 142-146.	0.7	40
70	Growth optimization during III-nitride multiwafer MOVPE using real-time curvature, reflectance and true temperature measurements. <i>Journal of Crystal Growth</i> , 2007, 298, 202-206.	0.7	38
71	Controlled coalescence of MOVPE grown AlN during lateral overgrowth. <i>Journal of Crystal Growth</i> , 2013, 368, 83-86.	0.7	38
72	Metamorphic Al _{0.5} Ga _{0.5} N:Si on AlN/sapphire for the growth of UVB LEDs. <i>Journal of Crystal Growth</i> , 2017, 464, 185-189.	0.7	38

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73	Heat transfer and mass transport in a multiwafer MOVPE reactor: modelling and experimental studies. Journal of Crystal Growth, 1997, 170, 66-71.	0.7	37
74	Electrical properties and microstructure of vanadium-based contacts on ICP plasma etched n-type AlGa _N :Si and GaN:Si surfaces. Semiconductor Science and Technology, 2013, 28, 125015.	1.0	37
75	Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs. Scientific Reports, 2021, 11, 14647.	1.6	37
76	A -plane GaN epitaxial lateral overgrowth structures: Growth domains, morphological defects, and impurity incorporation directly imaged by cathodoluminescence microscopy. Applied Physics Letters, 2008, 92, .	1.5	35
77	Surface morphology of homoepitaxial GaN grown on non- and semipolar GaN substrates. Physica Status Solidi (B): Basic Research, 2011, 248, 574-577.	0.7	35
78	Techniques towards GaN power transistors with improved high voltage dynamic switching properties. , 2013, , .		35
79	Correlation of sapphire off-cut and reduction of defect density in MOVPE grown AlN. Physica Status Solidi (B): Basic Research, 2016, 253, 809-813.	0.7	35
80	Temperature and excitation power dependent photoluminescence intensity of GaInN quantum wells with varying charge carrier wave function overlap. Journal of Applied Physics, 2010, 107, .	1.1	34
81	Impact of intermediate high temperature annealing on the properties of AlN/sapphire templates grown by metalorganic vapor phase epitaxy. Japanese Journal of Applied Physics, 2019, 58, SC1002.	0.8	34
82	Reliability of UVC LEDs fabricated on AlN/sapphire templates with different threading dislocation densities. Applied Physics Letters, 2020, 117, .	1.5	34
83	Status and Prospects of AlN Templates on Sapphire for Ultraviolet Light-Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1901022.	0.8	34
84	Effect of temperature and strain on the optical polarization of (In)(Al)Ga _N ultraviolet light emitting diodes. Applied Physics Letters, 2011, 99, .	1.5	33
85	Impact of AlN nucleation layer on strain in GaN grown on 4H-SiC substrates. Journal of Crystal Growth, 2013, 371, 45-49.	0.7	33
86	Mechanisms of Implantation Damage Formation in Al _x Ga _{1-x} N Compounds. Journal of Physical Chemistry C, 2016, 120, 7277-7283.	1.5	33
87	The effects of magnesium doping on the modal loss in AlGa _N -based deep UV lasers. Applied Physics Letters, 2017, 110, .	1.5	33
88	Displacement Talbot lithography for nano-engineering of III-nitride materials. Microsystems and Nanoengineering, 2019, 5, 52.	3.4	33
89	Spectroscopic process sensors in MOVPE device production. Applied Physics A: Materials Science and Processing, 1999, 68, 309-313.	1.1	32
90	Si Doping of GaN in Hydride Vapor-Phase Epitaxy. Journal of Electronic Materials, 2013, 42, 820-825.	1.0	32

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91	High-power highly reliable Al-free 940-nm diode lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 143-148.	1.9	31
92	MOVPE process development for 650nm VCSELS using optical in-situ techniques. Journal of Crystal Growth, 2002, 235, 25-34.	0.7	31
93	Topography of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0005.gif" overflow="scroll" \rangle \langle \text{mml:mo stretchy="false" \rangle} \langle \text{mml:mn} \rangle 20 \langle \text{mml:mn} \rangle \langle \text{mml:mover} \rangle \text{Tj ETQq1 1 0.784314 rgBT /Overlock}$ phase epitaxy. Journal of Crystal Growth, 2012, 356, 70-74.	0.7	31
94	GaN boules grown by high rate HVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1450-1454.	0.8	30
95	650-nm vertical-cavity surface-emitting lasers: laser properties and reliability investigations. IEEE Photonics Technology Letters, 2002, 14, 1385-1387.	1.3	29
96	Uniformity of the wafer surface temperature during MOVPE growth of GaN-based laser diode structures on GaN and sapphire substrate. Journal of Crystal Growth, 2011, 315, 5-9.	0.7	29
97	Solar-blind AlGaIn MSM photodetectors with 24% external quantum efficiency at 0 V. Electronics Letters, 2015, 51, 1598-1600.	0.5	29
98	Substituted arsines as As sources in MOVPE. Journal of Crystal Growth, 1990, 105, 271-274.	0.7	28
99	Real-time calibration of wafer temperature, growth rate and composition by optical in-situ techniques during AlGaInAs growth in MOVPE. Journal of Crystal Growth, 2002, 240, 87-97.	0.7	28
100	Blue 489-nm picosecond pulses generated by intracavity frequency doubling in a passively mode-locked optically pumped semiconductor disk laser. Applied Physics B: Lasers and Optics, 2005, 81, 443-446.	1.1	28
101	Fe-doping in hydride vapor-phase epitaxy for semi-insulating gallium nitride. Journal of Crystal Growth, 2016, 456, 97-100.	0.7	28
102	High-power high-efficiency 1150-nm quantum-well laser. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 1217-1222.	1.9	27
103	Growth parameter optimization of the GaInP/AlGaInP active zone of 635nm red laser diodes. Journal of Crystal Growth, 2008, 310, 5175-5177.	0.7	27
104	Ultra-high-brightness 850 nm GaAs/AlGaAs photonic crystal laser diodes. Applied Physics Letters, 2008, 93, .	1.5	27
105	AlGaIn layer structures for deep UV emitters on laterally overgrown AlN/sapphire templates. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 451-454.	0.8	27
106	Growth of strained GaAsSb layers on GaAs (001) by MOVPE. Journal of Crystal Growth, 2005, 276, 347-353.	0.7	26
107	On the optical polarization properties of semipolar InGaIn quantum wells. Applied Physics Letters, 2011, 99, 051103.	1.5	26
108	Impact of electron irradiation on electron holographic potentiometry. Applied Physics Letters, 2014, 105, .	1.5	26

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109	Semi-polar GaN templates grown on 100-mm trench-patterned c-plane sapphire. Physica Status Solidi (B): Basic Research, 2015, 252, 1189-1194.	0.7	26
110	Simple method for examining sulphur passivation of facets in InGaAs-AlGaAs ($\lambda=0.98\ \mu\text{m}$) laser diodes. Applied Physics Letters, 1996, 68, 2467-2468.	1.5	25
111	In situ study of GaAs growth mechanisms using tri-methyl gallium and tri-ethyl gallium precursors in metal-organic vapour phase epitaxy. Journal of Crystal Growth, 2004, 262, 78-83.	0.7	25
112	2MeV ion irradiation effects on AlGaIn/GaN HFET devices. Solid-State Electronics, 2008, 52, 1011-1017.	0.8	25
113	Growth and Properties of Intentionally Carbon-Doped GaN Layers. Crystal Research and Technology, 2020, 55, 1900129.	0.6	25
114	High-power highly strained InGaAs quantum-well lasers operating at $1.2\ \mu\text{m}$. IEEE Photonics Technology Letters, 2002, 14, 887-889.	1.3	24
115	Freestanding 2-in GaN layers using lateral overgrowth with HVPE. Journal of Crystal Growth, 2008, 310, 911-915.	0.7	24
116	Analysis of doping induced wafer bow during GaN:Si growth on sapphire. Journal of Applied Physics, 2012, 112, 033503.	1.1	24
117	Analysis of crystal orientation in AlN layers grown on m-plane sapphire. Journal of Crystal Growth, 2014, 400, 54-60.	0.7	24
118	Effect of growth conditions and strain compensation on indium incorporation for diode lasers emitting above 1050nm. Journal of Crystal Growth, 2000, 221, 496-502.	0.7	23
119	High efficiency AlGaInP-based 650 nm vertical-cavity surface-emitting lasers. Electronics Letters, 2001, 37, 1222.	0.5	23
120	High-power 783-nm distributed-feedback laser. Electronics Letters, 2004, 40, 123.	0.5	23
121	Laser Scribing for Facet Fabrication of InGaIn MQW Diode Lasers on Sapphire Substrates. IEEE Photonics Technology Letters, 2010, 22, 416-418.	1.3	23
122	High-quality AlN grown on a thermally decomposed sapphire surface. Journal of Crystal Growth, 2017, 479, 16-21.	0.7	23
123	Freestanding two inch c-plane GaN layers grown on (100)-lithium aluminium oxide by hydride vapour phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1439-1443.	0.8	22
124	Ultrashort pulse Yb:LaSc ₃ (BO ₃) ₄ mode-locked oscillator. Optics Express, 2007, 15, 15539.	1.7	22
125	MOVPE growth optimization for laser diodes with highly strained InGaAs MQWs. Journal of Crystal Growth, 2007, 298, 652-657.	0.7	22
126	Red luminescence from freestanding GaN grown on LiAlO ₂ substrate by hydride vapor phase epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 846-849.	0.8	22

