Markus Weyers

List of Publications by Year
in descending order

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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	High-quality AlGaN epitaxy on lattice-engineerable AlN template for high-power UVC light-emitting diodes. Acta Materialia, 2022, 226, 117625.	7.9	10
2	Impact of Si doping on dislocation behavior in MOVPE-grown AlN on high-temperature annealed AlN buffer layers. Journal of Applied Physics, 2022, 131, .	2.5	9
3	Impact of operation parameters on the degradation of 233â€‰nm AlGaN-based far-UVC LEDs. Journal of Applied Physics, 2022, 131, .	2.5	17
4	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.	1.8	1
5	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.	3.4	5
6	In situ control of indium incorporation in (AlGa)1â^'xInxP layers. Journal of Crystal Growth, 2022, 590, 126696.	1.5	0
7	Origin of defect luminescence in ultraviolet emitting AlGaN diode structures. Applied Physics Letters, 2021, 118, .	3.3	4
8	Comparison of Ultraviolet B Lightâ€Emitting Diodes with Single or Triple Quantum Wells. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100100.	1.8	3
9	Wedged Nd:YVO4 crystal for wavelength tuning of monolithic passively Q-switched picosecond microchip lasers. Optics Express, 2021, 29, 19790.	3.4	2
10	Advances towards deep-UV light emitting diode technologies. , 2021, , .		2
11	Highâ€Temperature Annealing and Patterned AlN/Sapphire Interfaces. Physica Status Solidi (B): Basic Research, 2021, 258, 2100187.	1.5	12
12	Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs. Scientific Reports, 2021, 11, 14647.	3.3	37
13	Direct observation of resonant tunneling in heterostructure with a single quantum well. Applied Physics Letters, 2021, 119, 043503.	3.3	0
14	A carbon-doping related luminescence band in GaN revealed by below bandgap excitation. Journal of Applied Physics, 2021, 130, 055703.	2.5	6
15	Role of oxygen diffusion in the dislocation reduction of epitaxial AlN on sapphire during high-temperature annealing. Journal of Applied Physics, 2021, 130, .	2.5	12
16	Growth and Properties of Intentionally Carbonâ€Doped GaN Layers. Crystal Research and Technology, 2020, 55, 1900129.	1.3	25
17	AlN overgrowth of nano-pillar-patterned sapphire with different offcut angle by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2020, 531, 125343.	1.5	13
18	Improving AlN Crystal Quality and Strain Management on Nanopatterned Sapphire Substrates by Highâ€Temperature Annealing for UVC Lightâ€Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900796.	1.8	15

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19	Highâ€Temperature Annealing of AlGaN. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000473.	1.8	5
20	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	2.8	289
21	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.	0.6	0
22	Improved Efficiency of Ultraviolet B Lightâ€Emitting Diodes with Optimized pâ€Side. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000406.	1.8	5
23	Reliability of UVC LEDs fabricated on AlN/sapphire templates with different threading dislocation densities. Applied Physics Letters, 2020, 117, .	3.3	34
24	The Impact of AlN Templates on Strain Relaxation Mechanisms during the MOVPE Growth of UVBâ€LED Structures. Crystal Research and Technology, 2020, 55, 1900215.	1.3	6
25	Overcoming the excessive compressive strain in AlGaN epitaxy by introducing high Si-doping in AlN templates. Japanese Journal of Applied Physics, 2020, 59, 070904.	1.5	16
26	Enhanced wall plug efficiency of AlGaN-based deep-UV LEDs using Mo/Al as p-contact. IEEE Photonics Technology Letters, 2020, , 1-1.	2.5	9
27	Temperatureâ€Dependent Charge Carrier Diffusion in [0001Â¯] Direction of GaN Determined by Luminescence Evaluation of Buried InGaN Quantum Wells. Physica Status Solidi (B): Basic Research, 2020, 257, 2000016.	1.5	9
28	Impact of Highâ€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.	1.8	0
29	Optimization of the Epitaxial Growth of Undoped GaN Waveguides in GaN-Based Laser Diodes Evaluated by Photoluminescence. Journal of Electronic Materials, 2020, 49, 5138-5143.	2.2	3
30	Bulk photovoltaic effect in carbon-doped gallium nitride revealed by anomalous surface photovoltage spectroscopy. Physical Review B, 2020, 101, .	3.2	9
31	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
32	Structural and luminescence imaging and characterisation of semiconductors in the scanning electron microscope. Semiconductor Science and Technology, 2020, 35, 054001.	2.0	7
33	Designing sapphire surface patterns to promote AlGaN overgrowth in hydride vapor phase epitaxy. Semiconductor Science and Technology, 2020, 35, 035028.	2.0	1
34	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.	1.2	1
35	Group III-Nitride-Based UV Laser Diodes. Springer Series in Solid-state Sciences, 2020, , 505-548.	0.3	2
36	Carbon doping of GaN: Proof of the formation of electrically active tri-carbon defects. Journal of Applied Physics, 2020, 127, 205701.	2.5	9

