Markus Weyers

List of Publications by Year
in descending order

530 papers	11,118 citations	47006 47 h-index	56724 83 g-index
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.	1.5	715
2	Advances in group III-nitride-based deep UV light-emitting diode technology. Semiconductor Science and Technology, 2011, 26, 014036.	2.0	593
3	Application of GaN-based ultraviolet-C light emitting diodes â€“ UV LEDs â€“ for water disinfection. Water Research, 2011, 45, 1481-1489.	11.3	367
4	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	2.8	289
5	Recognition and imitation of pantomimed motor acts after unilateral parietal and premotor lesions: a perspective on apraxia. Neuropsychologia, 2001, 39, 200-216.	1.6	199
6	Growth of GaAsN alloys by lowâ€pressure metalorganic chemical vapor deposition using plasmaâ€cracked NH3. Applied Physics Letters, 1993, 62, 1396-1398.	3.3	196
7	A comparative study of Ga(CH3)3 and Ga(C2H5)3 in the mombe of GaAs. Journal of Crystal Growth, 1986, 74, 292-300.	1.5	177
8	AlGaN-based deep UV LEDs grown on sputtered and high temperature annealed AlN/sapphire. Applied Physics Letters, 2018, 112, .	3.3	171
9	Optical polarization characteristics of ultraviolet (In)(Al)GaN multiple quantum well light emitting diodes. Applied Physics Letters, 2010, 97, .	3.3	145
10	Selective growth of GaAs in the MOMBE and MOCVD systems. Journal of Crystal Growth, 1986, 77, 303-309.	1.5	131
11	Indium incorporation and emission wavelength of polar, nonpolar and semipolar InGaN quantum wells. Semiconductor Science and Technology, 2012, 27, 024014.	2.0	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, .	3.3	123
13	Efficient charge carrier injection into sub-250â€‰nm AlGaN multiple quantum well light emitting diodes. Applied Physics Letters, 2014, 105, .	3.3	103
14	Performance Characteristics of UV-C AlGaN-Based Lasers Grown on Sapphire and Bulk AlN Substrates. IEEE Photonics Technology Letters, 2014, 26, 342-345.	2.5	99
15	High gain ultraviolet photodetectors based on AlGaN/GaN heterostructures for optical switching. Applied Physics Letters, 2011, 98, .	3.3	90
16	High quality AlGaN grown on ELO AlN/sapphire templates. Journal of Crystal Growth, 2013, 377, 32-36.	1.5	89
17	Highly conductive n-AlxGa1â^'xN layers with aluminum mole fractions above 80%. Applied Physics Letters, 2013, 103, .	3.3	86
18	Intentional Ï•type doping by carbon in metalorganic MBE of GaAs. Journal of Electronic Materials, 1986, 15, 57-59.	2.2	82

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19	Passively mode-locked Yb:KLu(WO4)2 oscillators. Optics Express, 2005, 13, 3465.	3.4	81
20	12 W continuous-wave diode lasers at 1120 nm with InGaAs quantum wells. Applied Physics Letters, 2001, 79, 1965-1967.	3.3	79
21	High-power 808 nm lasers with a super-large optical cavity. Semiconductor Science and Technology, 2005, 20, 621-624.	2.0	79
22	Strongly transverse-electric-polarized emission from deep ultraviolet AlGaN quantum well light emitting diodes. Applied Physics Letters, 2015, 107, .	3.3	79
23	Effect of the AlN nucleation layer growth on AlN material quality. Journal of Crystal Growth, 2008, 310, 4932-4934.	1.5	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.	2.9	68
25	Effective Thermal Management in Ultraviolet Light-Emitting Diodes With Micro-LED Arrays. IEEE Transactions on Electron Devices, 2013, 60, 782-786.	3.0	68
26	Enhancement of light extraction in ultraviolet light-emitting diodes using nanopixel contact design with Al reflector. Applied Physics Letters, 2010, 96, .	3.3	62
27	Composition of selectively grown InxGa1â^'xAs structures from locally resolved Raman spectroscopy. Journal of Crystal Growth, 1991, 107, 151-155.	1.5	61