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127	Tilted Wave Lasers: A Way to High Brightness Sources of Light. IEEE Journal of Quantum Electronics, 2011, 47, 1014-1027.	1.0	22
128	Spatial clustering of defect luminescence centers in Si-doped low resistivity Al _{0.82} Ga _{0.18} N. Applied Physics Letters, 2015, 107, .	1.5	22
129	Localization of current-induced degradation effects in (InAlGa)N-based UV-B LEDs. Journal of Applied Physics, 2018, 124, .	1.1	22
130	Modeling and experimental verification of transport and deposition behavior during MOVPE of Ga _{1-x} In _x P in the Planetary Reactor. Journal of Crystal Growth, 2000, 208, 85-92.	0.7	21
131	In-situ Determination of the Carrier Concentration of (001) GaAs by Reflectance Anisotropy Spectroscopy. Physica Status Solidi A, 2001, 188, 1423-1429.	1.7	21
132	High-Brightness and Ultranarrow-Beam 850-nm GaAs/AlGaAs Photonic Band Crystal Lasers and Single-Mode Arrays. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 901-908.	1.9	21
133	Indium incorporation efficiency and critical layer thickness of (202 ⁻¹) InGa _N layers on GaN. Applied Physics Letters, 2012, 101, .	1.5	21
134	Device Breakdown and Dynamic effects in GaN Power Switching Devices: Dependencies on Material Properties and Device Design. ECS Transactions, 2013, 50, 211-222.	0.3	21
135	Measurement and simulation of top- and bottom-illuminated solar-blind AlGa _N metal-semiconductor-metal photodetectors with high external quantum efficiencies. Journal of Applied Physics, 2015, 118, .	1.1	21
136	Efficient carrier injection and electron confinement in UV light emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 210-214.	0.8	21
137	Compositional dependence of the bowing parameter for highly strained InGaAs/GaAs quantum wells. Physical Review B, 2009, 80, .	1.1	20
138	Hydride vapor phase epitaxy of GaN boules using high growth rates. Journal of Crystal Growth, 2010, 312, 2537-2541.	0.7	20
139	(In)AlGa _N deep ultraviolet light emitting diodes with optimized quantum well width. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2198-2200.	0.8	20
140	Investigation of inversion domain formation in AlN grown on sapphire by MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 496-498.	0.8	20
141	3-W Broad Area Lasers and 12-W Bars With Conversion Efficiencies up to 40% at 650 nm. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1188-1193.	1.9	19
142	InGa _N /Ga _N Disk Laser for Blue-Violet Emission Wavelengths. IEEE Photonics Technology Letters, 2010, 22, 652-654.	1.3	19
143	Comparative study of buffer designs for high breakdown voltage AlGa _N GaN HFETs. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2427-2429.	0.8	19
144	V-pit to truncated pyramid transition in AlGa _N -based heterostructures. Semiconductor Science and Technology, 2015, 30, 114010.	1.0	19

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145	Arsenic passivation of MOMBE grown GaAs surfaces. Surface Science, 1988, 204, 485-490.	0.8	18
146	MOMBE of InAs on GaAs. Journal of Crystal Growth, 1990, 105, 178-184.	0.7	18
147	Carbon doping for the GaAs base layer of Heterojunction Bipolar Transistors in a production scale MOVPE reactor. Journal of Crystal Growth, 2000, 221, 53-58.	0.7	18
148	Optimization of MOVPE growth for 650nm-emitting VCSELs. Journal of Crystal Growth, 2000, 221, 663-667.	0.7	18
149	Optimization of GaAsP/AlGaAs-based QW laser structures for high power 800 nm operation. Journal of Electronic Materials, 2000, 29, 53-56.	1.0	18
150	Exciton resonance tuning for the generation of subpicosecond pulses from a mode-locked semiconductor disk laser. Applied Physics Letters, 2006, 89, 141107.	1.5	18
151	Polarization of eigenmodes in laser diode waveguides on semipolar and nonpolar GaN. Physica Status Solidi - Rapid Research Letters, 2010, 4, 1-3.	1.2	18
152	Investigation of the temperature dependent efficiency droop in UV LEDs. Semiconductor Science and Technology, 2013, 28, 125021.	1.0	18
153	AlGaIn photodetectors for the UV spectral region on planar and epitaxial laterally overgrown AlN/sapphire templates. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 294-297.	0.8	18
154	UV-C Lasing From AlGaIn Multiple Quantum Wells on Different Types of AlN/Sapphire Templates. IEEE Photonics Technology Letters, 2015, 27, 1969-1972.	1.3	18
155	Strong amplitude-phase coupling in submonolayer quantum dots. Applied Physics Letters, 2016, 109, 201102.	1.5	18
156	Effect of the GaN:Mg Contact Layer on the Light Output and Current-Voltage Characteristic of UVB LEDs. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700643.	0.8	18
157	Degradation behavior of AlGaIn-based 233 nm deep-ultraviolet light emitting diodes. Semiconductor Science and Technology, 2018, 33, 095017.	1.0	18
158	Carbon doped GaAs grown in low pressure-metalorganic vapor phase epitaxy using carbon tetrabromide. Journal of Electronic Materials, 1995, 24, 1719-1722.	1.0	17
159	Facet formation for laser diodes on nonpolar and semipolar GaN. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1361-1364.	0.8	17
160	Growth of GaN boules via vertical HVPE. Journal of Crystal Growth, 2012, 350, 89-92.	0.7	17
161	HVPE of Al Ga $_{1-x}$ N layers on planar and trench patterned sapphire. Journal of Crystal Growth, 2012, 353, 129-133.	0.7	17
162	Excitonic recombination in epitaxial lateral overgrown AlN on sapphire. Applied Physics Letters, 2013, 103, .	1.5	17

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163	Semipolar (112) InGaN light-emitting diodes grown on chemically-mechanically polished GaN templates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2196-2200.	0.8	17
164	In-situ photoluminescence measurements during MOVPE growth of GaN and InGaN MQW structures. <i>Journal of Crystal Growth</i> , 2015, 415, 1-6.	0.7	17
165	Study of damage formation and annealing of implanted III-nitride semiconductors for optoelectronic devices. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 379, 251-254.	0.6	17
166	Effect of Electron Blocking Layer Doping and Composition on the Performance of 310 nm Light Emitting Diodes. <i>Materials</i> , 2017, 10, 1396.	1.3	17
167	Impact of operation parameters on the degradation of 233-nm AlGaIn-based far-UVC LEDs. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	17
168	Defects in GaAs films grown by MOMBE. <i>Journal of Crystal Growth</i> , 1987, 81, 281-287.	0.7	16
169	Residual donor contamination in MOCVD, MOMBE and MBE GaAs studied by far-infrared spectroscopy. <i>Semiconductor Science and Technology</i> , 1989, 4, 782-790.	1.0	16
170	Feedback controlled growth of strain-balanced InGaAs multiple quantum wells in metal-organic vapour phase epitaxy using an in situ curvature sensor. <i>Semiconductor Science and Technology</i> , 2006, 21, L45-L48.	1.0	16
171	Anisotropic strain on phonons in a-plane GaN layers studied by Raman scattering. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 51-57.	1.1	16
172	Near band edge and defect emissions from epitaxial lateral overgrown a-plane GaN with different stripe orientations. <i>Journal of Crystal Growth</i> , 2008, 310, 8-12.	0.7	16
173	5.6-W Broad-Area Lasers With a Vertical Far-Field Angle of 31° Emitting at 670 nm. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 575-577.	1.3	16
174	High-power high-brightness semiconductor lasers based on novel waveguide concepts. <i>Proceedings of SPIE</i> , 2010, , .	0.8	16
175	Impact of light polarization on photoluminescence intensity and quantum efficiency in AlGaIn and AlInGaIn layers. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	16
176	Stress evolution during Al _x Ga _{1-x} N/AlN growth on sapphire. <i>Journal of Crystal Growth</i> , 2013, 376, 54-58.	0.7	16
177	High Temperature Operation of 1060-nm High-Brightness Photonic Band Crystal Lasers With Very Low Astigmatism. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015, 21, 722-727.	1.9	16
178	MOVPE growth of violet GaN LEDs on $\hat{\Gamma}$ -Ga ₂ O ₃ substrates. <i>Journal of Crystal Growth</i> , 2017, 478, 212-215.	0.7	16
179	Influence of waveguide strain and surface morphology on AlGaIn-based deep UV laser characteristics. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 415101.	1.3	16
180	Overcoming the excessive compressive strain in AlGaIn epitaxy by introducing high Si-doping in AlN templates. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 070904.	0.8	16