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37	Continuous-wave operation of DFB laser diodes based on GaN using 10$^{m th}$th-order laterally coupled surface gratings. Optics Letters, 2020, 45, 935.	3.3	10
38	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
39	High-temperature annealing of AlN films grown on 4Hâ€"SiC. AIP Advances, 2020, 10, .	1.3	8
40	High power broad-area lasers with buried implantation for current confinement. Semiconductor Science and Technology, 2019, 34, 105005.	2.0	6
41	Influence of substrate off-cut angle on the performance of 310â€¯nm light emitting diodes. Journal of Crystal Growth, 2019, 526, 125241.	1.5	10
42	Determination of Sapphire Offâ€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.	1.8	13
43	Extra half-plane shortening of dislocations as an origin of tensile strain in Si-doped (Al)GaN. Journal of Applied Physics, 2019, 126, .	2.5	8
44	Degradation of AlGaN-based metal-semiconductor-metal photodetectors. Japanese Journal of Applied Physics, 2019, 58, SCCC21.	1.5	8
45	Time-resolved photoluminescence from <i>n</i>-doped GaN/Al0.18Ga0.82N short-period superlattices probes carrier kinetics and long-term structural stability. Journal of Applied Physics, 2019, 125, .	2.5	5
46	Broadband Semiconductor Light Sources Operating at 1060 nm Based on InAs:Sb/GaAs Submonolayer Quantum Dots. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-10.	2.9	3
47	High power UVB light emitting diodes with optimized n-AlGaN contact layers. Japanese Journal of Applied Physics, 2019, 58, SCCC02.	1.5	15
48	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
49	Degradation of (In)AlGaN-Based UVB LEDs and Migration of Hydrogen. IEEE Photonics Technology Letters, 2019, 31, 529-532.	2.5	43
50	AlN and AlN/Al2O3 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, .	2.1	2
51	Stabilization of sputtered AlN/sapphire templates during high temperature annealing. Journal of Crystal Growth, 2019, 512, 142-146.	1.5	40
52	Displacement Talbot lithography for nano-engineering of III-nitride materials. Microsystems and Nanoengineering, 2019, 5, 52.	7.0	33
53	Influence of silicon doping on internal quantum efficiency and threshold of optically pumped deep UV AlGaN quantum well lasers. Semiconductor Science and Technology, 2019, 34, 015005.	2.0	0
54	Influence of quartz on silicon incorporation in HVPE grown AlN. Journal of Crystal Growth, 2019, 507, 295-298.	1.5	4

