

# Peter J Parbrook

## List of Publications by Year in descending order

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195  
papers

3,702  
citations

147566

31  
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182168

51  
g-index

197  
all docs

197  
docs citations

197  
times ranked

3080  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
2	Many-beam dynamical simulation of electron backscatter diffraction patterns. Ultramicroscopy, 2007, 107, 414-421.	0.8	166
3	Micro-Light Emitting Diode: From Chips to Applications. Laser and Photonics Reviews, 2021, 15, 2000133.	4.4	108
4	Gate leakage effects and breakdown voltage in metalorganic vapor phase epitaxy AlGaIn/GaN heterostructure field-effect transistors. Applied Physics Letters, 2002, 80, 3207-3209.	1.5	103
5	Valence band offset of InN/AlN heterojunctions measured by x-ray photoelectron spectroscopy. Applied Physics Letters, 2007, 90, 132105.	1.5	89
6	An enhanced surface passivation effect in InGaIn/GaN disk-in-nanowire light emitting diodes for mitigating Shockley-Read-Hall recombination. Nanoscale, 2015, 7, 16658-16665.	2.8	84
7	Doping of III-nitride materials. Materials Science in Semiconductor Processing, 2017, 62, 180-191.	1.9	81
8	A study of dislocations in AlN and GaN films grown on sapphire substrates. Journal of Crystal Growth, 2005, 282, 290-296.	0.7	75
9	Electron-beam-induced segregation in InGaIn/GaN multiple-quantum wells. Applied Physics Letters, 2003, 83, 1965-1967.	1.5	70
10	Comparison of different surface passivation dielectrics in AlGaIn/GaN heterostructure field-effect transistors. Journal Physics D: Applied Physics, 2002, 35, 595-598.	1.3	69
11	Electron backscatter diffraction and electron channeling contrast imaging of tilt and dislocations in nitride thin films. Physical Review B, 2007, 75, .	1.1	69
12	The MOCVD growth without prereaction of ZnSe and ZnS layers. Journal of Crystal Growth, 1989, 94, 441-447.	0.7	63
13	Composition-Dependent Band Gap and Band-Edge Bowing in AlInN: A Combined Theoretical and Experimental Study. Applied Physics Express, 2013, 6, 121001.	1.1	58
14	Epitaxial lateral overgrowth of AlN on self-assembled patterned nanorods. Journal of Materials Chemistry C, 2015, 3, 431-437.	2.7	58
15	Rapid Nondestructive Analysis of Threading Dislocations in Wurtzite Materials Using the Scanning Electron Microscope. Physical Review Letters, 2012, 108, 135503.	2.9	56
16	Modeling and simulation of bulk gallium nitride power semiconductor devices. AIP Advances, 2016, 6, .	0.6	52
17	MOCVD Layer growth of ZnSe and ZnS / ZnSe multiple layers using nitrogen containing adducts of dimethylzinc. Journal of Crystal Growth, 1990, 104, 601-609.	0.7	49
18	Raman scattering and absorption study of the high-pressure wurtzite to rocksalt phase transition of GaN. Physical Review B, 2004, 69, .	1.1	49