#	ARTICLE	IF	CITATIONS
181	Quantitative analysis of carbon concentration in MOVPE-grown GaAs by low-temperature photoluminescence. Journal of Applied Physics, 1988, 64, 5098-5101.	1.1	15
182	Effect of doping on the thermal oxidation of GaAs. Applied Physics Letters, 1990, 56, 1131-1133.	1.5	15
183	Temperature dependent EBIC and deep level transient spectroscopy investigation of different types of misfit-dislocations at MOVPE grown GaAs/InGaAs/GaAs-single-quantum wells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 77-81.	1.7	15
184	Highly strained very high-power laser diodes with InGaAs QWs. Journal of Crystal Growth, 2003, 248, 354-358.	0.7	15
185	N-type doping of HVPE-grown GaN using dichlorosilane. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1658-1662.	0.8	15
186	Enhancement of channel conductivity in AlGaIn/GaN heterostructure field effect transistors by AlGaIn:Si back barrier. Applied Physics Letters, 2011, 99, .	1.5	15
187	Astigmatism-free high-brightness 1060 nm edge-emitting lasers with narrow circular beam profile. Optics Express, 2016, 24, 30514.	1.7	15
188	Impact of open-core threading dislocations on the performance of AlGaIn metal-semiconductor-metal photodetectors. Journal of Applied Physics, 2018, 123, .	1.1	15
189	Tri-carbon defects in carbon doped GaN. Applied Physics Letters, 2018, 113, .	1.5	15
190	High power UVB light emitting diodes with optimized n-AlGaIn contact layers. Japanese Journal of Applied Physics, 2019, 58, SCCC02.	0.8	15
191	Improving AlN Crystal Quality and Strain Management on Nanopatterned Sapphire Substrates by High-Temperature Annealing for UVC Light-Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900796.	0.8	15
192	Modelling of growth in a 5 X 3 inch multiwafer metalorganic vapour phase epitaxy reactor. Journal of Crystal Growth, 1994, 145, 630-635.	0.7	14
193	In-plane photoluminescence of vertical cavity surface-emitting laser structures. Physica Status Solidi A, 1995, 152, 293-301.	1.7	14
194	Influence of the growth temperature and substrate orientation on the layer properties of MOVPE-growth. Journal of Crystal Growth, 1997, 170, 281-286.	0.7	14
195	MOVPE growth of visible vertical-cavity surface-emitting lasers (VCSELs). Journal of Crystal Growth, 2003, 248, 186-193.	0.7	14
196	MOVPE growth for UV-LEDs. Proceedings of SPIE, 2009, , .	0.8	14
197	Influence of barrier growth schemes on the structural properties and thresholds of InGaIn quantum well laser diodes. Journal of Crystal Growth, 2014, 391, 46-51.	0.7	14
198	MOVPE growth of Al _x Ga _{1-x} N with x ≈ 0.5 on epitaxial laterally overgrown AlN/sapphire templates for UV-LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 377-380.	0.8	14

#	ARTICLE	IF	CITATIONS
199	Chip design for thin-film deep ultraviolet LEDs fabricated by laser lift-off of the sapphire substrate. Semiconductor Science and Technology, 2017, 32, 12LT01.	1.0	14
200	Highly Reflective p-Contacts Made of Pd-Al on Deep Ultraviolet Light-Emitting Diodes. IEEE Photonics Technology Letters, 2017, 29, 2222-2225.	1.3	14
201	Eu-Doped AlGaIn/GaN Superlattice-Based Diode Structure for Red Lighting: Excitation Mechanisms and Active Sites. ACS Applied Nano Materials, 2018, 1, 3845-3858.	2.4	14
202	New starting materials for MOMBE. Journal of Crystal Growth, 1991, 107, 1021-1029.	0.7	13
203	Effect of growth interruption on performance of AlGaAs/InGaAs/GaAs quantum well lasers. Journal of Crystal Growth, 1994, 145, 907-910.	0.7	13
204	Influence of oxygen in AlGaAs-based laser structures with Al-Free active region on device properties. Journal of Electronic Materials, 2001, 30, 1421-1424.	1.0	13
205	High-performance vertical-cavity surface-emitting lasers with emission wavelength between 650 and 670 nm. Electronics Letters, 2002, 38, 882.	0.5	13
206	In-situ determination of interface roughness in MOVPE-grown visible VCSELs by reflectance spectroscopy. Journal of Crystal Growth, 2003, 248, 194-200.	0.7	13
207	Automated emissivity corrected wafer-temperature measurement in Aixtrons planetary reactors. Journal of Crystal Growth, 2003, 248, 235-239.	0.7	13
208	Properties of As ⁺ -implanted and annealed GaAs and InGaAs quantum wells: Structural and band-structure modifications. Journal of Applied Physics, 2004, 95, 1122-1126.	1.1	13
209	Interdiffusion in highly strained InGaAs-QWs for high power laser diode applications. Journal of Crystal Growth, 2004, 272, 531-537.	0.7	13
210	Application of reflectance anisotropy spectroscopy to laser diode growth in MOVPE. Journal of Crystal Growth, 2005, 276, 29-36.	0.7	13
211	Mode-locked laser operation of epitaxially grown Yb:KLu(WO ₄) ₂ composites. Optics Letters, 2005, 30, 2484.	1.7	13
212	Spatial inhomogeneities in Al _x Ga _{1-x} N quantum wells induced by the surface morphology of AlN/sapphire templates. Semiconductor Science and Technology, 2015, 30, 114008.	1.0	13
213	Determination of Sapphire Off-Cut and Its Influence on the Morphology and Local Defect Distribution in Epitaxially Laterally Overgrown AlN for Optically Pumped UVC Lasers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900682.	0.8	13
214	AlN overgrowth of nano-pillar-patterned sapphire with different offcut angle by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2020, 531, 125343.	0.7	13
215	Surface chemistry of a new MOCVD reactant: PhAsH ₂ on GaAs(100). Journal of Crystal Growth, 1991, 107, 1036-1037.	0.7	12
216	Transport and reaction behaviour in Aix-2000 planetary metalorganic vapour phase epitaxy reactor. Journal of Crystal Growth, 1995, 146, 564-569.	0.7	12

#	ARTICLE	IF	CITATIONS
217	Crystalline perfection in GaInAsP/GaAs laser structures with GaInP or AlGaAs cladding layers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 44, 368-372.	1.7	12
218	MOVPE growth of tunable DBR laser diode emitting at 1060nm. <i>Journal of Crystal Growth</i> , 1998, 195, 676-680.	0.7	12
219	In situ monitoring and control of InGaP growth on GaAs in MOVPE. <i>Journal of Crystal Growth</i> , 1998, 195, 223-227.	0.7	12
220	Diode lasers with Al-free quantum wells embedded in LOC AlGaAs waveguides between 715 nm and 840 nm. , 1999, 3628, 19.		12
221	Effect of high-temperature annealing on GaInP/GaAs HBT structures grown by LP-MOVPE. <i>Journal of Electronic Materials</i> , 2000, 29, 205-209.	1.0	12
222	Optically pumped semiconductor disk laser with graded and step indices. <i>Applied Physics Letters</i> , 2006, 89, 151120.	1.5	12
223	Top- and bottom-illumination of solar-blind AlGaN metal-semiconductor-metal photodetectors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1021-1028.	0.8	12
224	Efficient iron doping of HVPE GaN. <i>Journal of Crystal Growth</i> , 2018, 500, 111-116.	0.7	12
225	High-temperature Annealing and Patterned AlN/Sapphire Interfaces. <i>Physica Status Solidi (B): Basic Research</i> , 2021, 258, 2100187.	0.7	12
226	Role of oxygen diffusion in the dislocation reduction of epitaxial AlN on sapphire during high-temperature annealing. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	12
227	Stability of sulfur-passivated facets of InGaAs-AlGaAs laser diodes. <i>IEEE Photonics Technology Letters</i> , 1996, 8, 1124-1126.	1.3	11
228	Ordering in $GaxIn_{1-x}AsyP_{1-y}$ grown on GaAs by metalorganic vapour-phase epitaxy. <i>Journal of Crystal Growth</i> , 1998, 195, 694-699.	0.7	11
229	MOVPE growth of (Al,Ga)InP-based laser structures monitored by real-time reflectance anisotropy spectroscopy. <i>Journal of Electronic Materials</i> , 2000, 29, 468-472.	1.0	11
230	Minority-carrier kinetics in heavily doped GaAs:C studied by transient photoluminescence. <i>Journal of Applied Physics</i> , 2002, 91, 5072-5078.	1.1	11
231	Growth monitoring of GaAsSb:C/InP heterostructures with reflectance anisotropy spectroscopy. <i>Journal of Crystal Growth</i> , 2004, 272, 111-117.	0.7	11
232	670 nm tapered lasers and amplifier with output powers $P \approx 1$ W and nearly diffraction limited beam quality. , 2007, , .		11
233	Self-separation of thick two inch GaN layers grown by HVPE on sapphire using epitaxial lateral overgrowth with masks containing tungsten. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2638-2641.	0.8	11
234	Semiconductor components for femtosecond semiconductor disk lasers grown by MOVPE. <i>Journal of Crystal Growth</i> , 2008, 310, 5187-5190.	0.7	11