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55	Crystal defect analysis in AlN layers grown by MOVPE on bulk AlN. Journal of Crystal Growth, 2019, 505, 69-73.	1.5	8
56	Current spreading suppression by O- and Si-implantation in high power broad area diode lasers. , 2019, , .		3
57	MOVPE-grown AlGaN-based tunnel heterojunctions enabling fully transparent UVC LEDs. Photonics Research, 2019, 7, B7.	7.0	42
58	Current-induced degradation and lifetime prediction of 310â€‰â€‰nm ultraviolet light-emitting diodes. Photonics Research, 2019, 7, B36.	7.0	46
59	Scanning electron microscopy as a flexible technique for investigating the properties of UV-emitting nitride semiconductor thin films. Photonics Research, 2019, 7, B73.	7.0	9
60	High-power-class QCW red laser bars and stacks for pump and direct application. , 2019, , .		0
61	Lifetime behavior of laser diodes with highly strained InGaAs QWs and emission wavelength between 1120â€¯nm and 1180â€¯nm. Journal of Crystal Growth, 2018, 491, 31-35.	1.5	7
62	Optical investigations of europium ion implanted in nitride-based diode structures. Surface and Coatings Technology, 2018, 355, 40-44.	4.8	9
63	AlGaN-based deep UV LEDs grown on sputtered and high temperature annealed AlN/sapphire. Applied Physics Letters, 2018, 112, .	3.3	171
64	Influence of template properties and quantum well number on stimulated emission from Al0.7Ga0.3N/Al0.8Ga0.2N quantum wells. Semiconductor Science and Technology, 2018, 33, 035015.	2.0	3
65	Crystal damage analysis of implanted AlxGa1-xN (0â€¯â‰¤â€¯xâ€¯â‰¤â€¯1) by ion beam techniques. Surface and Coatings Technology, 2018, 355, 55-60.	4.8	9
66	Si impurity concentration in nominally undoped Al0.7Ga0.3N grown in a planetary MOVPE reactor. Journal of Crystal Growth, 2018, 483, 297-300.	1.5	4
67	Impact of open-core threading dislocations on the performance of AlGaN metal-semiconductor-metal photodetectors. Journal of Applied Physics, 2018, 123, .	2.5	15
68	Ultrafast carrier dynamics in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi>GaN</mml:mi><mml:mo>/</m mathvariant="normal">N</mml:mi></mml:mrow></mml:math> superlattice. Physical Review B, 2018, 97, .	3.2	3
69	Advanced <i>in-situ</i> control for III-nitride RF power device epitaxy. Semiconductor Science and Technology, 2018, 33, 045014.	2.0	1
70	Degradation effects of the active region in UV-C light-emitting diodes. Journal of Applied Physics, 2018, 123, .	2.5	55
71	GaN-Based Vertical n -Channel MISFETs on Free Standing Ammonothermal GaN Substrates. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700422.	1.8	5
72	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

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73	Tri-carbon defects in carbon doped GaN. Applied Physics Letters, 2018, 113, .	3.3	15
74	Bow Reduction of AlInGaN-Based Deep UV LED Wafers Using Focused Laser Patterning. IEEE Photonics Technology Letters, 2018, 30, 1792-1794.	2.5	2
75	Localization of current-induced degradation effects in (InAlGa)N-based UV-B LEDs. Journal of Applied Physics, 2018, 124, .	2.5	22
76	Reduction of absorption losses in MOVPE-grown AlGaAs Bragg mirrors. Optics Letters, 2018, 43, 3522.	3.3	6
77	Efficient iron doping of HVPE GaN. Journal of Crystal Growth, 2018, 500, 111-116.	1.5	12
78	Eu-Doped AlGaN/GaN Superlattice-Based Diode Structure for Red Lighting: Excitation Mechanisms and Active Sites. ACS Applied Nano Materials, 2018, 1, 3845-3858.	5.0	14
79	Influence of waveguide strain and surface morphology on AlGaN-based deep UV laser characteristics. Journal Physics D: Applied Physics, 2018, 51, 415101.	2.8	16
80	Degradation behavior of AlGaN-based 233 nm deep-ultraviolet light emitting diodes. Semiconductor Science and Technology, 2018, 33, 095017.	2.0	18
81	High-power sampled-grating-based master oscillator power amplifier system with 235â€‰â€‰nm wavelength tuning around 970â€‰â€‰nm. Applied Optics, 2018, 57, 8680.	1.8	4
82	Analysis of strain and composition distributions in laterally strain-modulated InGaAs nanostructures after overgrowth with GaAs or InGaP. , 2018, , 135-138.		0
83	Widely tunable high power sampled-grating MOPA system emitting around 970 nm. , 2018, , .		0
84	Influence of different approaches for dynamical performance optimization of monolithic passive colliding-pulse mode-locked laser diodes emitting around 850 nm. , 2018, , .		0
85	Reflectors and tuning elements for widely-tunable GaAs-based sampled grating DBR lasers. , 2018, , .		1
86	Silicon induced defect reduction in AlN template layers for epitaxial lateral overgrowth. Journal of Crystal Growth, 2017, 462, 18-23.	1.5	10
87	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
88	Influence of AlN buffer layer on growth of AlGaN by HVPE. Physica Status Solidi (B): Basic Research, 2017, 254, 1600696.	1.5	9
89	AlGaN-based metal-semiconductor-metal photodetectors with high external quantum efficiency at low operating voltage. , 2017, , .		4
90	The effects of magnesium doping on the modal loss in AlGaN-based deep UV lasers. Applied Physics Letters, 2017, 110, .	3.3	33

