

Markus Weyers

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

495
papers

9,086
citations

41
h-index

74
g-index

536
ext. papers

10,220
ext. citations

2.1
avg, IF

5.76
L-index

#	Paper	IF	Citations
495	Impact of Si doping on dislocation behavior in MOVPE-grown AlN on high-temperature annealed AlN buffer layers. <i>Journal of Applied Physics</i> , 2022 , 131, 045702	2.5	1
494	Impact of operation parameters on the degradation of 233 nm AlGaIn-based far-UVC LEDs. <i>Journal of Applied Physics</i> , 2022 , 131, 014501	2.5	5
493	High-quality AlGaIn epitaxy on lattice-engineerable AlN template for high-power UVC light-emitting diodes. <i>Acta Materialia</i> , 2022 , 226, 117625	8.4	2
492	Passively Q-switched microchip laser based picosecond light source in the visible-red to near-infrared band for semiconductor excitation.. <i>Optics Express</i> , 2022 , 30, 15428-15435	3.3	0
491	In situ control of indium incorporation in (AlGa)InP layers. <i>Journal of Crystal Growth</i> , 2022 , 590, 1266966		
490	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, 203101	2.5	1
489	Origin of defect luminescence in ultraviolet emitting AlGaIn diode structures. <i>Applied Physics Letters</i> , 2021 , 118, 202101	3.4	1
488	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	1.6	2
487	Wedged Nd:YVO crystal for wavelength tuning of monolithic passively Q-switched picosecond microchip lasers. <i>Optics Express</i> , 2021 , 29, 19790-19795	3.3	2
486	High-Temperature Annealing and Patterned AlN/Sapphire Interfaces. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2100187	1.3	4
485	Skin tolerant inactivation of multiresistant pathogens using far-UVC LEDs. <i>Scientific Reports</i> , 2021 , 11, 14647	4.9	9
484	Direct observation of resonant tunneling in heterostructure with a single quantum well. <i>Applied Physics Letters</i> , 2021 , 119, 043503	3.4	
483	A carbon-doping related luminescence band in GaN revealed by below bandgap excitation. <i>Journal of Applied Physics</i> , 2021 , 130, 055703	2.5	3
482	Reliability of UVC LEDs fabricated on AlN/sapphire templates with different threading dislocation densities. <i>Applied Physics Letters</i> , 2020 , 117, 241104	3.4	15
481	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	1.3	2
480	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	1.4	8
479	Enhanced Wall Plug Efficiency of AlGaIn-Based Deep-UV LEDs Using Mo/Al as p-Contact. <i>IEEE Photonics Technology Letters</i> , 2020 , 1-1	2.2	4

478	Temperature-Dependent Charge Carrier Diffusion in [0001] Direction of GaN Determined by Luminescence Evaluation of Buried InGaN Quantum Wells. <i>Physica Status Solidi (B): Basic Research</i> , 2020 , 257, 2000016	1.3	7
477	Impact of High-Temperature Annealing on Boron Containing AlN Layers Grown by Metal Organic Vapor Phase Epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 2000251	1.6	
476	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	1.9	1
475	Bulk photovoltaic effect in carbon-doped gallium nitride revealed by anomalous surface photovoltage spectroscopy. <i>Physical Review B</i> , 2020 , 101,	3.3	6
474	Status and Prospects of AlN Templates on Sapphire for Ultraviolet Light-Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 1901022	1.6	18
473	Structural and luminescence imaging and characterisation of semiconductors in the scanning electron microscope. <i>Semiconductor Science and Technology</i> , 2020 , 35, 054001	1.8	3
472	Designing sapphire surface patterns to promote AlGaIn overgrowth in hydride vapor phase epitaxy. <i>Semiconductor Science and Technology</i> , 2020 , 35, 035028	1.8	1
471	Structural and electrical properties of Pd/p-GaN contacts for GaN-based laser diodes. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020 , 38, 032211	1.3	1
470	Continuous-wave operation of DFB laser diodes based on GaN using 10 th -order laterally coupled surface gratings. <i>Optics Letters</i> , 2020 , 45, 935-938	3	7
469	Improved performance of UVC-LEDs by combination of high-temperature annealing and epitaxially laterally overgrown AlN/sapphire. <i>Photonics Research</i> , 2020 , 8, 589	6	26
468	High-temperature annealing of AlN films grown on 4H _{SiC} . <i>AIP Advances</i> , 2020 , 10, 125303	1.5	3
467	Group III-Nitride-Based UV Laser Diodes. <i>Springer Series in Solid-state Sciences</i> , 2020 , 505-548	0.4	1
466	Carbon doping of GaN: Proof of the formation of electrically active tri-carbon defects. <i>Journal of Applied Physics</i> , 2020 , 127, 205701	2.5	6
465	Growth and Properties of Intentionally Carbon-Doped GaN Layers. <i>Crystal Research and Technology</i> , 2020 , 55, 1900129	1.3	14
464	AlN overgrowth of nano-pillar-patterned sapphire with different offcut angle by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2020 , 531, 125343	1.6	10
463	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	1.6	12
462	High-Temperature Annealing of AlGaIn. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 2000473	1.6	1
461	The 2020 UV emitter roadmap. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 503001	3	123