#	ARTICLE	IF	CITATIONS
235	Strain engineering of AlGaIn/GaN HFETs grown on 3 inch 4H-SiC. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S1065.	0.8	11
236	MOVPE growth of InGaAs/GaAsP-MQWs for high-power laser diodes studied by reflectance anisotropy spectroscopy. Journal of Crystal Growth, 2009, 311, 1065-1069.	0.7	11
237	GaN-based ultraviolet light-emitting diodes with multifinger contacts. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2585-2588.	0.8	11
238	Structure investigations of nonpolar GaN layers. Journal of Microscopy, 2010, 237, 308-313.	0.8	11
239	AlGaIn Metal-Semiconductor-Metal Photodetectors on Planar and Epitaxial Laterally Overgrown AlN/Sapphire Templates for the Ultraviolet C Spectral Region. Japanese Journal of Applied Physics, 2013, 52, 08JF03.	0.8	11
240	In-situ observation of InGaIn quantum well decomposition during growth of laser diodes. Crystal Research and Technology, 2015, 50, 499-503.	0.6	11
241	Effect of Cl ₂ plasma treatment and annealing on vanadium based metal contacts to Si-doped Al _{0.75} Ga _{0.25} N. Journal of Applied Physics, 2017, 122, .	1.1	11
242	MOMBE and MOVPE-A comparison of growth techniques. Progress in Crystal Growth and Characterization, 1989, 19, 83-96.	0.8	10
243	Doping of GaAs and InP in MOMBE using DEZn, TESn and DETe. Journal of Crystal Growth, 1991, 107, 1043-1044.	0.7	10
244	Adsorption and Decomposition of Organometallics on GaAs Surfaces in Low-Pressure Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 1991, 30, L1911-L1913.	0.8	10
245	Effects of storage time of epi-ready InP:Fe substrates on the quality of metalorganic vapour phase epitaxial grown InP. Journal of Crystal Growth, 1995, 146, 549-553.	0.7	10
246	Evaluation of strained InGaAs/GaAs quantum wells by atomic force microscopy. Applied Physics Letters, 1997, 70, 1134-1136.	1.5	10
247	Direct Growth of GaN on (0001) Sapphire by Low Pressure Hydride Vapour Phase Epitaxy. Physica Status Solidi A, 2001, 188, 439-442.	1.7	10
248	Highly strained InGaAs/GaAs quantum wells emitting beyond 1.2 μm. Crystal Research and Technology, 2005, 40, 877-881.	0.6	10
249	5-W Reliable Operation Over 2000 h of 5-mm-Wide 650-nm AlGaInP/GaInP/AlGaAs Laser Bars With Asymmetric Cladding Layers. IEEE Photonics Technology Letters, 2006, 18, 1955-1957.	1.3	10
250	Bowing of thick GaN layers grown by HVPE using ELOG. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1466-1470.	0.8	10
251	Characterization of free standing GaN grown by HVPE on a LiAlO ₂ substrate. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1663-1666.	0.8	10
252	Well width study of InGaIn multiple quantum wells for blue-green emitter. Journal of Crystal Growth, 2010, 312, 3428-3433.	0.7	10

#	ARTICLE	IF	CITATIONS
253	Strong charge carrier localization interacting with extensive nonradiative recombination in heteroepitaxially grown m-plane GaInN quantum wells. <i>Semiconductor Science and Technology</i> , 2011, 26, 105017.	1.0	10
254	Characterization and optimization of 2-step MOVPE growth for single-mode DFB or DBR laser diodes. <i>Journal of Crystal Growth</i> , 2011, 315, 74-77.	0.7	10
255	High-power low-divergence 1060-nm photonic crystal laser diodes based on quantum dots. <i>Electronics Letters</i> , 2012, 48, 1419.	0.5	10
256	Optimization of GaN wafer bow grown on cone shaped patterned sapphire substrates. <i>Journal of Crystal Growth</i> , 2013, 363, 109-112.	0.7	10
257	Effect of quantum well non-uniformities on lasing threshold, linewidth, and lateral near field filamentation in violet (Al,In)GaN laser diodes. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	10
258	Polarization of photoluminescence emission from semi-polar (11 $\bar{1}$ 2) AlGaIn layers. <i>Applied Physics Letters</i> , 2014, 104, 051906.	1.5	10
259	Silicon induced defect reduction in AlN template layers for epitaxial lateral overgrowth. <i>Journal of Crystal Growth</i> , 2017, 462, 18-23.	0.7	10
260	Influence of substrate off-cut angle on the performance of 310-nm light emitting diodes. <i>Journal of Crystal Growth</i> , 2019, 526, 125241.	0.7	10
261	Continuous-wave operation of DFB laser diodes based on GaN using 10 th -order laterally coupled surface gratings. <i>Optics Letters</i> , 2020, 45, 935.	1.7	10
262	High-quality AlGaIn epitaxy on lattice-engineerable AlN template for high-power UVC light-emitting diodes. <i>Acta Materialia</i> , 2022, 226, 117625.	3.8	10
263	Growth of GaP by MOVPE at very low pressure: kinetics and carbon incorporation. <i>Journal of Crystal Growth</i> , 1991, 115, 469-473.	0.7	9
264	MOVPE growth of AlGaAs/GaInP diode lasers. <i>Journal of Electronic Materials</i> , 2000, 29, 57-61.	1.0	9
265	Interlayer formation due to group V-hydride stabilization during interruptions of MOVPE growth of InGaP. <i>Semiconductor Science and Technology</i> , 2004, 19, 680-684.	1.0	9
266	Influence of the barrier composition on the light output of InGaIn multiple-quantum-well ultraviolet light emitting diodes. <i>Proceedings of SPIE</i> , 2007, , .	0.8	9
267	Conductively Cooled 637-nm InGaP Broad-Area Lasers and Laser Bars With Conversion Efficiencies Up to 37% and a Small Vertical Far Field of 30 ^{circ} \$. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 1824-1826.	1.3	9
268	Twin-Contact 645-nm Tapered Laser With 500-mW Output Power. <i>IEEE Photonics Technology Letters</i> , 2009, 21, 236-238.	1.3	9
269	Megahertz monocrystalline optomechanical resonators with minimal dissipation. , 2010, , .		9
270	(Invited) Technological Approaches Towards High Voltage, Fast Switching GaN Power Transistors. <i>ECS Transactions</i> , 2013, 52, 979-989.	0.3	9

#	ARTICLE	IF	CITATIONS
271	Growth of laser diode structures with emission wavelength beyond 1100nm for yellow-green emission by frequency conversion. Journal of Crystal Growth, 2015, 414, 205-209.	0.7	9
272	Combined Mg/Zn p-type doping for AlGaInP laser diodes. Journal of Crystal Growth, 2015, 414, 215-218.	0.7	9
273	Determination of polarization fields in group III-nitride heterostructures by capacitance-voltage-measurements. Journal of Applied Physics, 2016, 119, .	1.1	9
274	Impact of acceptor concentration on the resistivity of Ni/Au p-contacts on semipolar (20 \times 21) GaN:Mg. Physica Status Solidi (B): Basic Research, 2016, 253, 169-173.	0.7	9
275	Influence of AlN buffer layer on growth of AlGaIn by HVPE. Physica Status Solidi (B): Basic Research, 2017, 254, 1600696.	0.7	9
276	Optical investigations of europium ion implanted in nitride-based diode structures. Surface and Coatings Technology, 2018, 355, 40-44.	2.2	9
277	Crystal damage analysis of implanted Al _x Ga _{1-x} N (0 \leq x \leq 1) by ion beam techniques. Surface and Coatings Technology, 2018, 355, 55-60.	2.2	9
278	Enhanced wall plug efficiency of AlGaIn-based deep-UV LEDs using Mo/Al as p-contact. IEEE Photonics Technology Letters, 2020, , 1-1.	1.3	9
279	Temperature-Dependent Charge Carrier Diffusion in [0001 \bar{A}] Direction of GaN Determined by Luminescence Evaluation of Buried InGaIn Quantum Wells. Physica Status Solidi (B): Basic Research, 2020, 257, 2000016.	0.7	9
280	Bulk photovoltaic effect in carbon-doped gallium nitride revealed by anomalous surface photovoltage spectroscopy. Physical Review B, 2020, 101, .	1.1	9
281	Carbon doping of GaN: Proof of the formation of electrically active tri-carbon defects. Journal of Applied Physics, 2020, 127, 205701.	1.1	9
282	Scanning electron microscopy as a flexible technique for investigating the properties of UV-emitting nitride semiconductor thin films. Photonics Research, 2019, 7, B73.	3.4	9
283	Impact of Si doping on dislocation behavior in MOVPE-grown AlN on high-temperature annealed AlN buffer layers. Journal of Applied Physics, 2022, 131, .	1.1	9
284	Formation of GaAsP interface layers monitored by reflectance anisotropy spectroscopy. Journal of Electronic Materials, 1997, 26, 1159-1163.	1.0	8
285	Behavior of the Fermi-edge singularity in the photoluminescence spectra of a high-density two-dimensional electron gas. Physical Review B, 2002, 65, .	1.1	8
286	High-efficiency AlGaInP/AlGaAs vertical-cavity surface-emitting lasers with 650-nm wavelength. IEE Proceedings: Optoelectronics, 2003, 150, 110-114.	0.8	8
287	Nanoengineering of lateral strain modulation in quantum well heterostructures. Physical Review B, 2004, 69, .	1.1	8
288	Nonequilibrium carrier dynamics in heavily p-doped GaAs. EPJ Applied Physics, 2004, 27, 181-184.	0.3	8