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19	Air-bridged lateral growth of an Al <sub>0.98</sub> Ga <sub>0.02</sub> N layer by introduction of porosity in an AlN buffer. Applied Physics Letters, 2005, 87, 151906.	1.5	49
20	Time Evolution of the Screening of Piezoelectric Fields in InGaN Quantum Wells. IEEE Journal of Quantum Electronics, 2006, 42, 1202-1208.	1.0	47
21	The growth of ZnSe / CdSe and ZnS / CdS strained layer superlattices by MOVPE. Journal of Crystal Growth, 1990, 106, 503-509.	0.7	41
22	Growth and optical investigation of self-assembled InGaN quantum dots on a GaN surface using a high temperature AlN buffer. Journal of Applied Physics, 2008, 103, 123522.	1.1	41
23	GHz bandwidth semipolar (112̂ <sup>2</sup> ) InGaN/GaN light-emitting diodes. Optics Letters, 2016, 41, 5752.	1.7	40
24	Photoluminescence of wide bandgap IIâ€“VI superlattices. Journal of Crystal Growth, 1990, 101, 554-558.	0.7	39
25	Band alignments in Zn(Cd)S(Se) strained layer superlattices. Semiconductor Science and Technology, 1992, 7, 536-541.	1.0	39
26	Control of prereaction in the metalorganic chemical vapour deposition of zinc- and cadmium-based chalcogenides. Journal of Crystal Growth, 1991, 108, 525-533.	0.7	38
27	Critical thickness of common-anion IIâ€“VI strained layer superlattices (SLSs). Journal of Crystal Growth, 1992, 117, 492-496.	0.7	38
28	AlN heteroepitaxy on sapphire by metalorganic vapour phase epitaxy using low temperature nucleation layers. Journal of Crystal Growth, 2013, 383, 72-78.	0.7	37
29	Dependence of carrier localization in InGaNâˆ•GaN multiple-quantum wells on well thickness. Applied Physics Letters, 2006, 89, 253120.	1.5	35
30	Optical investigation of exciton localization in Al <sub>x</sub> Ga <sub>1âˆ•x</sub> N. Journal of Applied Physics, 2007, 101, 053513.	1.1	35
31	Fabrication and optical investigation of a high-density GaN nanowire array. Applied Physics Letters, 2005, 86, 103103.	1.5	33
32	High-reflectivity Al <sub>x</sub> Ga <sub>1âˆ•x</sub> Nâˆ•Al <sub>y</sub> Ga <sub>1âˆ•y</sub> N distributed Bragg reflectors with peak wavelength around 350nm. Applied Physics Letters, 2004, 85, 43-45.	1.5	32
33	Effect of anneal temperature on GaN nucleation layer transformation. Journal of Crystal Growth, 2003, 258, 89-99.	0.7	31
34	Greatly improved performance of 340nm light emitting diodes using a very thin GaN interlayer on a high temperature AlN buffer layer. Applied Physics Letters, 2006, 89, 081126.	1.5	31
35	The origin of the high ideality factor in AlGaIn-based quantum well ultraviolet light emitting diodes. Physica Status Solidi (B): Basic Research, 2010, 247, 1761-1763.	0.7	30
36	Influence of premetallization surface treatment on the formation of Schottky Au-nGaN contacts. Journal of Applied Physics, 2002, 92, 3179-3186.	1.1	28

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37	Origin of the red luminescence in Mg-doped GaN. Applied Physics Letters, 2006, 89, 022107.	1.5	28
38	Structure of hexagonal and cubic CdS heteroepitaxial layers on GaAs studied by transmission electron microscopy. Applied Physics Letters, 1989, 55, 2081-2083.	1.5	27
39	Optical properties of AlGaIn/GaN multiple quantum well structure by using a high-temperature AlN buffer on sapphire substrate. Journal of Applied Physics, 2006, 99, 023513.	1.1	27
40	Single phase (112 $\bar{2}$ ) AlN grown on (101 $\bar{0}$ ) sapphire by metalorganic vapour phase epitaxy. Journal of Crystal Growth, 2015, 414, 94-99.	0.7	26
41	The optical properties of wide bandgap binary II-VI superlattices. Journal of Crystal Growth, 1992, 117, 497-500.	0.7	25
42	Influence of GaN barrier growth temperature on the photoluminescence of InGaN/GaN heterostructures. Journal Physics D: Applied Physics, 2002, 35, 599-603.	1.3	25
43	InGaN/GaN quantum wells with low growth temperature GaN cap layers. Journal of Crystal Growth, 2007, 307, 363-366.	0.7	25
44	Optical and microstructural study of a single layer of InGaN quantum dots. Journal of Applied Physics, 2009, 105, 053505.	1.1	25
45	Fully Porous GaN p-n Junction Diodes Fabricated by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2014, 6, 17954-17964.	4.0	25
46	Influence of dual-frequency plasma-enhanced chemical-vapor deposition Si <sub>3</sub> N <sub>4</sub> passivation on the electrical characteristics of AlGaIn/GaN heterostructure field-effect transistors. Journal of Electronic Materials, 2004, 33, 400-407.	1.0	24
47	Influence of substrate miscut angle on surface morphology and luminescence properties of AlGaIn. Applied Physics Letters, 2014, 104, 092114.	1.5	24
48	Interdiffusion in wide-bandgap Zn(Cd)S(Se) strained layer superlattices. Semiconductor Science and Technology, 1991, 6, 818-821.	1.0	23
49	Optical absorption of ZnSe/ZnS strained layer superlattices. Applied Physics Letters, 1991, 59, 2142-2144.	1.5	23
50	Effect of V/III ratio on the growth of AlGaIn by metalorganic vapour phase epitaxy. Journal of Crystal Growth, 2016, 435, 12-18.	0.7	22
51	Influence of annealing temperature on optical properties of InGaIn quantum dot based light emitting diodes. Applied Physics Letters, 2008, 93, .	1.5	21
52	Light Emitting and Laser Diodes in the Ultraviolet. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1402-1411.	1.9	21
53	Determination of Ga auto-incorporation in nominal InAlIn epilayers grown by MOCVD. Journal of Materials Chemistry C, 2014, 2, 5787.	2.7	21
54	V-shaped pits formed at the GaN/AlN interface. Journal of Crystal Growth, 2006, 289, 63-67.	0.7	20