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91	High-power broad-area buried-mesa lasers. Semiconductor Science and Technology, 2017, 32, 065009.	2.0	6
92	Design considerations for AlGaN-based UV LEDs emitting near 235 nm with uniform emission pattern. Semiconductor Science and Technology, 2017, 32, 045019.	2.0	4
93	Triangular-shaped sapphire patterning for HVPE grown AlGaN layers. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600751.	1.8	2
94	High-quality AlN grown on a thermally decomposed sapphire surface. Journal of Crystal Growth, 2017, 479, 16-21.	1.5	23
95	Effect of Cl2 plasma treatment and annealing on vanadium based metal contacts to Si-doped Al0.75Ga0.25N. Journal of Applied Physics, 2017, 122, .	2.5	11
96	MOVPE growth of violet GaN LEDs on Î²-Ga2O3 substrates. Journal of Crystal Growth, 2017, 478, 212-215.	1.5	16
97	Avoidance of instable photoluminescence intensity from AlGaN bulk layers. Physica Status Solidi (B): Basic Research, 2017, 254, 1600672.	1.5	2
98	Chip design for thin-film deep ultraviolet LEDs fabricated by laser lift-off of the sapphire substrate. Semiconductor Science and Technology, 2017, 32, 12LT01.	2.0	14
99	On the EQE-bias characteristics of bottom-illuminated AlGaN-based metal-semiconductor-metal photodetectors with asymmetric electrode geometry. Journal of Applied Physics, 2017, 122, .	2.5	5
100	Generation of optical picosecond pulses with monolithic collidingâ€pulse modeâ€locked lasers containing a chirped doubleâ€quantumâ€well active region. IET Optoelectronics, 2017, 11, 79-85.	3.3	4
101	Realisation of a widely tuneable sampled grating DBR laser emitting around 970Ânm. Electronics Letters, 2017, 53, 744-746.	1.0	8
102	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
103	Highly Reflective p-Contacts Made of Pd-Al on Deep Ultraviolet Light-Emitting Diodes. IEEE Photonics Technology Letters, 2017, 29, 2222-2225.	2.5	14
104	Design and realization of a widely tunable sampled-grating distributed-Bragg reflector (SG DBR) laser emitting at 976 nm. , 2017, , .		0
105	In-situ photoluminescence measurements during MOVPE of GaN and InGaN in a CCS reactor. TM Technisches Messen, 2017, 84, 747-752.	0.7	1
106	Comparison of symmetric and asymmetric double quantum well extended-cavity diode lasers for broadband passive mode-locking at 780â€‰â€‰nm. Applied Optics, 2017, 56, 5566.	1.8	4
107	Effect of Electron Blocking Layer Doping and Composition on the Performance of 310 nm Light Emitting Diodes. Materials, 2017, 10, 1396.	2.9	17
108	Development of a compact mode-locked ECDL for precision frequency comparison experiments at 780 nm. , 2017, , .		0