#	ARTICLE	IF	CITATIONS
289	Growth optimization for thick crack-free GaN layers on sapphire with HVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2099-2103.	0.8	8
290	650-nm InGaP Broad Area Lasers With 5000-h Reliable Operation at 600 mW. IEEE Photonics Technology Letters, 2007, 19, 118-120.	1.3	8
291	Segregation and desorption of antimony in InP (001) in MOVPE. Journal of Crystal Growth, 2007, 298, 159-162.	0.7	8
292	TEM study of c-plane GaN layers grown on $\text{LiAlO}_2(100)$. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3712-3715.	0.8	8
293	In-situ etching of GaAs/AlxGa1-xAs by CBr4. Journal of Crystal Growth, 2008, 310, 4754-4756.	0.7	8
294	Emission characteristics of InGaN multi quantum well light emitting diodes with differently strained InAlGaN barriers. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S889.	0.8	8
295	Boule-like growth of GaN by HVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 28-31.	0.8	8
296	High-power edge-emitting laser diode with narrow vertical beam divergence. Electronics Letters, 2011, 47, 1339.	0.5	8
297	Influence of Carrier Lifetime, Transit Time, and Operation Voltages on the Photoresponse of Visible-Blind AlGaIn Metal-Semiconductor-Metal Photodetectors. Japanese Journal of Applied Physics, 2013, 52, 08JF01.	0.8	8
298	High brightness photonic band crystal semiconductor lasers in the passive mode locking regime. Applied Physics Letters, 2014, 105, 161101.	1.5	8
299	Hydride Vapor-Phase Epitaxy of c-Plane AlGaIn Layers on Patterned Sapphire Substrates. Journal of Electronic Materials, 2014, 43, 814-818.	1.0	8
300	Role of substrate quality on the performance of semipolar (112̄) InGaIn light-emitting diodes. Journal of Applied Physics, 2016, 120, .	1.1	8
301	Development of semipolar (11-22) LEDs on GaN templates. Proceedings of SPIE, 2016, , .	0.8	8
302	Realisation of a widely tuneable sampled grating DBR laser emitting around 970nm. Electronics Letters, 2017, 53, 744-746.	0.5	8
303	Extra half-plane shortening of dislocations as an origin of tensile strain in Si-doped (Al)GaIn. Journal of Applied Physics, 2019, 126, .	1.1	8
304	Degradation of AlGaIn-based metal-semiconductor-metal photodetectors. Japanese Journal of Applied Physics, 2019, 58, SCCC21.	0.8	8
305	Crystal defect analysis in AlN layers grown by MOVPE on bulk AlN. Journal of Crystal Growth, 2019, 505, 69-73.	0.7	8
306	High-temperature annealing of AlN films grown on 4H-SiC. AIP Advances, 2020, 10, .	0.6	8

#	ARTICLE	IF	CITATIONS
307	Surface chemistry of new As precursors for MOVPE and MOMBE: phenylarsine and tertiarybutylarsine on GaAs(100). Journal of Crystal Growth, 1992, 123, 411-422.	0.7	7
308	Metalorganic vapor phase epitaxial growth of GaInAsP/GaAs. Journal of Electronic Materials, 1995, 24, 1655-1658.	1.0	7
309	Hydrogen in carbon-doped GaAs base layer of GaInP/GaAs heterojunction bipolar transistors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 44, 337-340.	1.7	7
310	Growth monitoring by reflectance anisotropy spectroscopy in MOVPE reactors for device fabrication. Journal of Crystal Growth, 1997, 170, 203-207.	0.7	7
311	Comparison of binary and ternary growth over trenches using MOVPE. Journal of Crystal Growth, 2000, 213, 229-234.	0.7	7
312	Investigation of strain-modulated InGaAs nanostructures by grazing-incidence x-ray diffraction and photoluminescence. Journal Physics D: Applied Physics, 2001, 34, A183-A187.	1.3	7
313	Evidence for strain-induced lateral carrier confinement in InGaAs quantum wells by low-temperature near-field spectroscopy. Applied Physics Letters, 2001, 79, 1611-1613.	1.5	7
314	Comprehensive characterization of MOVPE-grown AlGaAs/AlAs distributed Bragg reflector structures by optical reflectance, X-ray diffraction and atomic force microscopy. Journal of Crystal Growth, 2005, 274, 331-338.	0.7	7
315	High-performance laser diodes with emission wavelengths above 1100 nm and very small vertical divergence of the far field. IEEE Photonics Technology Letters, 2005, 17, 1145-1147.	1.3	7
316	High-efficient 650 nm laser bars with an output power of about 10 W and a wall-plug efficiency of 30%. , 2006, 6133, 78.		7
317	Comprehensive study of (Al)GaAs Si-doping using reflectance anisotropy spectroscopy in metal-organic vapour-phase epitaxy. Journal Physics D: Applied Physics, 2007, 40, 878-882.	1.3	7
318	Mechanism of LiAlO ₂ decomposition during the GaN growth on (100) $\hat{1}^3$ -LiAlO ₂ . Journal of Applied Physics, 2007, 102, .	1.1	7
319	Influence of MOVPE growth temperature on the structural and optical properties of InGaN MQW laser diodes. Journal of Crystal Growth, 2008, 310, 4525-4530.	0.7	7
320	GaN substrates by HVPE. Proceedings of SPIE, 2008, , .	0.8	7
321	Epitaxial lateral overgrowth on (21 $\hat{1}^0$) a-plane GaN with [01 $\hat{1}^1$]-oriented stripes. Journal of Crystal Growth, 2009, 311, 2895-2898.	0.7	7
322	Carrier injection in InAlGaIn single and multi \hat{e} quantum \hat{e} well ultraviolet light emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2196-2198.	0.8	7
323	Polarization dependent study of gain anisotropy in semipolar InGaN lasers. Applied Physics Letters, 2011, 99, .	1.5	7
324	In situ etched gratings embedded in AlGaAs for efficient high power 970 \hat{e} nm distributed feedback broad-area lasers. Applied Physics Letters, 2012, 100, 201115.	1.5	7

#	ARTICLE	IF	CITATIONS
325	HVPE growth of thick Al _{0.45} Ga _{0.55} N layers on trench patterned sapphire substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 355-358.	0.8	7
326	Analysis of HVPE grown AlGa _N layers on honeycomb patterned sapphire. <i>Journal of Crystal Growth</i> , 2015, 414, 32-37.	0.7	7
327	On optical polarization and charge carrier statistics of nonpolar InGa _N quantum wells. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 145-157.	0.7	7
328	Lifetime behavior of laser diodes with highly strained InGaAs QWs and emission wavelength between 1120 nm and 1180 nm. <i>Journal of Crystal Growth</i> , 2018, 491, 31-35.	0.7	7
329	Structural and luminescence imaging and characterisation of semiconductors in the scanning electron microscope. <i>Semiconductor Science and Technology</i> , 2020, 35, 054001.	1.0	7
330	Effect of impurities on the thermal oxidation process in InP. <i>Applied Physics Letters</i> , 1990, 56, 919-921.	1.5	6
331	High-resolution X-ray diffraction investigation of crystal perfection and relaxation of GaAs/InGaAs/GaAs quantum wells depending on MOVPE growth conditions. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1997, 19, 369-376.	0.4	6
332	Epitaxy of High-Power Diode Laser Structures. , 2000, , 83-120.		6
333	Properties of (In,Ga)(As,P)/GaAs interfaces grown under different metalorganic vapor phase epitaxy conditions. <i>Journal of Crystal Growth</i> , 2003, 248, 364-368.	0.7	6
334	High and low energy proton irradiation effects on AlGa _N /Ga _N HFETs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 2338-2341.	0.8	6
335	650 nm tapered lasers with 1 W maximum output power and nearly diffraction limited beam quality at 500 mW. , 2008, , .		6
336	HVPE growth of Al _x Ga _{1-x} N alloy layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, S309-S312.	0.8	6
337	GaN quantum well design and measurement conditions affecting the emission energy shape. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2151-2153.	0.8	6
338	Spacer and well pumping of InGa _N vertical cavity semiconductor lasers with varying number of quantum wells. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	6
339	Temperature induced degradation of InAlGa _N multiple-quantum well UV-B LEDs. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1792, 1.	0.1	6
340	High-power broad-area buried-mesa lasers. <i>Semiconductor Science and Technology</i> , 2017, 32, 065009.	1.0	6
341	Reduction of absorption losses in MOVPE-grown AlGaAs Bragg mirrors. <i>Optics Letters</i> , 2018, 43, 3522.	1.7	6
342	High power broad-area lasers with buried implantation for current confinement. <i>Semiconductor Science and Technology</i> , 2019, 34, 105005.	1.0	6