460	Advances in electron channelling contrast imaging and electron backscatter diffraction for imaging and analysis of structural defects in the scanning electron microscope. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 891, 012023	0.4	
459	Improved Efficiency of Ultraviolet B Light-Emitting Diodes with Optimized p-Side. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 2000406	1.6	2
458	Extra half-plane shortening of dislocations as an origin of tensile strain in Si-doped (Al)GaN. <i>Journal of Applied Physics</i> , 2019 , 126, 085701	2.5	6
457	Degradation of AlGaN-based metal-semiconductor-metal photodetectors. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SCCC21	1.4	6
456	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. <i>Journal of Applied Physics</i> , 2019 , 125, 185705	2.5	5
455	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	3.8	3
454	High power UVB light emitting diodes with optimized n-AlGaN contact layers. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SCCC02	1.4	10
453	Impact of intermediate high temperature annealing on the properties of AlN/sapphire templates grown by metalorganic vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SC1002	1.4	23
452	Degradation of (In)AlGaN-Based UVB LEDs and Migration of Hydrogen. <i>IEEE Photonics Technology Letters</i> , 2019 , 31, 529-532	2.2	29
451	AlN and AlN/Al ₂ O ₃ seed layers from atomic layer deposition for epitaxial growth of AlN on sapphire. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 020914	2.9	1
450	Stabilization of sputtered AlN/sapphire templates during high temperature annealing. <i>Journal of Crystal Growth</i> , 2019 , 512, 142-146	1.6	23
449	High power broad-area lasers with buried implantation for current confinement. <i>Semiconductor Science and Technology</i> , 2019 , 34, 105005	1.8	1
448	Influence of substrate off-cut angle on the performance of 310 nm light emitting diodes. <i>Journal of Crystal Growth</i> , 2019 , 526, 125241	1.6	7
447	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. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1900682	1.6	7
446	Nitride Semiconductors 2019 , 109-147		1
445	Current spreading suppression by O- and Si-implantation in high power broad area diode lasers 2019 ,		2
444	MOVPE-grown AlGaN-based tunnel heterojunctions enabling fully transparent UVC LEDs. <i>Photonics Research</i> , 2019 , 7, B7	6	34
443	Current-induced degradation and lifetime prediction of 310 nm ultraviolet light-emitting diodes. <i>Photonics Research</i> , 2019 , 7, B36	6	27