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109	Orientation dependent indium incorporation in MOVPE grown InGaAs/GaAs quantum wells. , 2017, , 397-400.		0
110	Astigmatism-free high-brightness 1060 nm edge-emitting lasers with narrow circular beam profile. Optics Express, 2016, 24, 30514.	3.4	15
111	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
112	Quantification of matrix and impurity elements in AlxGa1â^'xN compounds by secondary ion mass spectrometry. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 03H128.	1.2	3
113	Strong amplitude-phase coupling in submonolayer quantum dots. Applied Physics Letters, 2016, 109, 201102.	3.3	18
114	Exciton localization in semipolar (112Â¯2) InGaN multiple quantum wells. Journal of Applied Physics, 2016, 120, 055705.	2.5	2
115	Temperature and doping dependent changes in surface recombination during UV illumination of (Al)GaN bulk layers. Journal of Applied Physics, 2016, 120, .	2.5	5
116	Near-field microscopy of waveguide architectures of InGaN/GaN diode lasers. Semiconductor Science and Technology, 2016, 31, 115015.	2.0	2
117	Low absorption loss p-AlGaN superlattice cladding layer for current-injection deep ultraviolet laser diodes. Applied Physics Letters, 2016, 108, .	3.3	47
118	Determination of polarization fields in group III-nitride heterostructures by capacitance-voltage-measurements. Journal of Applied Physics, 2016, 119, .	2.5	9
119	Role of substrate quality on the performance of semipolar (112Â¯2) InGaN light-emitting diodes. Journal of Applied Physics, 2016, 120, .	2.5	8
120	In-situ control of large area (11â€“22)-GaN growth on patterned r-plane sapphire. Journal of Crystal Growth, 2016, 452, 253-257.	1.5	1
121	Fe-doping in hydride vapor-phase epitaxy for semi-insulating gallium nitride. Journal of Crystal Growth, 2016, 456, 97-100.	1.5	28
122	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
123	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
124	Structural and optical properties of (112Ì…2) InGaN quantum wells compared to (0001) and (112Ì…0). Semiconductor Science and Technology, 2016, 31, 085007.	2.0	5
125	Kinetics of AlGaN metalâ€“organic vapor phase epitaxy for deep-UV applications. Japanese Journal of Applied Physics, 2016, 55, 05FD07.	1.5	5
126	MOVPE growth of laser structures for high-power applications at different ambient temperatures. Journal of Crystal Growth, 2016, 452, 258-262.	1.5	0

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127	Impact of acceptor concentration on the resistivity of Ni/Au pâ€•contacts on semipolar (20â€“21) GaN:Mg. Physica Status Solidi (B): Basic Research, 2016, 253, 169-173.	1.5	9
128	On optical polarization and charge carrier statistics of nonpolar InGaN quantum wells. Physica Status Solidi (B): Basic Research, 2016, 253, 145-157.	1.5	7
129	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
130	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.	2.0	4
131	Mechanisms of Implantation Damage Formation in Al_{<i>x</i>}Ga_{1â€“<i>x</i>}N Compounds. Journal of Physical Chemistry C, 2016, 120, 7277-7283.	3.1	33
132	Development of semipolar (11-22) LEDs on GaN templates. Proceedings of SPIE, 2016, , .	0.8	8
133	Process control of MOCVD growth for LEDs by in-situ photoluminescence. , 2016, , .		1
134	Influence of the LED heterostructure on the degradation behavior of (InAlGa)N-based UV-B LEDs. Proceedings of SPIE, 2016, , .	0.8	1
135	CBr4-based in-situ etching of GaAs, assisted with TMAl and TMGa. Journal of Crystal Growth, 2016, 434, 116-122.	1.5	2
136	Femtosecond Mode-Locked Semiconductor Disk Lasers. Springer Series in Optical Sciences, 2016, , 47-74.	0.7	0
137	Vapor Phase Epitaxy of AlGaN Base Layers on Sapphire Substrates for Nitride-Based UV-Light Emitters. Springer Series in Materials Science, 2016, , 47-73.	0.6	1
138	Solar- and Visible-Blind AlGaN Photodetectors. Springer Series in Materials Science, 2016, , 219-266.	0.6	4
139	V-pit to truncated pyramid transition in AlGaN-based heterostructures. Semiconductor Science and Technology, 2015, 30, 114010.	2.0	19
140	Temperature induced degradation of InAlGaN multiple-quantum well UV-B LEDs. Materials Research Society Symposia Proceedings, 2015, 1792, 1.	0.1	6
141	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
142	Spatial clustering of defect luminescence centers in Si-doped low resistivity Al0.82Ga0.18N. Applied Physics Letters, 2015, 107, .	3.3	22
143	Degradation of (InAlGa)N-based UV-B light emitting diodes stressed by current and temperature. Journal of Applied Physics, 2015, 118, .	2.5	47
144	Strongly transverse-electric-polarized emission from deep ultraviolet AlGaN quantum well light emitting diodes. Applied Physics Letters, 2015, 107, .	3.3	79