28	Structural and optical properties of nonpolar GaN thin films. Applied Physics Letters, 2008, 92, .	3.3	61
29	Growth of AlGaN and AlN on patterned AlN/sapphire templates. Journal of Crystal Growth, 2011, 315, 200-203.	1.5	61
30	Carbon incorporation in MOMBE-grown Ga0.47In0.53As. Journal of Crystal Growth, 1989, 95, 154-157.	1.5	59
31	Gaseous dopant sources in MOMBE/CBE. Journal of Crystal Growth, 1990, 105, 383-392.	1.5	58
32	Correlation of InGaP(001) surface structure during growth and bulk ordering. Physical Review B, 1999, 60, 8185-8190.	3.2	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.	1.5	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.	3.4	56
35	Degradation effects of the active region in UV-C light-emitting diodes. Journal of Applied Physics, 2018, 123, .	2.5	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.	1.5	54

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37	MOVPE growth of highly strained InGaAs/GaAs quantum wells. Journal of Crystal Growth, 1998, 183, 511-518.	1.5	54
38	Passively cooled 940â€…nm laser bars with 73% wall-plug efficiency at 70â€…W and 25Â°C. Electronics Letters, 2005, 41, 250.	1.0	53
39	Defect analysis in AlGaN layers on AlN templates obtained by epitaxial lateral overgrowth. Journal of Crystal Growth, 2014, 402, 222-229.	1.5	53
40	Quantitative analysis of in situ wafer bowing measurements for III-nitride growth on sapphire. Journal of Crystal Growth, 2008, 310, 2432-2438.	1.5	51
41	Optical in-well pumping of a semiconductor disk laser with high optical efficiency. IEEE Journal of Quantum Electronics, 2005, 41, 1439-1449.	1.9	50
42	Effect of the barrier composition on the polarization fields in near UV InGaN light emitting diodes. Applied Physics Letters, 2008, 92, 191912.	3.3	50
43	Reliability issues of GaN based high voltage power devices. Microelectronics Reliability, 2011, 51, 1710-1716.	1.7	50
44	Modulated Epitaxial Lateral Overgrowth of AlN for Efficient UV LEDs. IEEE Photonics Technology Letters, 2012, 24, 1603-1605.	2.5	49
45	Improved performance of UVC-LEDs by combination of high-temperature annealing and epitaxially laterally overgrown AlN/sapphire. Photonics Research, 2020, 8, 589.	7.0	49
46	Semipolar GaN grown on mâ€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.	3.4	48
48	Degradation of (InAlGa)N-based UV-B light emitting diodes stressed by current and temperature. Journal of Applied Physics, 2015, 118, .	2.5	47
49	Low absorption loss p-AlGaN superlattice cladding layer for current-injection deep ultraviolet laser diodes. Applied Physics Letters, 2016, 108, .	3.3	47
50	Carbon in III-V Compounds: A Theoretical Approach. Japanese Journal of Applied Physics, 1992, 31, 2483-2487.	1.5	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.	2.9	46
52	Impact of band structure and transition matrix elements on polarization properties of the photoluminescence of semipolar and nonpolar InGaN quantum wells. Physica Status Solidi (B): Basic Research, 2011, 248, 638-646.	1.5	46
53	Current-induced degradation and lifetime prediction of 310â€‰â€‰nm ultraviolet light-emitting diodes. Photonics Research, 2019, 7, B36.	7.0	46
54	Doping of GaAs in metalorganic MBE using gaseous sources. Journal of Crystal Growth, 1987, 81, 270-275.	1.5	45

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55	Passively mode-locked Yb:LuVO4oscillator. Optics Express, 2006, 14, 11668.	3.4	45
56	Highâ€temperature growth of AlN in a production scale 11 Ã— 2â€² MOVPE reactor. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1799-1801.	0.8	45
57	Proton and Heavy Ion Irradiation Effects on AlGaN/GaN HFET Devices. IEEE Transactions on Nuclear Science, 2006, 53, 3661-3666.	2.0	43