#	ARTICLE	IF	CITATIONS
343	The Impact of AlN Templates on Strain Relaxation Mechanisms during the MOVPE Growth of UVB-LED Structures. <i>Crystal Research and Technology</i> , 2020, 55, 1900215.	0.6	6
344	A carbon-doping related luminescence band in GaN revealed by below bandgap excitation. <i>Journal of Applied Physics</i> , 2021, 130, 055703.	1.1	6
345	Interdiffusion in InGaAs/GaAs and InGaAs/GaAsP quantum wells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 44, 20-23.	1.7	5
346	Overgrowth of trenches with (AlGa)As using metalorganic vapor-phase epitaxy (MOVPE). <i>Journal of Crystal Growth</i> , 1998, 195, 485-489.	0.7	5
347	MOVPE growth of (Al, Ga)InP-based laser structures monitored by real-time reflectance anisotropy spectroscopy. <i>Journal of Electronic Materials</i> , 2000, 29, 94-98.	1.0	5
348	Continuous-wave vertical-cavity surface-emitting lasers with emission wavelengths near 650 nm. , 2001, , .		5
349	(AlGa)As composition profile analysis of trenches overgrown with MOVPE. <i>Journal of Crystal Growth</i> , 2001, 222, 465-470.	0.7	5
350	Critical issues of growth optimization for Ga _{0.5} In _{0.5} P/GaAs heterojunction bipolar transistors. <i>Journal of Materials Science: Materials in Electronics</i> , 2002, 13, 665-670.	1.1	5
351	In situ determination and control of AlGaInP composition during MOVPE growth. <i>Journal of Crystal Growth</i> , 2006, 287, 637-641.	0.7	5
352	Microstructure of a-plane (α) GaN ELOG stripe patterns with different in-plane orientation. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 46-50.	1.1	5
353	Optical and Structural Properties of In _{0.08} GaN/In _{0.02} GaN Multiple Quantum Wells Grown at Different Temperatures and with Different Indium Supplies. <i>Journal of Electronic Materials</i> , 2010, 39, 677-683.	1.0	5
354	Optimisation of 660-nm high-power tapered diode lasers. <i>IET Optoelectronics</i> , 2011, 5, 121-127.	1.8	5
355	Growth and characterization of heavily selenium doped GaAs using MOVPE. <i>Journal of Crystal Growth</i> , 2011, 315, 57-60.	0.7	5
356	Linear thermal expansion coefficient determination using <i>in situ</i> curvature and temperature dependent X-ray diffraction measurements applied to metalorganic vapor phase epitaxy-grown AlGaAs. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	5
357	In-situ etching of patterned GaAs/InGaP surfaces for highly efficient 975nm DFB-BA diode lasers. <i>Journal of Crystal Growth</i> , 2013, 370, 226-229.	0.7	5
358	Breakdown and dynamic effects in GaN power switching devices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1393-1396.	0.8	5
359	Anisotropic Responsivity of AlGaIn Metal-Semiconductor-Metal Photodetectors on Epitaxial Laterally Overgrown AlN/Sapphire Templates. <i>Journal of Electronic Materials</i> , 2014, 43, 833-837.	1.0	5
360	Temperature and doping dependent changes in surface recombination during UV illumination of (Al)GaN bulk layers. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	5

#	ARTICLE	IF	CITATIONS
361	Structural and optical properties of (112̄...2) InGaN quantum wells compared to (0001) and (112̄...0). Semiconductor Science and Technology, 2016, 31, 085007.	1.0	5
362	Kinetics of AlGaIn metal-organic vapor phase epitaxy for deep-UV applications. Japanese Journal of Applied Physics, 2016, 55, 05FD07.	0.8	5
363	On the EQE-bias characteristics of bottom-illuminated AlGaIn-based metal-semiconductor-metal photodetectors with asymmetric electrode geometry. Journal of Applied Physics, 2017, 122, .	1.1	5
364	GaN-Based Vertical n-Channel MISFETs on Free Standing Ammonothermal GaN Substrates. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700422.	0.8	5
365	Time-resolved photoluminescence from n-doped GaN/Al _{0.18} Ga _{0.82} N short-period superlattices probes carrier kinetics and long-term structural stability. Journal of Applied Physics, 2019, 125, .	1.1	5
366	High-Temperature Annealing of AlGaIn. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000473.	0.8	5
367	Improved Efficiency of Ultraviolet B Light-Emitting Diodes with Optimized p-Side. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000406.	0.8	5
368	Passively Q-switched microchip laser based picosecond light source in the visible-red to near-infrared band for semiconductor excitation. Optics Express, 2022, 30, 15428.	1.7	5
369	A Comparison of the Growth of GaAs and GaP from Trimethyl-Gallium. Japanese Journal of Applied Physics, 1995, 34, 434-441.	0.8	4
370	Effect of growth temperature on performance of AlGaAs/InGaAs/GaAs QW laser diodes. Journal of Electronic Materials, 1996, 25, 309-312.	1.0	4
371	Stable operation of InGaAs/InGaP/AlGaAs (= 1020 nm) laser diodes. Electronics Letters, 1997, 33, 778.	0.5	4
372	MOVPE growth of hetero-bipolar-transistors using CBr ₄ as carbon dopant source. Journal of Crystal Growth, 1997, 170, 442-446.	0.7	4
373	Assessment of compensation ratio in high-purity GaAs using photoluminescence. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 44, 228-232.	1.7	4
374	Photoluminescence on ordered Ga _x In _{1-x} As _y P _{1-y} . Journal of Applied Physics, 1998, 84, 1588-1594.	1.1	4
375	Patterned growth of (AlGa)As using metalorganic vapor-phase epitaxy. Journal of Crystal Growth, 1999, 206, 255-262.	0.7	4
376	Al-free 950-nm BA diode lasers with high efficiency and reliability at 50° C ambient temperature. , 2000, 3945, 301.		4
377	Defect study of MOVPE-grown InGaP layers on GaAs. Journal of Crystal Growth, 2004, 272, 627-632.	0.7	4
378	Laser diodes with highly strained InGaAs MQWs and very narrow vertical far fields. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 423-426.	0.8	4

#	ARTICLE	IF	CITATIONS
379	AlGaN growth parameter optimisation during MOVPE for opto-electronic devices. Journal of Crystal Growth, 2007, 298, 23-27.	0.7	4
380	X-ray diffraction spot mapping - a tool to study structural properties of semiconductor disk laser devices. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2753-2759.	0.8	4
381	1 W reliable operation of broad area lasers and 8 W reliable operation of 5 mm wide laser bars at 650 nm. Proceedings of SPIE, 2008, , .	0.8	4
382	Effect of TMGa preflow on the properties of high temperature AlN layers grown on sapphire. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 285-290.	0.8	4
383	Predominant growth of non-polar a-plane (Al,Ga)N on patterned c-plane sapphire by hydride vapor phase epitaxy. Journal of Applied Physics, 2013, 113, 093505.	1.1	4
384	Surface topology caused by dislocations in polar, semipolar, and nonpolar InGaN/GaN heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 756-760.	0.8	4
385	Nano-optical analysis of GaN-based diode lasers. Semiconductor Science and Technology, 2014, 29, 112001.	1.0	4
386	Defect distribution and compositional inhomogeneities in Al _{0.5} Ga _{0.5} N layers grown on stepped surfaces. Semiconductor Science and Technology, 2016, 31, 025007.	1.0	4
387	AlGaN-based metal-semiconductor-metal photodetectors with high external quantum efficiency at low operating voltage. , 2017, , .		4
388	Design considerations for AlGaN-based UV LEDs emitting near 235 nm with uniform emission pattern. Semiconductor Science and Technology, 2017, 32, 045019.	1.0	4
389	Generation of optical picosecond pulses with monolithic colliding pulse mode-locked lasers containing a chirped double quantum well active region. IET Optoelectronics, 2017, 11, 79-85.	1.8	4
390	Comparison of symmetric and asymmetric double quantum well extended-cavity diode lasers for broadband passive mode-locking at 780 nm. Applied Optics, 2017, 56, 5566.	0.9	4
391	Si impurity concentration in nominally undoped Al _{0.7} Ga _{0.3} N grown in a planetary MOVPE reactor. Journal of Crystal Growth, 2018, 483, 297-300.	0.7	4
392	Influence of quartz on silicon incorporation in HVPE grown AlN. Journal of Crystal Growth, 2019, 507, 295-298.	0.7	4
393	Origin of defect luminescence in ultraviolet emitting AlGaN diode structures. Applied Physics Letters, 2021, 118, .	1.5	4
394	Solar- and Visible-Blind AlGaN Photodetectors. Springer Series in Materials Science, 2016, , 219-266.	0.4	4
395	High-power sampled-grating-based master oscillator power amplifier system with 235 nm wavelength tuning around 970 nm. Applied Optics, 2018, 57, 8680.	0.9	4
396	Ordering in Ga _x In _{1-x} As _y P _{1-y} Detected by Diffraction Methods. Materials Research Society Symposia Proceedings, 1995, 417, 49.	0.1	3