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145	Spatial inhomogeneities in AlxGa1â^’xN quantum wells induced by the surface morphology of AlN/sapphire templates. Semiconductor Science and Technology, 2015, 30, 114008.	2.0	13
146	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
147	Semiâ€polar â€GaN templates grown on 100â€‰mm trenchâ€patterned <i>r</i>â€plane sapphire. Physica Status Solidi (B): Basic Research, 2015, 252, 1189-1194.	1.5	26
148	Effect of carrier gas in hydride vapor phase epitaxy on optical and structural properties of GaN. Physica Status Solidi (B): Basic Research, 2015, 252, 1180-1188.	1.5	3
149	Inâ€situ observation of InGaN quantum well decomposition during growth of laser diodes. Crystal Research and Technology, 2015, 50, 499-503.	1.3	11
150	Solarâ€blind AlGaN MSM photodetectors with 24% external quantum efficiency at 0 V. Electronics Letters, 2015, 51, 1598-1600.	1.0	29
151	Analysis of HVPE grown AlGaN layers on honeycomb patterned sapphire. Journal of Crystal Growth, 2015, 414, 32-37.	1.5	7
152	AlAsP-based strain-balancing in MOVPE-grown distributed Bragg reflectors. Journal of Crystal Growth, 2015, 414, 10-14.	1.5	2
153	Topâ€•and bottomâ€illumination of solarâ€blind AlGaN metalâ€“semiconductorâ€“metal photodetectors. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1021-1028.	1.8	12
154	In-situ photoluminescence measurements during MOVPE growth of GaN and InGaN MQW structures. Journal of Crystal Growth, 2015, 415, 1-6.	1.5	17
155	Current spreading in UV-C LEDs emitting at 235 nm. Proceedings of SPIE, 2015, , .	0.8	1
156	High-power UV-B LEDs with long lifetime. Proceedings of SPIE, 2015, , .	0.8	41
157	High Temperature Operation of 1060-nm High-Brightness Photonic Band Crystal Lasers With Very Low Astigmatism. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 722-727.	2.9	16
158	Deep ultraviolet LEDs: From materials research to real-world applications. , 2015, , .		0
159	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
160	Growth of laser diode structures with emission wavelength beyond 1100nm for yellowâ€“green emission by frequency conversion. Journal of Crystal Growth, 2015, 414, 205-209.	1.5	9
161	Combined Mg/Zn p-type doping for AlGaInP laser diodes. Journal of Crystal Growth, 2015, 414, 215-218.	1.5	9
162	Enhanced quantum efficiency of AlGaN photodetectors by patterned growth. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1005-1010.	1.8	1

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163	Challenges for AlGaN Based UV Laser Diodes. , 2015, , .		3
164	High peak power pulse generation from PBC lasers. , 2014, , .		0
165	Effect of quantum well non-uniformities on lasing threshold, linewidth, and lateral near field filamentation in violet (Al,In)GaN laser diodes. Applied Physics Letters, 2014, 105, .	3.3	10
166	Impact of electron irradiation on electron holographic potentiometry. Applied Physics Letters, 2014, 105, .	3.3	26
167	High brightness photonic band crystal semiconductor lasers in the passive mode locking regime. Applied Physics Letters, 2014, 105, 161101.	3.3	8
168	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
169	Efficient charge carrier injection into sub-250â€‰nm AlGaN multiple quantum well light emitting diodes. Applied Physics Letters, 2014, 105, .	3.3	103
170	Polarization of photoluminescence emission from semi-polar (11â€“22) AlGaN layers. Applied Physics Letters, 2014, 104, 051906.	3.3	10
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524	Investigation of short-term current gain stability of GaInP/GaAs-HBTs grown by MOVPE. , 0, , .		1
525	High-power, high-efficiency 1150 nm quantum well laser. , 0, , .		1
526	Passively cooled 940 nm laser bars with 73 % wall-plug efficiency and high reliability at 98 W quasi-cw output power. , 0, , .		1
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528	Sub-80 fs pulses from a mode-locked Yb:NaGd(WO/sub 4/)/sub 2/ laser. , 0, , .		3
529	Temperature Dependence of Dark Spot Diameters in GaN and AlGaN. Physica Status Solidi (B): Basic Research, 0, , 2100358.	1.5	3
530	Enhanced light extraction efficiency of UV LEDs by encapsulation with UV-transparent silicone resin. Semiconductor Science and Technology, 0, , .	2.0	2