58	1.9 W continuous-wave single transverse mode emission from 1060â€‰nm edge-emitting lasers with vertically extended lasing area. Applied Physics Letters, 2014, 105, .	3.3	43
59	Gas Sensing of Nitrogen Oxide Utilizing Spectrally Pure Deep UV LEDs. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 29-36.	2.9	43
60	Degradation of (In)AlGaN-Based UVB LEDs and Migration of Hydrogen. IEEE Photonics Technology Letters, 2019, 31, 529-532.	2.5	43
61	Design and realization of high-power DFB lasers. , 2004, , .		42
62	Determination of band offsets in strainedInxGa1âˆ’xAsâ•GaAsquantum wells by capacitance-voltage profiling and SchrÃ¶dinger-Poisson self-consistent simulation. Physical Review B, 2004, 70, .	3.2	42
63	High-power red laser diodes grown by MOVPE. Journal of Crystal Growth, 2007, 298, 667-671.	1.5	42
64	Orientation control of GaN and grown on sapphire by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2010, 312, 2171-2174.	1.5	42
65	MOVPE-grown AlGaN-based tunnel heterojunctions enabling fully transparent UVC LEDs. Photonics Research, 2019, 7, B7.	7.0	42
66	(Al,Ga)N overgrowth over AlN ridges oriented in [1120] and [1100] direction. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2022-2024.	0.8	41
67	High-power UV-B LEDs with long lifetime. Proceedings of SPIE, 2015, , .	0.8	41
68	AlN growth on nano-patterned sapphire: A route for cost efficient pseudo substrates for deep UV LEDs. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3178-3185.	1.8	41
69	Stabilization of sputtered AlN/sapphire templates during high temperature annealing. Journal of Crystal Growth, 2019, 512, 142-146.	1.5	40
70	Growth optimization during III-nitride multiwafer MOVPE using real-time curvature, reflectance and true temperature measurements. Journal of Crystal Growth, 2007, 298, 202-206.	1.5	38
71	Controlled coalescence of MOVPE grown AlN during lateral overgrowth. Journal of Crystal Growth, 2013, 368, 83-86.	1.5	38
72	Metamorphic Al 0.5 Ga 0.5 N:Si on AlN/sapphire for the growth of UVB LEDs. Journal of Crystal Growth, 2017, 464, 185-189.	1.5	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.	1.5	37
74	Electrical properties and microstructure of vanadium-based contacts on ICP plasma etched n-type AlGaN:Si and GaN:Si surfaces. Semiconductor Science and Technology, 2013, 28, 125015.	2.0	37
75	Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs. Scientific Reports, 2021, 11, 14647.	3.3	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, .	3.3	35
77	Surface morphology of homoepitaxial GaN grown on non- and semipolar GaN substrates. Physica Status Solidi (B): Basic Research, 2011, 248, 574-577.	1.5	35
78	Techniques towards GaN power transistors with improved high voltage dynamic switching properties. , 2013, , .		35
79	Correlation of sapphire offâ€cut and reduction of defect density in MOVPE grown AlN. Physica Status Solidi (B): Basic Research, 2016, 253, 809-813.	1.5	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, .	2.5	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.	1.5	34
82	Reliability of UVC LEDs fabricated on AlN/sapphire templates with different threading dislocation densities. Applied Physics Letters, 2020, 117, .	3.3	34
83	Status and Prospects of AlN Templates on Sapphire for Ultraviolet Lightâ€Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1901022.	1.8	34
84	Effect of temperature and strain on the optical polarization of (In)(Al)GaN ultraviolet light emitting diodes. Applied Physics Letters, 2011, 99, .	3.3	33
85	Impact of AlN nucleation layer on strain in GaN grown on 4H-SiC substrates. Journal of Crystal Growth, 2013, 371, 45-49.	1.5	33
86	Mechanisms of Implantation Damage Formation in Al_xGa_{1â€“x}N Compounds. Journal of Physical Chemistry C, 2016, 120, 7277-7283.	3.1	33