442	Scanning electron microscopy as a flexible technique for investigating the properties of UV-emitting nitride semiconductor thin films. <i>Photonics Research</i> , 2019 , 7, B73	6	6
441	Displacement Talbot lithography for nano-engineering of III-nitride materials. <i>Microsystems and Nanoengineering</i> , 2019 , 5, 52	7.7	19
440	Influence of silicon doping on internal quantum efficiency and threshold of optically pumped deep UV AlGaIn quantum well lasers. <i>Semiconductor Science and Technology</i> , 2019 , 34, 015005	1.8	
439	Influence of quartz on silicon incorporation in HVPE grown AlN. <i>Journal of Crystal Growth</i> , 2019 , 507, 295-298	1.6	3
438	Crystal defect analysis in AlN layers grown by MOVPE on bulk AlN. <i>Journal of Crystal Growth</i> , 2019 , 505, 69-73	1.6	7
437	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	1.6	4
436	Optical investigations of europium ion implanted in nitride-based diode structures. <i>Surface and Coatings Technology</i> , 2018 , 355, 40-44	4.4	8
435	AlGaIn-based deep UV LEDs grown on sputtered and high temperature annealed AlN/sapphire. <i>Applied Physics Letters</i> , 2018 , 112, 041110	3.4	136
434	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	1.8	3
433	Crystal damage analysis of implanted Al _x Ga _{1-x} N (0 ≤ x ≤ 1) by ion beam techniques. <i>Surface and Coatings Technology</i> , 2018 , 355, 55-60	4.4	8
432	Si impurity concentration in nominally undoped Al _{0.7} Ga _{0.3} N grown in a planetary MOVPE reactor. <i>Journal of Crystal Growth</i> , 2018 , 483, 297-300	1.6	3
431	Impact of open-core threading dislocations on the performance of AlGaIn metal-semiconductor-metal photodetectors. <i>Journal of Applied Physics</i> , 2018 , 123, 161551	2.5	12
430	Ultrafast carrier dynamics in a GaN/Al _{0.18} Ga _{0.82} N superlattice. <i>Physical Review B</i> , 2018 , 97,	3.3	3
429	Advanced in-situ control for III-nitride RF power device epitaxy. <i>Semiconductor Science and Technology</i> , 2018 , 33, 045014	1.8	1
428	Degradation effects of the active region in UV-C light-emitting diodes. <i>Journal of Applied Physics</i> , 2018 , 123, 104502	2.5	35
427	GaN-Based Vertical n-Channel MISFETs on Free Standing Ammonothermal GaN Substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700422	1.6	3
426	Effect of the GaN:Mg Contact Layer on the Light-Output and Current-Voltage Characteristic of UVB LEDs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700643	1.6	13
425	Reduction of absorption losses in MOVPE-grown AlGaAs Bragg mirrors. <i>Optics Letters</i> , 2018 , 43, 3522-3525		2

424	Efficient iron doping of HVPE GaN. <i>Journal of Crystal Growth</i> , 2018 , 500, 111-116	1.6	7
423	Eu-Doped AlGa _N /Ga _N Superlattice-Based Diode Structure for Red Lighting: Excitation Mechanisms and Active Sites. <i>ACS Applied Nano Materials</i> , 2018 , 1, 3845-3858	5.6	10
422	Influence of waveguide strain and surface morphology on AlGa _N -based deep UV laser characteristics. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 415101	3	11
421	Degradation behavior of AlGa _N -based 233 nm deep-ultraviolet light emitting diodes. <i>Semiconductor Science and Technology</i> , 2018 , 33, 095017	1.8	13
420	High-power sampled-grating-based master oscillator power amplifier system with 23.5 nm wavelength tuning around 970 nm. <i>Applied Optics</i> , 2018 , 57, 8680-8685	1.7	2
419	Analysis of strain and composition distributions in laterally strain-modulated InGaAs nanostructures after overgrowth with GaAs or InGaP 2018 , 135-138		
418	AFM characterization of AlGaAs/AlAs distributed Bragg reflectors 2018 , 543-546		
417	TEM investigations of oxidation phenomena in (Al,Ga)As/AlAs 2018 , 489-492		
416	Tri-carbon defects in carbon doped GaN. <i>Applied Physics Letters</i> , 2018 , 113, 262101	3.4	12
415	Bow Reduction of AlInGa _N -Based Deep UV LED Wafers Using Focused Laser Patterning. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 1792-1794	2.2	1
414	Localization of current-induced degradation effects in (InAlGa) _N -based UV-B LEDs. <i>Journal of Applied Physics</i> , 2018 , 124, 084504	2.5	16
413	Silicon induced defect reduction in AlN template layers for epitaxial lateral overgrowth. <i>Journal of Crystal Growth</i> , 2017 , 462, 18-23	1.6	8
412	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	1.6	33
411	Influence of AlN buffer layer on growth of AlGa _N by HVPE. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600696	1.3	7
410	AlGa _N -based metal-semiconductor-metal photodetectors with high external quantum efficiency at low operating voltage 2017 ,		3
409	The effects of magnesium doping on the modal loss in AlGa _N -based deep UV lasers. <i>Applied Physics Letters</i> , 2017 , 110, 081103	3.4	25
408	High-power broad-area buried-mesa lasers. <i>Semiconductor Science and Technology</i> , 2017 , 32, 065009	1.8	4
407	Design considerations for AlGa _N -based UV LEDs emitting near 235 nm with uniform emission pattern. <i>Semiconductor Science and Technology</i> , 2017 , 32, 045019	1.8	4

