

Michael Kneissl

List of Publications by Year in descending order

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391
papers

10,835
citations

43973

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g-index

395
all docs

395
docs citations

395
times ranked

5231
citing authors

#	ARTICLE	IF	CITATIONS
1	The emergence and prospects of deep-ultraviolet light-emitting diode technologies. Nature Photonics, 2019, 13, 233-244.	15.6	800
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	Fabrication of thin-film InGaN light-emitting diode membranes by laser lift-off. Applied Physics Letters, 1999, 75, 1360-1362.	1.5	326
5	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
6	Unidirectional lasing from InGaN multiple-quantum-well spiral-shaped micropillars. Applied Physics Letters, 2003, 83, 1710-1712.	1.5	272
7	InGa ^x N light emitting diodes on Si substrates fabricated by Pd-In metal bonding and laser lift-off. Applied Physics Letters, 2000, 77, 2822-2824.	1.5	178
8	AlGa _N -based deep UV LEDs grown on sputtered and high temperature annealed AlN/sapphire. Applied Physics Letters, 2018, 112, .	1.5	171
9	Metastability of Oxygen Donors in AlGa _N . Physical Review Letters, 1998, 80, 4008-4011.	2.9	154
10	Current-injection spiral-shaped microcavity disk laser diodes with unidirectional emission. Applied Physics Letters, 2004, 84, 2485-2487.	1.5	147
11	Optical polarization characteristics of ultraviolet (In)(Al)Ga _N multiple quantum well light emitting diodes. Applied Physics Letters, 2010, 97, .	1.5	145
12	Ultraviolet semiconductor laser diodes on bulk AlN. Journal of Applied Physics, 2007, 101, 123103.	1.1	144
13	Effect of strain and barrier composition on the polarization of light emission from AlGa _N /AlN quantum wells. Applied Physics Letters, 2012, 100, .	1.5	143
14	Indium incorporation and emission wavelength of polar, nonpolar and semipolar InGa _N quantum wells. Semiconductor Science and Technology, 2012, 27, 024014.	1.0	129
15	Quantitative analysis of the polarization fields and absorption changes in InGa _N /Ga _N quantum wells with electroabsorption spectroscopy. Applied Physics Letters, 2002, 81, 490-492.	1.5	116
16	Nitride emitters go nonpolar. Physica Status Solidi - Rapid Research Letters, 2007, 1, A44-A46.	1.2	105
17	The critical thickness of InGa _N on (0001)Ga _N . Journal of Crystal Growth, 2008, 310, 4913-4915.	0.7	104
18	Efficient charge carrier injection into sub-250nm AlGa _N multiple quantum well light emitting diodes. Applied Physics Letters, 2014, 105, .	1.5	103

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19	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
20	High gain ultraviolet photodetectors based on AlGaIn/GaN heterostructures for optical switching. Applied Physics Letters, 2011, 98, .	1.5	90
21	High quality AlGaIn grown on ELO AlN/sapphire templates. Journal of Crystal Growth, 2013, 377, 32-36.	0.7	89
22	Highly conductive n-Al _x Ga _{1-x} N layers with aluminum mole fractions above 80%. Applied Physics Letters, 2013, 103, .	1.5	86
23	Characterization of AlGaInN diode lasers with mirrors from chemically assisted ion beam etching. Applied Physics Letters, 1998, 72, 1539-1541.	1.5	83
24	Ultraviolet AlGaIn multiple-quantum-well laser diodes. Applied Physics Letters, 2003, 82, 4441-4443.	1.5	82
25	Near-bandedge cathodoluminescence of an AlN homoepitaxial film. Applied Physics Letters, 2004, 84, 3501-3503.	1.5	80
26	Strongly transverse-electric-polarized emission from deep ultraviolet AlGaIn quantum well light emitting diodes. Applied Physics Letters, 2015, 107, .	1.5	79
27	Low-threshold stimulated emission at 249 nm and 256 nm from AlGaIn-based multiple-quantum-well lasers grown on sapphire substrates. Applied Physics Letters, 2014, 105, .	1.5	78
28	Influence of microstructure on the carrier concentration of Mg-doped GaN films. Applied Physics Letters, 2001, 79, 2734-2736.	1.5	77
29	Effect of the AlN nucleation layer growth on AlN material quality. Journal of Crystal Growth, 2008, 310, 4932-4934.	0.7	76
30	Determination of the piezoelectric field in InGaIn quantum wells. Applied Physics Letters, 2005, 86, 131108.	1.5	71
31	Continuous-wave operation of ultraviolet InGaIn/InAlGaIn multiple-quantum-well laser diodes. Applied Physics Letters, 2003, 82, 2386-2388.	1.5	69
32	Optically pumped UV lasers grown on bulk AlN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 822-825.	0.8	69
33	Effective Thermal Management in Ultraviolet Light-Emitting Diodes With Micro-LED Arrays. IEEE Transactions on Electron Devices, 2013, 60, 782-786.	1.6	68
34	Polycrystalline nitride semiconductor light-emitting diodes fabricated on quartz substrates. Applied Physics Letters, 2000, 76, 2182-2184.	1.5	66
35	Enhancement of light extraction in ultraviolet light-emitting diodes using nanopixel contact design with Al reflector. Applied Physics Letters, 2010, 96, .	1.5	62
36	Defect-Related Degradation of AlGaIn-Based UV-B LEDs. IEEE Transactions on Electron Devices, 2017, 64, 200-205.	1.6	62