87	The effects of magnesium doping on the modal loss in AlGaN-based deep UV lasers. Applied Physics Letters, 2017, 110, .	3.3	33
88	Displacement Talbot lithography for nano-engineering of III-nitride materials. Microsystems and Nanoengineering, 2019, 5, 52.	7.0	33
89	Spectroscopic process sensors in MOVPE device production. Applied Physics A: Materials Science and Processing, 1999, 68, 309-313.	2.3	32
90	Si Doping of GaN in Hydride Vapor-Phase Epitaxy. Journal of Electronic Materials, 2013, 42, 820-825.	2.2	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.	2.9	31
92	MOVPE process development for 650nm VCSELS using optical in-situ techniques. Journal of Crystal Growth, 2002, 235, 25-34.	1.5	31
93	Topography of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0005.gif" overflow="scroll"><mml:mo stretchy="false">(</mml:mo><mml:mn>20</mml:mn><mml:mover) Tj ETQq1 1 0.784314 rgBT /Overlock 1 phase epitaxy. Journal of Crystal Growth, 2012, 356, 70-74.	1.5	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.	2.5	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.	1.5	29
97	Solarâ€blind AlGaN MSM photodetectors with 24% external quantum efficiency at 0 V. Electronics Letters, 2015, 51, 1598-1600.	1.0	29
98	Substituted arsines as As sources in MOMBE. Journal of Crystal Growth, 1990, 105, 271-274.	1.5	28
99	Real-time calibration of wafer temperature, growth rate and composition by optical in-situ techniques during AlxGa1â^'xAs growth in MOVPE. Journal of Crystal Growth, 2002, 240, 87-97.	1.5	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.	2.2	28
101	Fe-doping in hydride vapor-phase epitaxy for semi-insulating gallium nitride. Journal of Crystal Growth, 2016, 456, 97-100.	1.5	28
102	High-power high-efficiency 1150-nm quantum-well laser. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 1217-1222.	2.9	27
103	Growth parameter optimization of the GaInP/AlGaInP active zone of 635nm red laser diodes. Journal of Crystal Growth, 2008, 310, 5175-5177.	1.5	27
104	Ultrahigh-brightness 850 nm GaAs/AlGaAs photonic crystal laser diodes. Applied Physics Letters, 2008, 93, .	3.3	27
105	AlGaN layer structures for deep UV emitters on laterally overgrown AlN/sapphire templates. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 451-454.	1.8	27
106	Growth of strained GaAsSb layers on GaAs (001) by MOVPE. Journal of Crystal Growth, 2005, 276, 347-353.	1.5	26
107	On the optical polarization properties of semipolar InGaN quantum wells. Applied Physics Letters, 2011, 99, 051103.	3.3	26
108	Impact of electron irradiation on electron holographic potentiometry. Applied Physics Letters, 2014, 105, .	3.3	26

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109	Semiâ€polar â€GaN templates grown on 100â€‰mm trenchâ€patterned râ€plane sapphire. Physica Status Solidi (B): Basic Research, 2015, 252, 1189-1194.	1.5	26
110	Simple method for examining sulphur passivation of facets in InGaAsâ€“AlGaAs (Î»=0.98 Î¼m) laser diodes. Applied Physics Letters, 1996, 68, 2467-2468.	3.3	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.	1.5	25
112	2MeV ion irradiation effects on AlGaN/GaN HFET devices. Solid-State Electronics, 2008, 52, 1011-1017.	1.4	25
113	Growth and Properties of Intentionally Carbonâ€Doped GaN Layers. Crystal Research and Technology, 2020, 55, 1900129.	1.3	25
114	High-power highly strained InGaAs quantum-well lasers operating at 1.2 Î¼m. IEEE Photonics Technology Letters, 2002, 14, 887-889.	2.5	24
115	Freestanding 2-in GaN layers using lateral overgrowth with HVPE. Journal of Crystal Growth, 2008, 310, 911-915.	1.5	24
116	Analysis of doping induced wafer bow during GaN:Si growth on sapphire. Journal of Applied Physics, 2012, 112, 033503.	2.5	24