406	Triangular-shaped sapphire patterning for HVPE grown AlGa _N layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600751	1.6	2
405	High-quality AlN grown on a thermally decomposed sapphire surface. <i>Journal of Crystal Growth</i> , 2017 , 479, 16-21	1.6	19
404	Effect of Cl ₂ plasma treatment and annealing on vanadium based metal contacts to Si-doped Al _{0.75} Ga _{0.25} N. <i>Journal of Applied Physics</i> , 2017 , 122, 125701	2.5	8
403	Comparison of symmetric and asymmetric double quantum well extended-cavity diode lasers for broadband passive mode-locking at 780 nm. <i>Applied Optics</i> , 2017 , 56, 5566-5572	1.7	2
402	Effect of Electron Blocking Layer Doping and Composition on the Performance of 310 nm Light Emitting Diodes. <i>Materials</i> , 2017 , 10,	3.5	15
401	MOVPE growth of violet GaN LEDs on Ga ₂ O ₃ substrates. <i>Journal of Crystal Growth</i> , 2017 , 478, 212-215	1.6	13
400	Avoidance of instable photoluminescence intensity from AlGa _N bulk layers. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600672	1.3	2
399	Chip design for thin-film deep ultraviolet LEDs fabricated by laser lift-off of the sapphire substrate. <i>Semiconductor Science and Technology</i> , 2017 , 32, 12LT01	1.8	11
398	On the EQE-bias characteristics of bottom-illuminated AlGa _N -based metal-semiconductor-metal photodetectors with asymmetric electrode geometry. <i>Journal of Applied Physics</i> , 2017 , 122, 174501	2.5	5
397	Generation of optical picosecond pulses with monolithic colliding-pulse mode-locked lasers containing a chirped double-quantum-well active region. <i>IET Optoelectronics</i> , 2017 , 11, 79-85	1.5	1
396	Realisation of a widely tuneable sampled grating DBR laser emitting around 970nm. <i>Electronics Letters</i> , 2017 , 53, 744-746	1.1	2
395	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	3.8	32
394	Highly Reflective p-Contacts Made of Pd-Al on Deep Ultraviolet Light-Emitting Diodes. <i>IEEE Photonics Technology Letters</i> , 2017 , 29, 2222-2225	2.2	8
393	In-situ photoluminescence measurements during MOVPE of GaN and InGa _N in a CCS reactor. <i>TM Technisches Messen</i> , 2017 , 84, 747-752	0.7	1
392	Orientation dependent indium incorporation in MOVPE grown InGaAs/GaAs quantum wells 2017 , 397-400		
391	Structural and optical properties of (112 2) InGa _N quantum wells compared to (0001) and (112 0). <i>Semiconductor Science and Technology</i> , 2016 , 31, 085007	1.8	4
390	Kinetics of AlGa _N metalorganic vapor phase epitaxy for deep-UV applications. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 05FD07	1.4	4
389	MOVPE growth of laser structures for high-power applications at different ambient temperatures. <i>Journal of Crystal Growth</i> , 2016 , 452, 258-262	1.6	