#	ARTICLE	IF	CITATIONS
397	Degradation properties of MOVPE-grown GaInP/GaAs HBTs under combined temperature and current stressing. <i>Microelectronics Reliability</i> , 2001, 41, 1103-1108.	0.9	3
398	Influence of lateral patterning geometry on lateral carrier confinement in strain-modulated InGaAs-nanostructures. <i>Physica Status Solidi A</i> , 2003, 195, 178-182.	1.7	3
399	Carrier dynamics in laterally strain-modulated InGaAs quantum wells. <i>Applied Physics Letters</i> , 2005, 87, 262103.	1.5	3
400	Sub-80 fs pulses from a mode-locked Yb:NaGd(WO ₄) ₂ laser. , 0, , .		3
401	High energy irradiation effects on AlGaIn/GaN HFET devices. <i>Semiconductor Science and Technology</i> , 2007, 22, 1220-1224.	1.0	3
402	Optimization of HVPE growth of freestanding c-plane GaN layers using (100) LiAlO ₂ substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2277-2280.	0.8	3
403	AlGaIn-based Ultraviolet Lasers - Applications and Materials Challenges. , 2011, , .		3
404	Optical polarization of UV-A and UV-B (In)(Al)GaN multiple quantum well light-emitting diodes. , 2011, , .		3
405	Auger effect in nonpolar quantum wells. <i>Proceedings of SPIE</i> , 2012, , .	0.8	3
406	Double-heterostructure ridge-waveguide GaAs/AlGaAs phase modulator for 780 nm lasers. <i>Applied Physics B: Lasers and Optics</i> , 2014, 116, 175-181.	1.1	3
407	Effect of carrier gas in hydride vapor phase epitaxy on optical and structural properties of GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 1180-1188.	0.7	3
408	Quantification of matrix and impurity elements in Al _x Ga _{1-x} N compounds by secondary ion mass spectrometry. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016, 34, 03H128.	0.6	3
409	Influence of template properties and quantum well number on stimulated emission from Al _{0.7} Ga _{0.3} N/Al _{0.8} Ga _{0.2} N quantum wells. <i>Semiconductor Science and Technology</i> , 2018, 33, 035015.	1.0	3
410	Ultrafast carrier dynamics in a GaN superlattice. <i>Physical Review B</i> , 2018, 97, .		3
411	Broadband Semiconductor Light Sources Operating at 1060 nm Based on InAs:Sb/GaAs Submonolayer Quantum Dots. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019, 25, 1-10.	1.9	3
412	Optimization of the Epitaxial Growth of Undoped GaN Waveguides in GaN-Based Laser Diodes Evaluated by Photoluminescence. <i>Journal of Electronic Materials</i> , 2020, 49, 5138-5143.	1.0	3
413	Comparison of Ultraviolet B Light-Emitting Diodes with Single or Triple Quantum Wells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2100100.	0.8	3
414	Temperature Dependence of Dark Spot Diameters in GaN and AlGaIn. <i>Physica Status Solidi (B): Basic Research</i> , 0, , 2100358.	0.7	3

#	ARTICLE	IF	CITATIONS
415	Current spreading suppression by O- and Si-implantation in high power broad area diode lasers. , 2019, , .		3
416	Challenges for AlGa _N Based UV Laser Diodes. , 2015, , .		3
417	Localized deposition of In and Ga in MOMBRE. Journal of Crystal Growth, 1992, 123, 174-180.	0.7	2
418	High-power diode lasers based on InGaAsP spacer and waveguide layers with AlGaAs cladding layers. , 1996, 2683, 136.		2
419	Real-time monitoring of P-based semiconductor growth by linear-optical spectroscopy. , 0, , .		2
420	Real-time growth monitoring of InGaAs/InP-HBT structures with reflectance anisotropy spectroscopy. Thin Solid Films, 1998, 313-314, 609-613.	0.8	2
421	Performance of 3-W/100- μ m stripe diode laser at 950 and 810 nm. , 2001, 4287, 93.		2
422	Investigation of short-term current gain stability of GaInP/GaAs-HBTs grown by MOVPE. Microelectronics Reliability, 2003, 43, 839-844.	0.9	2
423	Experimental method for scanning the surface depletion region in nitride based heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S691.	0.8	2
424	Spectral properties of polarized light from semipolar grown InGa _N quantum wells at low temperatures. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 700-703.	0.8	2
425	Characterization of semiconductor devices and wafer materials via sub-nanosecond time-correlated single-photon counting. Journal of Applied Spectroscopy, 2013, 80, 449-457.	0.3	2
426	Phase control of semi-polar and non-polar Ga _N on cone shaped r-plane patterned sapphire substrates. Journal of Crystal Growth, 2013, 371, 11-16.	0.7	2
427	Optical pulse generation in photonic band crystal mode locked lasers. , 2013, , .		2
428	MOVPE-grown Al _x Ga _{1-x} As _y P _{1-y} strain compensating layers on GaAs. Journal of Crystal Growth, 2013, 370, 150-153.	0.7	2
429	MOVPE growth of Al _{0.85} Ga _{0.15} As for high power laser diodes emitting at 808nm. Journal of Crystal Growth, 2013, 370, 221-225.	0.7	2
430	Waveguide Optimization for Semipolar (In,Al,Ga) _N Lasers. Japanese Journal of Applied Physics, 2013, 52, 08JG12.	0.8	2
431	Cathodoluminescence and TEM investigations of structural and optical properties of AlGa _N on epitaxial laterally overgrown AlN/sapphire templates. Journal of Physics: Conference Series, 2013, 471, 012021.	0.3	2
432	AlAsP-based strain-balancing in MOVPE-grown distributed Bragg reflectors. Journal of Crystal Growth, 2015, 414, 10-14.	0.7	2

#	ARTICLE	IF	CITATIONS
433	Exciton localization in semipolar ($112\hat{A}^2$) InGaN multiple quantum wells. Journal of Applied Physics, 2016, 120, 055705.	1.1	2
434	Near-field microscopy of waveguide architectures of InGaN/GaN diode lasers. Semiconductor Science and Technology, 2016, 31, 115015.	1.0	2
435	CBr ₄ -based in-situ etching of GaAs, assisted with TMAI and TMGa. Journal of Crystal Growth, 2016, 434, 116-122.	0.7	2
436	Triangular-shaped sapphire patterning for HVPE grown AlGaIn layers. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600751.	0.8	2
437	Avoidance of instable photoluminescence intensity from AlGaIn bulk layers. Physica Status Solidi (B): Basic Research, 2017, 254, 1600672.	0.7	2
438	Bow Reduction of AlInGaIn-Based Deep UV LED Wafers Using Focused Laser Patterning. IEEE Photonics Technology Letters, 2018, 30, 1792-1794.	1.3	2
439	AlN and AlN/Al ₂ O ₃ seed layers from atomic layer deposition for epitaxial growth of AlN on sapphire. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	2
440	Wedged Nd:YVO ₄ crystal for wavelength tuning of monolithic passively Q-switched picosecond microchip lasers. Optics Express, 2021, 29, 19790.	1.7	2
441	Advances towards deep-UV light emitting diode technologies. , 2021, , .		2
442	Group III-Nitride-Based UV Laser Diodes. Springer Series in Solid-state Sciences, 2020, , 505-548.	0.3	2
443	Enhanced light extraction efficiency of UV LEDs by encapsulation with UV-transparent silicone resin. Semiconductor Science and Technology, 0, , .	1.0	2
444	MOVPE-overgrowth for buried InP/(In,Ga)(As,P) laser diode arrays. , 0, , .		1
445	On-line growth monitoring of InP-based device structures by reflectance anisotropy spectroscopy. Journal of Electronic Materials, 1997, 26, 1154-1158.	1.0	1
446	Growth monitoring of GaInP/GaAs heterojunction bipolar transistors by reflectance anisotropy spectroscopy. Journal of Crystal Growth, 1998, 195, 217-222.	0.7	1
447	Assessment of layer structures for GaInP/GaAs-heterojunction bipolar transistors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 66, 162-173.	1.7	1
448	Correlation of InGaP(001) Surface Structure During Growth and CuptB-Type Bulk Ordering. Materials Research Society Symposia Proceedings, 1999, 583, 217.	0.1	1
449	Femtosecond excitation cavity studies and superluminescence by two-photon absorption in vertical cavity lasers at 300 K. Physical Review B, 2002, 66, .	1.1	1
450	Investigation of short-term current gain stability of GaInP/GaAs-HBTs grown by MOVPE. , 0, , .		1