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37	Structural and optical properties of nonpolar GaN thin films. Applied Physics Letters, 2008, 92, .	1.5	61
38	Growth of AlGaIn and AlN on patterned AlN/sapphire templates. Journal of Crystal Growth, 2011, 315, 200-203.	0.7	61
39	A Brief Review of III-Nitride UV Emitter Technologies and Their Applications. Springer Series in Materials Science, 2016, , 1-25.	0.4	60
40	Auger recombination in AlGaIn quantum wells for UV light-emitting diodes. Applied Physics Letters, 2018, 113, .	1.5	59
41	Laser gain properties of AlGaIn quantum wells. Journal of Applied Physics, 2005, 98, 114502.	1.1	58
42	Continuous-wave InGaIn multiple-quantum-well laser diodes on copper substrates. Applied Physics Letters, 2001, 78, 1198-1200.	1.5	57
43	Room-temperature continuous-wave operation of InGaIn multiple-quantum-well laser diodes with an asymmetric waveguide structure. Applied Physics Letters, 1999, 75, 581-583.	1.5	56
44	Degradation effects of the active region in UV-C light-emitting diodes. Journal of Applied Physics, 2018, 123, .	1.1	55
45	Integration of GaN thin films with dissimilar substrate materials by Pd-In metal bonding and laser lift-off. Journal of Electronic Materials, 1999, 28, 1409-1413.	1.0	54
46	Vertical injection thin-film AlGaIn ^x AlGaIn multiple-quantum-well deep ultraviolet light-emitting diodes. Applied Physics Letters, 2006, 89, 241113.	1.5	53
47	Effect of the barrier composition on the polarization fields in near UV InGaIn light emitting diodes. Applied Physics Letters, 2008, 92, 191912.	1.5	50
48	Milliwatt power 233nm AlGaIn-based deep UV-LEDs on sapphire substrates. Applied Physics Letters, 2020, 117, .	1.5	50
49	Modulated Epitaxial Lateral Overgrowth of AlN for Efficient UV LEDs. IEEE Photonics Technology Letters, 2012, 24, 1603-1605.	1.3	49
50	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
51	Semipolar GaN grown on m-plane sapphire using MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1815-1817.	0.8	48
52	Surface diffusion and layer morphology of ((112̂ ²)) GaN grown by metal-organic vapor phase epitaxy. Journal of Applied Physics, 2012, 111, .	1.1	48
53	Room-temperature pulsed operation of an electrically injected InGaIn/GaN multi-quantum well distributed feedback laser. Applied Physics Letters, 1998, 73, 2158-2160.	1.5	47
54	Degradation of (InAlGa)N-based UV-B light emitting diodes stressed by current and temperature. Journal of Applied Physics, 2015, 118, .	1.1	47