388	Impact of acceptor concentration on the resistivity of Ni/Au p-contacts on semipolar (20 $\bar{1}$ 1) GaN:Mg. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 169-173	1.3	8
387	On optical polarization and charge carrier statistics of nonpolar InGaN quantum wells. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 145-157	1.3	6
386	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	1.2	16
385	Defect distribution and compositional inhomogeneities in Al _{0.5} Ga _{0.5} N layers grown on stepped surfaces. <i>Semiconductor Science and Technology</i> , 2016 , 31, 025007	1.8	4
384	Mechanisms of Implantation Damage Formation in Al _x Ga _{1-x} N Compounds. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 7277-7283	3.8	30
383	Development of semipolar (11-22) LEDs on GaN templates 2016 ,		7
382	Process control of MOCVD growth for LEDs by in-situ photoluminescence 2016 ,		1
381	Influence of the LED heterostructure on the degradation behavior of (InAlGa)N-based UV-B LEDs 2016 ,		1
380	CBr ₄ -based in-situ etching of GaAs, assisted with TMAI and TMGa. <i>Journal of Crystal Growth</i> , 2016 , 434, 116-122	1.6	2
379	Femtosecond Mode-Locked Semiconductor Disk Lasers. <i>Springer Series in Optical Sciences</i> , 2016 , 47-74	0.5	
378	Vapor Phase Epitaxy of AlGa _N Base Layers on Sapphire Substrates for Nitride-Based UV-Light Emitters. <i>Springer Series in Materials Science</i> , 2016 , 47-73	0.9	1
377	Solar- and Visible-Blind AlGa _N Photodetectors. <i>Springer Series in Materials Science</i> , 2016 , 219-266	0.9	4
376	Astigmatism-free high-brightness 1060 nm edge-emitting lasers with narrow circular beam profile. <i>Optics Express</i> , 2016 , 24, 30514-30522	3.3	7
375	Correlation of sapphire off-cut and reduction of defect density in MOVPE grown AlN. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 809-813	1.3	29
374	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	1.3	3
373	Strong amplitude-phase coupling in submonolayer quantum dots. <i>Applied Physics Letters</i> , 2016 , 109, 201102	3.4	13
372	Exciton localization in semipolar (112 $\bar{2}$) InGa _N multiple quantum wells. <i>Journal of Applied Physics</i> , 2016 , 120, 055705	2.5	2
371	Temperature and doping dependent changes in surface recombination during UV illumination of (Al)Ga _N bulk layers. <i>Journal of Applied Physics</i> , 2016 , 120, 095307	2.5	5

370	Near-field microscopy of waveguide architectures of InGaN/GaN diode lasers. <i>Semiconductor Science and Technology</i> , 2016 , 31, 115015	1.8	0
369	Low absorption loss p-AlGaIn superlattice cladding layer for current-injection deep ultraviolet laser diodes. <i>Applied Physics Letters</i> , 2016 , 108, 151108	3.4	39
368	Determination of polarization fields in group III-nitride heterostructures by capacitance-voltage-measurements. <i>Journal of Applied Physics</i> , 2016 , 119, 095713	2.5	8
367	Role of substrate quality on the performance of semipolar (112̄2̄) InGaIn light-emitting diodes. <i>Journal of Applied Physics</i> , 2016 , 120, 135701	2.5	7
366	In-situ control of large area (110̄2̄)-GaIn growth on patterned r-plane sapphire. <i>Journal of Crystal Growth</i> , 2016 , 452, 253-257	1.6	1
365	Fe-doping in hydride vapor-phase epitaxy for semi-insulating gallium nitride. <i>Journal of Crystal Growth</i> , 2016 , 456, 97-100	1.6	20
364	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	1.6	31
363	Efficient carrier-injection and electron-confinement in UV-B light-emitting diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 210-214	1.6	18
362	Current spreading in UV-C LEDs emitting at 235 nm 2015 ,		1
361	High-power UV-B LEDs with long lifetime 2015 ,		38
360	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015 , 21, 722-727	3.8	11
359	UV-C Lasing From AlGaIn Multiple Quantum Wells on Different Types of AlN/Sapphire Templates. <i>IEEE Photonics Technology Letters</i> , 2015 , 27, 1969-1972	2.2	18
358	Growth of laser diode structures with emission wavelength beyond 1100 nm for yellow-green emission by frequency conversion. <i>Journal of Crystal Growth</i> , 2015 , 414, 205-209	1.6	7
357	Combined Mg/Zn p-type doping for AlGaInP laser diodes. <i>Journal of Crystal Growth</i> , 2015 , 414, 215-218	1.6	3
356	Enhanced quantum efficiency of AlGaIn photodetectors by patterned growth. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1005-1010	1.6	1
355	V-pit to truncated pyramid transition in AlGaIn-based heterostructures. <i>Semiconductor Science and Technology</i> , 2015 , 30, 114010	1.8	17
354	Temperature induced degradation of InAlGaIn multiple-quantum well UV-B LEDs. <i>Materials Research Society Symposia Proceedings</i> , 2015 , 1792, 1		6
353	Measurement and simulation of top- and bottom-illuminated solar-blind AlGaIn metal-semiconductor-metal photodetectors with high external quantum efficiencies. <i>Journal of Applied Physics</i> , 2015 , 118, 244504	2.5	20