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55	GaN hybrid microcavities in the strong coupling regime grown by metal-organic chemical vapor deposition on sapphire substrates. <i>Journal of Applied Physics</i> , 2007, 101, 093110.	1.1	20
56	Effect of the AlGaIn electron blocking layer thickness on the performance of AlGaIn-based ultraviolet light-emitting diodes. <i>Journal of Crystal Growth</i> , 2009, 311, 2857-2859.	0.7	20
57	Ultra-High-Density Arrays of Defect-Free AlN Nanorods: A Space-Filling Approach. <i>ACS Nano</i> , 2016, 10, 1988-1994.	7.3	20
58	Bandgap and refractive index estimates of InAlN and related nitrides across their full composition ranges. <i>Scientific Reports</i> , 2020, 10, 16205.	1.6	20
59	Influence of alloy composition and interlayer thickness on twist and tilt mosaic in Al <sub>x</sub> Ga <sub>1-x</sub> N/AlN/GaN heterostructures. <i>Applied Physics Letters</i> , 2003, 83, 5434-5436.	1.5	19
60	Structural and optical properties of Ga auto-incorporated InAlN epilayers. <i>Journal of Crystal Growth</i> , 2014, 408, 97-101.	0.7	19
61	High Bandwidth Freestanding Semipolar (11 $\bar{2}$ ) InGaIn/GaN Light-Emitting Diodes. <i>IEEE Photonics Journal</i> , 2016, 8, 1-8.	1.0	18
62	Mechanisms of dislocation reduction in an Al <sub>0.98</sub> Ga <sub>0.02</sub> N layer grown using a porous AlN buffer. <i>Applied Physics Letters</i> , 2006, 89, 131925.	1.5	17
63	Semipolar (112) InGaIn light-emitting diodes grown on chemically/mechanically polished GaN templates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2196-2200.	0.8	17
64	GaN Nanowire Schottky Barrier Diodes. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 2283-2290.	1.6	17
65	Nature of acceptor states in magnesium-doped gallium nitride. <i>Physical Review B</i> , 2005, 71, .	1.1	16
66	Two coexisting mechanisms of dislocation reduction in an AlGaIn layer grown using a thin GaIn interlayer. <i>Applied Physics Letters</i> , 2007, 91, 131903.	1.5	16
67	Low-Dimensional Waveguide Grating Fabrication in GaN with Use of SiCl <sub>4</sub> /Cl <sub>2</sub> /Ar-Based Inductively Coupled Plasma Dry Etching. <i>Journal of Electronic Materials</i> , 2009, 38, 635-639.	1.0	16
68	Imaging and identifying defects in nitride semiconductor thin films using a scanning electron microscope. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 424-426.	0.8	16
69	Enhanced UV luminescence from InAlIn quantum well structures using two temperature growth. <i>Journal of Luminescence</i> , 2014, 155, 108-111.	1.5	16
70	Topography measurements of the critical thickness of ZnSe grown on GaAs. <i>Applied Physics Letters</i> , 1998, 72, 3148-3150.	1.5	15
71	Optical investigation of InGaIn/GaN multiple-quantum wells under high excitation. <i>Applied Physics Letters</i> , 2004, 84, 5159-5161.	1.5	15
72	Generation of misfit dislocations in highly mismatched GaN/AlN layers. <i>Surface Science</i> , 2008, 602, 2643-2646.	0.8	15