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55	Low absorption loss p-AlGaIn superlattice cladding layer for current-injection deep ultraviolet laser diodes. Applied Physics Letters, 2016, 108, .	1.5	47
56	Electronic properties of Si-doped Al _x Ga _{1-x} N with aluminum mole fractions above 80%. Journal of Applied Physics, 2016, 120, .	1.1	47
57	Controlling the morphology transition between step-flow growth and step-bunching growth. Journal of Crystal Growth, 2017, 478, 187-192.	0.7	47
58	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
59	Current-induced degradation and lifetime prediction of 310-nm ultraviolet light-emitting diodes. Photonics Research, 2019, 7, B36.	3.4	46
60	High-temperature growth of AlN in a production scale 11 Å— 2 MOVPE reactor. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1799-1801.	0.8	45
61	MOVPE growth of semipolar AlGaIn quantum wells on GaN/AlN heterostructure. Applied Physics Letters, 2007, 91, 101101.	0.7	45
62	Improved injection efficiency in 290-nm light emitting diodes with Al(Ga)N electron blocking heterostructure. Applied Physics Letters, 2013, 103, .	1.5	44
63	Optical light polarization and light extraction efficiency of AlGaIn-based LEDs emitting between 264 and 220nm. Japanese Journal of Applied Physics, 2019, 58, SCCB20.	0.8	44
64	Gas Sensing of Nitrogen Oxide Utilizing Spectrally Pure Deep UV LEDs. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 29-36.	1.9	43
65	Degradation of (In)AlGaIn-Based UVB LEDs and Migration of Hydrogen. IEEE Photonics Technology Letters, 2019, 31, 529-532.	1.3	43
66	Phase separation in InGaIn multiple quantum wells annealed at high nitrogen pressures. Applied Physics Letters, 1999, 75, 3950-3952.	1.5	42
67	Ultraviolet InAlGaIn Light Emitting Diodes Grown on Hydride Vapor Phase Epitaxy AlGaIn/Sapphire Templates. Japanese Journal of Applied Physics, 2006, 45, 3905-3908.	0.8	42
68	Orientation control of GaIn and grown on sapphire by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2010, 312, 2171-2174.	0.7	42
69	Crystal orientation of GaIn layers on (101 0) m-plane sapphire. Physica Status Solidi (B): Basic Research, 2011, 248, 583-587.	0.7	42
70	MOVPE-grown AlGaIn-based tunnel heterojunctions enabling fully transparent UVC LEDs. Photonics Research, 2019, 7, B7.	3.4	42
71	Above band gap absorption spectra of the arsenic antisite defect in low temperature grown GaAs and AlGaAs. Applied Physics Letters, 1996, 68, 37-39.	1.5	41
72	(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

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73	High-power UV-B LEDs with long lifetime. Proceedings of SPIE, 2015, , .	0.8	41
74	Structural and optical properties of semipolar AlGaIn grown on sapphire by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2013, 367, 42-47.	0.7	40
75	Performance and degradation of continuous-wave InGaIn multiple-quantum-well laser diodes on epitaxially laterally overgrown GaN substrates. Applied Physics Letters, 2000, 77, 1931-1933.	1.5	38
76	Controlled coalescence of MOVPE grown AlN during lateral overgrowth. Journal of Crystal Growth, 2013, 368, 83-86.	0.7	38
77	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.	0.7	38
78	Electrical properties and microstructure of vanadium-based contacts on ICP plasma etched n-type AlGaIn:Si and GaIn:Si surfaces. Semiconductor Science and Technology, 2013, 28, 125015.	1.0	37
79	Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs. Scientific Reports, 2021, 11, 14647.	1.6	37
80	Recombination mechanisms and thermal droop in AlGaIn-based UV-B LEDs. Photonics Research, 2017, 5, A44.	3.4	36
81	Shock-induced band-gap shift in GaN: Anisotropy of the deformation potentials. Physical Review B, 2005, 71, .	1.1	35
82	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
83	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
84	Determination of lattice parameters, strain state and composition in semipolar III-nitrides using high resolution X-ray diffraction. Journal of Applied Physics, 2013, 114, .	1.1	35
85	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
86	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
87	Influence of light absorption on the performance characteristics of UV LEDs with emission between 239 and 217 nm. Applied Physics Express, 2019, 12, 012008.	1.1	34
88	Reliability of UVC LEDs fabricated on AlN/sapphire templates with different threading dislocation densities. Applied Physics Letters, 2020, 117, .	1.5	34
89	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
90	Effect of temperature and strain on the optical polarization of (In)(Al)GaIn ultraviolet light emitting diodes. Applied Physics Letters, 2011, 99, .	1.5	33