117	Analysis of crystal orientation in AlN layers grown on m-plane sapphire. Journal of Crystal Growth, 2014, 400, 54-60.	1.5	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.	1.5	23
119	High efficiency AlGaInP-based 650 nm vertical-cavity surface-emitting lasers. Electronics Letters, 2001, 37, 1222.	1.0	23
120	High-power 783â€…nm distributed-feedback laser. Electronics Letters, 2004, 40, 123.	1.0	23
121	Laser Scribing for Facet Fabrication of InGaN MQW Diode Lasers on Sapphire Substrates. IEEE Photonics Technology Letters, 2010, 22, 416-418.	2.5	23
122	High-quality AlN grown on a thermally decomposed sapphire surface. Journal of Crystal Growth, 2017, 479, 16-21.	1.5	23
123	Freestanding two inch c-plane GaN layers grown on (100) Î³-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.	3.4	22
125	MOVPE growth optimization for laser diodes with highly strained InGaAs MQWs. Journal of Crystal Growth, 2007, 298, 652-657.	1.5	22
126	Red luminescence from freestanding GaN grown on LiAlO2substrate by hydride vapor phase epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 846-849.	1.8	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.	1.9	22
128	Spatial clustering of defect luminescence centers in Si-doped low resistivity Al0.82Ga0.18N. Applied Physics Letters, 2015, 107, .	3.3	22
129	Localization of current-induced degradation effects in (InAlGa)N-based UV-B LEDs. Journal of Applied Physics, 2018, 124, .	2.5	22
130	Modeling and experimental verification of transport and deposition behavior during MOVPE of Ga1-xInxP in the Planetary Reactor. Journal of Crystal Growth, 2000, 208, 85-92.	1.5	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.	2.9	21
133	Indium incorporation efficiency and critical layer thickness of (202Â¯1) InGaN layers on GaN. Applied Physics Letters, 2012, 101, .	3.3	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.	0.5	21
135	Measurement and simulation of top- and bottom-illuminated solar-blind AlGaN metal-semiconductor-metal photodetectors with high external quantum efficiencies. Journal of Applied Physics, 2015, 118, .	2.5	21
136	Efficient carrierâ€injection and electronâ€confinement in UVâ€B lightâ€emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 210-214.	1.8	21
137	Compositional dependence of the bowing parameter for highly strained InGaAs/GaAs quantum wells. Physical Review B, 2009, 80, .	3.2	20
138	Hydride vapor phase epitaxy of GaN boules using high growth rates. Journal of Crystal Growth, 2010, 312, 2537-2541.	1.5	20
139	(In)AlGaN deep ultraviolet light emitting diodes with optimized quantum well width. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2198-2200.	1.8	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.	2.9	19
142	InGaNâ€“GaN Disk Laser for Blue-Violet Emission Wavelengths. IEEE Photonics Technology Letters, 2010, 22, 652-654.	2.5	19
143	Comparative study of buffer designs for high breakdown voltage AlGaNGaN 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 AlGaN-based heterostructures. Semiconductor Science and Technology, 2015, 30, 114010.	2.0	19

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145	Arsenic passivation of MOMBE grown GaAs surfaces. Surface Science, 1988, 204, 485-490.	1.9	18
146	MOMBE of InAs on GaAs. Journal of Crystal Growth, 1990, 105, 178-184.	1.5	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.	1.5	18
148	Optimization of MOVPE growth for 650nm-emitting VCSELs. Journal of Crystal Growth, 2000, 221, 663-667.	1.5	18
149	Optimization of GaAsP/AlGaAs-based QW laser structures for high power 800 nm operation. Journal of Electronic Materials, 2000, 29, 53-56.	2.2	18