#	ARTICLE	IF	CITATIONS
451	The impact of defects to minority-carrier dynamics in heavily doped GaAs:C analyzed by transient photoluminescence spectroscopy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 91-92, 25-28.	1.7	1
452	High-power, high-efficiency 1150 nm quantum well laser. , 0, , .		1
453	Passively cooled 940 nm laser bars with 73 % wall-plug efficiency and high reliability at 98 W quasi-cw output power. , 0, , .		1
454	Avoidance of surface-related defects in MOVPE-grown InGaP layers. <i>Journal of Crystal Growth</i> , 2006, 287, 633-636.	0.7	1
455	Study of in-depth strain variation in ion-irradiated GaN. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 68-72.	1.1	1
456	Irradiation effects on AlGaIn HFET devices and GaN layers. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 64-67.	1.1	1
457	InGaAs-AlGaAs Disk Laser Generating sub-220-fs Pulses and Tapered Diode Amplifier with Ultrafast Pulse Picking. , 2009, , .		1
458	Optimization of InGaIn/(In,Al,Ga)N based near UV-LEDs by MQW strain balancing with in-situ wafer bow sensor. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 211-214.	0.8	1
459	Study of excess carrier dynamics in polar, semi-polar, and non-polar (In,Ga)N epilayers and QWs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2154-2156.	0.8	1
460	(Invited) High Voltage Normally-Off Transistors and Efficient Schottky Diodes based on GaN Technology. <i>ECS Transactions</i> , 2011, 41, 127-138.	0.3	1
461	Harmonically and fundamentally mode-locked InGaAs-AlGaAs disk laser generating pulse repetition rates in the 100 GHz or pulse durations in the 100-fs range. , 2012, , .		1
462	The impact of external optical feedback on the degradation behavior of high-power diode lasers. , 2013, , .		1
463	Quantum Efficiency Analysis of Near-Ultraviolet Emitting AlGaIn and AlInGaIn Structures. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JL14.	0.8	1
464	Solar-blind Al _x Ga _{1-x} N MSM photodetectors on patterned AlN/sapphire templates with 0.4 x ≤ 1. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 802-805.	0.8	1
465	Current spreading in UV-C LEDs emitting at 235 nm. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1
466	Enhanced quantum efficiency of AlGaIn photodetectors by patterned growth. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1005-1010.	0.8	1
467	In-situ control of large area (11 [±] 22)-GaN growth on patterned r-plane sapphire. <i>Journal of Crystal Growth</i> , 2016, 452, 253-257.	0.7	1
468	Process control of MOCVD growth for LEDs by in-situ photoluminescence. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
469	Influence of the LED heterostructure on the degradation behavior of (InAlGa)N-based UV-B LEDs. Proceedings of SPIE, 2016, , .	0.8	1
470	In-situ photoluminescence measurements during MOVPE of GaN and InGaN in a CCS reactor. TM Technisches Messen, 2017, 84, 747-752.	0.3	1
471	Advanced <i>in-situ</i> control for III-nitride RF power device epitaxy. Semiconductor Science and Technology, 2018, 33, 045014.	1.0	1
472	Designing sapphire surface patterns to promote AlGaIn overgrowth in hydride vapor phase epitaxy. Semiconductor Science and Technology, 2020, 35, 035028.	1.0	1
473	Structural and electrical properties of Pd/p-GaN contacts for GaN-based laser diodes. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2020, 38, 032211.	0.6	1
474	Growth of c-Plane GaN Films on (100) $\hat{\Gamma}$ -LiAlO ₂ by Hydride Vapour Phase Epitaxy. Springer Proceedings in Physics, 2008, , 45-48.	0.1	1
475	Vapor Phase Epitaxy of AlGaIn Base Layers on Sapphire Substrates for Nitride-Based UV-Light Emitters. Springer Series in Materials Science, 2016, , 47-73.	0.4	1
476	Passively mode-locked semiconductor disk laser generating sub-300-fs pulses. , 2008, , .		1
477	58 fs pulses from a mode-locked Yb:LuVO ₄ laser. , 2007, , .		1
478	Algorithms and Models for Simulation of MOCVD of III-V Layers in the Planetary Reactor. , 1995, , 328-331.		1
479	Reflectors and tuning elements for widely-tunable GaAs-based sampled grating DBR lasers. , 2018, , .		1
480	Molten Barium Hydroxide as Defect Selective Drop Etchant for Dislocation Analysis on Aluminum Nitride Layers. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100707.	0.8	1
481	Raman Study of MOMBE and Plasma-MOVPE Grown III-V Layers on Si(100).. Materials Research Society Symposia Proceedings, 1989, 160, 499.	0.1	0
482	Epitaxy of III-V semiconductors. Canadian Journal of Physics, 1991, 69, 370-377.	0.4	0
483	Growth of GaAs and GaP from TMG: A Comparison. Materials Research Society Symposia Proceedings, 1991, 240, 27.	0.1	0
484	Correlation of carbon incorporation from TEG and effective V/III ratio on the surface in MOMBE grown GaAs. Journal of Crystal Growth, 1991, 107, 1053-1054.	0.7	0
485	Some Theoretical Aspects of Carbon Incorporation into III-V's. Materials Research Society Symposia Proceedings, 1992, 282, .	0.1	0
486	Potential sources of degradation in InGaAs/GaAs laser diodes. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1994, 28, 310-313.	1.7	0

#	ARTICLE	IF	CITATIONS
487	Analysis of Bragg reflectors by lateral photoluminescence spectroscopy. Materials Science and Technology, 1998, 14, 1314-1316.	0.8	0
488	High power 810 nm GaAsP/AlGaAs diode lasers with narrow beam divergence. , 0, , .		0
489	High power, highly reliable Al-free 940 nm diode lasers. , 0, , .		0
490	Development of 650 nm-emitting VCSELs for cw operation. , 0, , .		0
491	Red VCSELs: More than 4 mW output power at 650 nm. , 0, , .		0
492	In situ analysis of a vertical-cavity surface-emitting laser active layer by two-photon spectroscopy. Optical Engineering, 2003, 42, 1152.	0.5	0
493	Investigation of Breakdown and DC Behavior in HBTs With (Al,Ga)As Collector Layer. IEEE Electron Device Letters, 2004, 25, 672-674.	2.2	0
494	Femtosecond mode-locking of epitaxially grown Yb:KLu(WO ₄) ₂ composites. , 0, , .		0
495	Optimised two layer overgrowth of a lateral strain-modulated nanostructure. Journal of Alloys and Compounds, 2005, 401, 226-230.	2.8	0
496	Optically pumped surface-emitting semiconductor disk lasers with high spatial and spectral homogeneity. , 2006, , .		0
497	5.5 W output power from 100 μm stripe width lasers at 670 nm with a vertical far-field angle of 32 degrees. , 2007, , .		0
498	Optically pumped semiconductor disk laser with graded and step indices for cw and ultrashort pulse generation. , 2007, , .		0
499	Microscopic recombination kinetics in high quality, fully coalesced a-plane GaN ELO structures investigated by ps-time-resolved cathodoluminescence microscopy. , 2008, , .		0
500	High brightness and ultra-narrow beam 850 nm GaAs/AlGaAs photonic band crystal lasers and first uncoupled PBC single-mode arrays. , 2008, , .		0
501	190-fs semiconductor disk laser and tapered diode amplifier with ultrafast pulse picking. , 2009, , .		0
502	Effects of low charge carrier wave function overlap on internal quantum efficiency in GaInN quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1872-1874.	0.8	0
503	Tilted waveguide and PBC lasers: Novel cavity designs for narrow far-fields and high brightness. , 2010, , .		0
504	Polarization of eigenmodes and the effect on the anisotropic gain in laser structures on nonpolar and semipolar GaN. Proceedings of SPIE, 2012, , .	0.8	0

#	ARTICLE	IF	CITATIONS
505	Investigation of GaAs based MOVPE-grown Al _x Ga _{1-x} As _y P _{1-y} strain compensating layers. , 2012, , .		0
506	Buried DFB gratings floating in AlGaAs with low oxygen contamination enable high power and efficiency DFB lasers. , 2012, , .		0
507	Degradation processes in high-power diode lasers under external optical feedback. , 2013, , .		0
508	Origin of a-plane (Al,Ga)N formation on patterned c-plane AlN/sapphire templates. Journal of Physics: Conference Series, 2013, 471, 012038.	0.3	0
509	High peak power pulse generation from PBC lasers. , 2014, , .		0
510	Double Heterostructure AlGaAs/GaAs W-shaped Waveguide Mach-Zehnder Intensity Modulator for 780 nm Lasers. , 2014, , .		0
511	Deep ultraviolet LEDs: From materials research to real-world applications. , 2015, , .		0
512	MOVPE growth of laser structures for high-power applications at different ambient temperatures. Journal of Crystal Growth, 2016, 452, 258-262.	0.7	0
513	Femtosecond Mode-Locked Semiconductor Disk Lasers. Springer Series in Optical Sciences, 2016, , 47-74.	0.5	0
514	Design and realization of a widely tunable sampled-grating distributed-Bragg reflector (SG DBR) laser emitting at 976 nm. , 2017, , .		0
515	Development of a compact mode-locked ECDL for precision frequency comparison experiments at 780 nm. , 2017, , .		0
516	Influence of silicon doping on internal quantum efficiency and threshold of optically pumped deep UV AlGaIn quantum well lasers. Semiconductor Science and Technology, 2019, 34, 015005.	1.0	0
517	Advances in electron channelling contrast imaging and electron backscatter diffraction for imaging and analysis of structural defects in the scanning electron microscope. IOP Conference Series: Materials Science and Engineering, 2020, 891, 012023.	0.3	0
518	Impact of High-Temperature Annealing on Boron Containing AlN Layers Grown by Metal Organic Vapor Phase Epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000251.	0.8	0
519	Direct observation of resonant tunneling in heterostructure with a single quantum well. Applied Physics Letters, 2021, 119, 043503.	1.5	0
520	290-fs Passively Mode-Locked Semiconductor Disk Laser. , 2008, , .		0
521	Sub-200-fs Passively Mode-Locked Semiconductor Disk Laser. , 2009, , .		0
522	Sub-200-fs Pulses at 92 GHz Repetition Rate from a Harmonically Mode-locked Semiconductor Disk Laser. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
523	Mombe and Pemocvd Growth of GaAs on Si (100) Substrates. , 1989, , 45-50.		0
524	Orientation dependent indium incorporation in MOVPE grown InGaAs/GaAs quantum wells. , 2017, , 397-400.		0
525	Analysis of strain and composition distributions in laterally strain-modulated InGaAs nanostructures after overgrowth with GaAs or InGaP. , 2018, , 135-138.		0
526	Widely tunable high power sampled-grating MOPA system emitting around 970 nm. , 2018, , .		0
527	Influence of different approaches for dynamical performance optimization of monolithic passive colliding-pulse mode-locked laser diodes emitting around 850 nm. , 2018, , .		0
528	High-power-class QCW red laser bars and stacks for pump and direct application. , 2019, , .		0
529	Defects in m-plane GaN layers grown on (100) \hat{i}^3 -LiAlO ₂ . , 2008, , 73-74.		0
530	In situ control of indium incorporation in (AlGa) _{1-\hat{x}} In _{\hat{x}} P layers. Journal of Crystal Growth, 2022, 590, 126696.	0.7	0