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91	The effects of magnesium doping on the modal loss in AlGaIn-based deep UV lasers. Applied Physics Letters, 2017, 110, .	1.5	33
92	Displacement Talbot lithography for nano-engineering of III-nitride materials. Microsystems and Nanoengineering, 2019, 5, 52.	3.4	33
93	Electrical properties and microstructure formation of V/Al-based n-contacts on high Al mole fraction n-AlGaIn layers. Photonics Research, 2020, 8, 1381.	3.4	33
94	Dry-etching and characterization of mirrors on III-nitride laser diodes from chemically assisted ion beam etching. Journal of Crystal Growth, 1998, 189-190, 846-849.	0.7	32
95	Effect of heterostructure design on carrier injection and emission characteristics of 295-nm light emitting diodes. Journal of Applied Physics, 2015, 117, .	1.1	32
96	Dominance of radiative recombination from electron-beam-pumped deep-UV AlGaIn multi-quantum-well heterostructures. Applied Physics Letters, 2016, 109, .	1.5	32
97	Internal efficiency of InGaIn light-emitting diodes: Beyond a quasiequilibrium model. Applied Physics Letters, 2010, 97, 121105.	1.5	31
98	Topography of phase epitaxy. Journal of Crystal Growth, 2012, 356, 70-74.	0.7	31
99	DFB Laser Diodes Based on GaIn Using 10th Order Laterally Coupled Surface Gratings. IEEE Photonics Technology Letters, 2018, 30, 231-234.	1.3	31
100	High aluminium content and high growth rates of AlGaIn in a close-coupled showerhead MOVPE reactor. Journal of Crystal Growth, 2011, 315, 229-232.	0.7	30
101	Polarity determination of polar and semipolar (112̂ ⁻²) InN and GaIn layers by valence band photoemission spectroscopy. Journal of Applied Physics, 2013, 114, .	1.1	30
102	Two-section InGaIn multiple-quantum-well laser diode with integrated electroabsorption modulator. Applied Physics Letters, 2002, 80, 3283-3285.	1.5	29
103	Uniformity of the wafer surface temperature during MOVPE growth of GaIn-based laser diode structures on GaIn and sapphire substrate. Journal of Crystal Growth, 2011, 315, 5-9.	0.7	29
104	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
105	On the optical polarization properties of semipolar InGaIn quantum wells. Applied Physics Letters, 2011, 99, 051103.	1.5	26
106	Growth and characterizations of semipolar (112̂ ⁻²) InN. Journal of Applied Physics, 2012, 112, .	1.1	26
107	Impact of electron irradiation on electron holographic potentiometry. Applied Physics Letters, 2014, 105, .	1.5	26
108	Influence of quantum-well-barrier composition on gain and threshold current in AlGaIn lasers. Applied Physics Letters, 2007, 90, 101116.	1.5	25