150	Exciton resonance tuning for the generation of subpicosecond pulses from a mode-locked semiconductor disk laser. Applied Physics Letters, 2006, 89, 141107.	3.3	18
151	Polarization of eigenmodes in laser diode waveguides on semipolar and nonpolar GaN. Physica Status Solidi - Rapid Research Letters, 2010, 4, 1-3.	2.4	18
152	Investigation of the temperature dependent efficiency droop in UV LEDs. Semiconductor Science and Technology, 2013, 28, 125021.	2.0	18
153	AlGaN photodetectors for the UVâ€C 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 AlGaN Multiple Quantum Wells on Different Types of AlN/Sapphire Templates. IEEE Photonics Technology Letters, 2015, 27, 1969-1972.	2.5	18
155	Strong amplitude-phase coupling in submonolayer quantum dots. Applied Physics Letters, 2016, 109, 201102.	3.3	18
156	Effect of the GaN:Mg Contact Layer on the Lightâ€Output and Currentâ€Voltage Characteristic of UVB LEDs. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700643.	1.8	18
157	Degradation behavior of AlGaN-based 233 nm deep-ultraviolet light emitting diodes. Semiconductor Science and Technology, 2018, 33, 095017.	2.0	18
158	Carbon doped GaAs grown in low pressure-metalorganic vapor phase epitaxy using carbon tetrabromide. Journal of Electronic Materials, 1995, 24, 1719-1722.	2.2	17
159	Facet formation for laser diodes on nonpolar and semipolar GaN. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1361-1364.	1.8	17
160	Growth of GaN boules via vertical HVPE. Journal of Crystal Growth, 2012, 350, 89-92.	1.5	17
161	HVPE of Al Gaâ‹'N layers on planar and trench patterned sapphire. Journal of Crystal Growth, 2012, 353, 129-133.	1.5	17
162	Excitonic recombination in epitaxial lateral overgrown AlN on sapphire. Applied Physics Letters, 2013, 103, .	3.3	17

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163	Semipolar (112) InGaN lightâ€emitting diodes grown on chemicallyâ€“mechanically polished GaN templates. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2196-2200.	1.8	17
164	In-situ photoluminescence measurements during MOVPE growth of GaN and InGaN MQW structures. Journal of Crystal Growth, 2015, 415, 1-6.	1.5	17
165	Study of damage formation and annealing of implanted III-nitride semiconductors for optoelectronic devices. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 251-254.	1.4	17
166	Effect of Electron Blocking Layer Doping and Composition on the Performance of 310 nm Light Emitting Diodes. Materials, 2017, 10, 1396.	2.9	17
167	Impact of operation parameters on the degradation of 233â€‰nm AlGaN-based far-UVC LEDs. Journal of Applied Physics, 2022, 131, .	2.5	17
168	Defects in GaAs films grown by MOMBE. Journal of Crystal Growth, 1987, 81, 281-287.	1.5	16
169	Residual donor contamination in MOCVD, MOMBE and MBE GaAs studied by far-infrared spectroscopy. Semiconductor Science and Technology, 1989, 4, 782-790.	2.0	16
170	Feedback controlled growth of strain-balanced InGaAs multiple quantum wells in metal-organic vapour phase epitaxy using anin situcurvature sensor. Semiconductor Science and Technology, 2006, 21, L45-L48.	2.0	16
171	Anisotropic strain on phonons in a-plane GaN layers studied by Raman scattering. Journal of Materials Science: Materials in Electronics, 2008, 19, 51-57.	2.2	16
172	Near band edge and defect emissions from epitaxial lateral overgrown a-plane GaN with different stripe orientations. Journal of Crystal Growth, 2008, 310, 8-12.	1.5	16
173	5.6-W Broad-Area Lasers With a Vertical Far-Field Angle of 31^{circ} Emitting at 670 nm. IEEE Photonics Technology Letters, 2008, 20, 575-577.	2.5	16
174	High-power high-brightness semiconductor lasers based on novel waveguide concepts. Proceedings of SPIE, 2010, , .	0.8	16
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