352	Spatial clustering of defect luminescence centers in Si-doped low resistivity Al _{0.82} Ga _{0.18} N. <i>Applied Physics Letters</i> , 2015 , 107, 072103	3.4	20
351	Degradation of (InAlGa)N-based UV-B light emitting diodes stressed by current and temperature. <i>Journal of Applied Physics</i> , 2015 , 118, 094504	2.5	35
350	Strongly transverse-electric-polarized emission from deep ultraviolet AlGa _N quantum well light emitting diodes. <i>Applied Physics Letters</i> , 2015 , 107, 142101	3.4	63
349	Spatial inhomogeneities in Al _x Ga _{1-x} N quantum wells induced by the surface morphology of AlN/sapphire templates. <i>Semiconductor Science and Technology</i> , 2015 , 30, 114008	1.8	11
348	Semipolar (112) InGa _N light-emitting diodes grown on chemically/mechanically polished GaN templates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 2196-2200	1.6	15
347	Semi-polar -Ga _N templates grown on 100 mm trench-patterned r-plane sapphire. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 1189-1194	1.3	24
346	Effect of carrier gas in hydride vapor phase epitaxy on optical and structural properties of Ga _N . <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 1180-1188	1.3	3
345	In-situ observation of InGa _N quantum well decomposition during growth of laser diodes. <i>Crystal Research and Technology</i> , 2015 , 50, 499-503	1.3	7
344	Solar-blind AlGa _N MSM photodetectors with 24% external quantum efficiency at 0 V. <i>Electronics Letters</i> , 2015 , 51, 1598-1600	1.1	24
343	Analysis of HVPE grown AlGa _N layers on honeycomb patterned sapphire. <i>Journal of Crystal Growth</i> , 2015 , 414, 32-37	1.6	5
342	AlAsP-based strain-balancing in MOVPE-grown distributed Bragg reflectors. <i>Journal of Crystal Growth</i> , 2015 , 414, 10-14	1.6	2
341	Top- and bottom-illumination of solar-blind AlGa _N metal/semiconductor/metal photodetectors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1021-1028	1.6	12
340	In-situ photoluminescence measurements during MOVPE growth of Ga _N and InGa _N MQW structures. <i>Journal of Crystal Growth</i> , 2015 , 415, 1-6	1.6	13
339	Challenges for AlGa _N Based UV Laser Diodes 2015 ,		3
338	Double-heterostructure ridge-waveguide GaAs/AlGaAs phase modulator for 780 nm lasers. <i>Applied Physics B: Lasers and Optics</i> , 2014 , 116, 175-181	1.9	2
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13	Arsenic passivation of MOMBE grown GaAs surfaces. <i>Surface Science</i> , 1988 , 204, 485-490	1.8	18
12	Quantitative analysis of carbon concentration in MOMBE p-GaAs by low-temperature photoluminescence. <i>Journal of Applied Physics</i> , 1988 , 64, 5098-5101	2.5	13
11	Doping of GaAs in metalorganic MBE using gaseous sources. <i>Journal of Crystal Growth</i> , 1987 , 81, 270-275.6	1.6	37

10	Defects in GaAs films grown by MOMBE. <i>Journal of Crystal Growth</i> , 1987 , 81, 281-287	1.6	16
9	Intentional Etype doping by carbon in metalorganic MBE of GaAs. <i>Journal of Electronic Materials</i> , 1986 , 15, 57-59	1.9	75
8	A comparative study of Ga(CH ₃) ₃ and Ga(C ₂ H ₅) ₃ in the mombe of GaAs. <i>Journal of Crystal Growth</i> , 1986 , 74, 292-300	1.6	169
7	Selective growth of GaAs in the MOMBE and MOCVD systems. <i>Journal of Crystal Growth</i> , 1986 , 77, 303-308	1.6	125
6	Real-time monitoring of P-based semiconductor growth by linear-optical spectroscopy		1
5	High-power, high-efficiency 1150 nm quantum well laser		1
4	Sub-80 fs pulses from a mode-locked Yb:NaGd(WO ₄) ₂ laser		2
3	MOVPE-overgrowth for buried InP/(In,Ga)(As,P) laser diode arrays		1
2	Molten Barium Hydroxide as Defect Selective Drop Etchant for Dislocation Analysis on Aluminum Nitride Layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> ,2100707	1.6	1
1	Temperature Dependence of Dark Spot Diameters in GaN and AlGa _N . <i>Physica Status Solidi (B): Basic Research</i> ,2100358	1.3	1