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109	Impact of inhomogeneous broadening on optical polarization of high-inclination semipolar and nonpolar $\text{In}_{1-x}\text{Ga}_x\text{N}$ quantum wells. <i>Physical Review B</i> , 2016, 93, .		
110	Polarization-insensitive high-contrast GaAs/AlGaAs waveguide modulator based on the Franz-Keldysh effect. <i>IEEE Photonics Technology Letters</i> , 1993, 5, 1386-1388.	1.3	24
111	Analysis of crystal orientation in AlN layers grown on m-plane sapphire. <i>Journal of Crystal Growth</i> , 2014, 400, 54-60.	0.7	24
112	High-Current Stress of UV-B (In)AlGaIn-Based LEDs: Defect-Generation and Diffusion Processes. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3387-3392.	1.6	24
113	Novel shadow mask molecular beam epitaxial regrowth technique for selective doping. <i>Applied Physics Letters</i> , 1993, 62, 3180-3182.	1.5	23
114	Laser Scribing for Facet Fabrication of InGaIn MQW Diode Lasers on Sapphire Substrates. <i>IEEE Photonics Technology Letters</i> , 2010, 22, 416-418.	1.3	23
115	Single phase $\text{In}_{1-x}\text{Ga}_x\text{N}$ on SiO_2/Si substrate. <i>Journal of Crystal Growth</i> , 2011, 333, .		
116	Application of 233nm far-UVC LEDs for eradication of MRSA and MSSA and risk assessment on skin models. <i>Scientific Reports</i> , 2022, 12, 2587.	1.6	23
117	Growth mode of InGaIn on GaN (0001) in MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, S565-S569.	0.8	22
118	Spatial clustering of defect luminescence centers in Si-doped low resistivity $\text{Al}_{0.82}\text{Ga}_{0.18}\text{N}$. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	22
119	Localization of current-induced degradation effects in (InAlGa)N-based UV-B LEDs. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	22
120	Heterostructure band filling modulator with laterally interdigital contacts made by shadow mask molecular beam epitaxy regrowth. <i>Applied Physics Letters</i> , 1993, 62, 152-153.	1.5	21
121	High contrast electro-optic doping superlattice modulator. <i>Applied Physics Letters</i> , 1993, 62, 1916-1918.	1.5	21
122	Indium incorporation efficiency and critical layer thickness of $(202\text{\AA})^{-1}$ InGaIn layers on GaN. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	21
123	Efficient carrier injection and electron confinement in UV light emitting diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 210-214.	0.8	21
124	Low power (bistable) optoelectrical threshold switches with high gain based on $\text{In}_{1-x}\text{Ga}_x\text{N}$ doping superlattices. <i>Applied Physics Letters</i> , 1993, 62, 3399-3401.	1.5	20
125	Analysis of wavelength-dependent performance variations of GaN-based ultraviolet lasers. <i>Proceedings of SPIE</i> , 2007, .	0.8	20
126	(In)AlGaIn deep ultraviolet light emitting diodes with optimized quantum well width. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 2198-2200.	0.8	20

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145	Ultraviolet InAlGaN multiple-quantum-well laser diodes. <i>Physica Status Solidi A</i> , 2003, 200, 118-121.	1.7	17
146	High-Q-preserving coupling between a spiral and a semicircle $\frac{1}{4}$ -cavity. <i>Optics Letters</i> , 2007, 32, 1093.	1.7	17
147	Facet formation for laser diodes on nonpolar and semipolar GaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1361-1364.	0.8	17
148	Excitonic recombination in epitaxial lateral overgrown AlN on sapphire. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	17
149	Anisotropic optical properties of semipolar AlGaIn layers grown on m-plane sapphire. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	17
150	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
151	Impact of operation parameters on the degradation of 233nm AlGaIn-based far-UVC LEDs. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	17
152	The Integration of In _x Ga _{1-x} N Multiple-Quantum-Well Laser Diodes with Copper Substrates by Laser Lift-Off. <i>Japanese Journal of Applied Physics</i> , 2000, 39, L1203-L1205.	0.8	16
153	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
154	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
155	Optically Pumped DFB Lasers Based on GaN Using 10th-Order Laterally Coupled Surface Gratings. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 138-141.	1.3	16
156	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
157	Light extraction efficiency and internal quantum efficiency of fully UVC-transparent AlGaIn based LEDs. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 335101.	1.3	16
158	Two-dimensional Franz-Keldysh effect in MQW structures with lateral electric fields. <i>Superlattices and Microstructures</i> , 1994, 16, 109.	1.4	15
159	Multicharacterization approach for studying InAl(Ga)N/Al(Ga)N/GaN heterostructures for high electron mobility transistors. <i>AIP Advances</i> , 2014, 4, .	0.6	15
160	Improving AlN Crystal Quality and Strain Management on Nanopatterned Sapphire Substrates by High-Temperature Annealing for UVC Light-Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1900796.	0.8	15
161	Bistable opto-optical switches with high optical gain based on ϵ -doping superlattices. <i>Applied Physics Letters</i> , 1993, 62, 3288-3290.	1.5	14
162	Reverse biased photoconductive detectors and switches with separate absorption and detection area. <i>Applied Physics Letters</i> , 1995, 66, 1367-1369.	1.5	14

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163	Dynamical switching behavior of InGaP modulator structures. Applied Physics Letters, 1996, 68, 1838-1840.	1.5	14
164	Demonstration of an InGaN/GaN-based optically pumped multiquantum well distributed feedback laser using holographically defined third-order gratings. Applied Physics Letters, 1998, 73, 1928-1930.	1.5	14
165	Progress in the Preparation of Aluminum Nitride Substrates from Bulk Crystals. Materials Research Society Symposia Proceedings, 2002, 722, 111.	0.1	14
166	MOVPE growth for UV-LEDs. Proceedings of SPIE, 2009, , .	0.8	14
167	Growth of semipolar (10 $\bar{1}$ 1) InN on c -plane sapphire using MOVPE. Physica Status Solidi - Rapid Research Letters, 2010, 4, 127-129.	1.2	14
168	Growth mechanism of InGaN quantum dots during metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2011, 334, 40-45.	0.7	14
169	Influence of barrier growth schemes on the structural properties and thresholds of InGaN quantum well laser diodes. Journal of Crystal Growth, 2014, 391, 46-51.	0.7	14
170	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
171	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
172	Vertical conductivity and Poole-Frenkel-ionization of Mg acceptors in AlGaIn short-period superlattices with high Al mole fraction. Applied Physics Letters, 2020, 117, .	1.5	14
173	Continuous-wave operation of InGaIn multiple-quantum-well laser diodes on copper substrates obtained by laser liftoff. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 188-191.	1.9	13
174	The Franz-Keldysh effect in shocked GaN:Mg. Applied Physics Letters, 2003, 82, 2085-2087.	1.5	13
175	Ripening of InAs quantum dots on GaAs (001) investigated with in situ scanning tunneling microscopy in metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2008, 310, 4751-4753.	0.7	13
176	Spatial inhomogeneities in $\text{Al}_x\text{Ga}_{1-x}\text{N}$ quantum wells induced by the surface morphology of AlN/sapphire templates. Semiconductor Science and Technology, 2015, 30, 114008.	1.0	13
177	Analysis of doping concentration and composition in wide bandgap AlGaIn:Si by wavelength dispersive x-ray spectroscopy. Semiconductor Science and Technology, 2017, 32, 035020.	1.0	13
178	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
179	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
180	Electrical properties of (11-22) Si:AlGaIn layers at high Al contents grown by metal-organic vapor phase epitaxy. Applied Physics Letters, 2020, 117, .	1.5	13

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181	Thin-film flip-chip UVB LEDs realized by electrochemical etching. Applied Physics Letters, 2020, 116, 121101.	1.5	13
182	Electrical and optical characteristics of highly transparent MOVPE-grown AlGaIn-based tunnel heterojunction LEDs emitting at 232 nm. Photonics Research, 2021, 9, 1117.	3.4	13
183	Stripe-width dependence of threshold current for gain-guided AlGaInN laser diodes. Applied Physics Letters, 1999, 74, 404-406.	1.5	12
184	Surface transition induced island formation on thin strained InGaIn layers on GaN (0001) in metal-organic vapour phase epitaxy. Journal of Applied Physics, 2011, 110, .	1.1	12
185	Growth and characterization of stacking fault reduced GaN (1,0,3) on sapphire. Journal of Applied Physics, 2013, 46, 125308.	1.3	12
186	Preparation and structure of ultra-thin GaN (0001) layers on In _{0.11} Ga _{0.89} N-single quantum wells. Materials Science in Semiconductor Processing, 2016, 55, 7-11.	1.9	12
187	High speed and high contrast electro-optical modulators based on n-i-p-i doping superlattices. Superlattices and Microstructures, 1993, 13, 21-24.	1.4	11
188	Annealing induced refractive index and absorption changes of low temperature grown GaAs. Applied Physics Letters, 1994, 65, 3269-3271.	1.5	11
189	Optical characterization of low temperature grown GaAs by transmission measurements above the band gap. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2275.	1.6	11
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