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73	Femtosecond studies of electron capture times in InGaN/GaN multiple quantum wells. Applied Physics Letters, 2004, 84, 3052-3054.	1.5	14
74	Investigations on Electrode-Less Wet Etching of GaN Using Continuous Ultraviolet Illumination. Journal of Electronic Materials, 2007, 36, 397-402.	1.0	14
75	Silicon doping of semipolar $\text{Al}_{0.15}\text{In}_{0.85}\text{N}$ epilayers. <a href="http://www.w3.org/1998/Math/MathML">http://www.w3.org/1998/Math/MathML</a> altimg="si0031.gif" overflow="scroll" > <mml:mrow> <mml:mo stretchy="true"> (</mml:mo> <mml:mn>11</mml:mn> <mml:mover> Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 662 Td (accent="tr	0.7	14
76	Ag colloids and arrays for plasmonic non-radiative energy transfer from quantum dots to a quantum well. Nanotechnology, 2017, 28, 115401.	1.3	14
77	Time-resolved optical studies of piezoelectric effects in wurtzite strained-layer superlattices. Semiconductor Science and Technology, 1990, 5, 997-1000.	1.0	13
78	Growth and optical characterisation of binary $\text{In}_{1-x}\text{Al}_x\text{N}$ SLS. Physica B: Condensed Matter, 1993, 191, 45-56.	1.3	13
79	Near ideal, high barrier, Au-nGaN Schottky contacts. Journal Physics D: Applied Physics, 2000, 33, L115-L118.	1.3	13
80	Effect of strain relaxation and exciton localization on performance of 350-nm AlInGaN quaternary light-emitting diodes. Journal of Applied Physics, 2005, 97, 083104.	1.1	13
81	Influence of plasmonic array geometry on energy transfer from a quantum well to a quantum dot layer. Nanoscale, 2016, 8, 18170-18179.	2.8	13
82	InAlN-based LEDs emitting in the near-UV region. Japanese Journal of Applied Physics, 2019, 58, SCCB33.	0.8	13
83	Luminescence of ZnSe/ZnS superlattices. Superlattices and Microstructures, 1991, 9, 107-110.	1.4	12
84	The influence of a capping layer on optical properties of self-assembled InGaN quantum dots. Journal of Applied Physics, 2007, 101, 113520-113520.	1.1	12
85	Carrier density dependence of plasmon-enhanced nonradiative energy transfer in a hybrid quantum well-quantum dot structure. Optics Express, 2015, 23, 1377.	1.7	12
86	Strongly nonparabolic variation of the band gap in $\text{In}_{1-x}\text{Al}_x\text{N}$ with low indium content. Semiconductor Science and Technology, 2016, 31, 025006.	1.0	12
87	Site controlled red-yellow-green light emitting InGaN quantum discs on nano-tipped GaN rods. Nanoscale, 2016, 8, 11019-11026.	2.8	12
88	Luminescence and its dynamics of ZnSe/ZnS superlattices. Journal of Luminescence, 1992, 53, 409-411.	1.5	11
89	The role of vacancies in the red luminescence from Mg-doped GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1919-1922.	0.8	11
90	Fabrication of p-type porous GaN on silicon and epitaxial GaN. Applied Physics Letters, 2013, 103, .	1.5	11

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91	Comparative study of polar and semipolar (112 $\bar{2}$ ) InGaN layers grown by metalorganic vapour phase epitaxy. <i>Journal of Applied Physics</i> , 2014, 116, 153505.	1.1	11
92	Exciton binding energies in II $\bar{6}$ VI compound strained layer superlattices. <i>Superlattices and Microstructures</i> , 1991, 9, 461-465.	1.4	10
93	Electron beam excitation and profiling of strained CdS epilayers grown by metalorganic vapour phase epitaxy on GaAs(111)A, GaAs(100), ZnSe(100) and ZnS(100) substrates. <i>Journal of Crystal Growth</i> , 1992, 117, 532-535.	0.7	10
94	Carrier capture times in InGaN/GaN multiple quantum wells. <i>Physica Status Solidi (B): Basic Research</i> , 2003, 240, 364-367.	0.7	10
95	Time-resolved photoluminescence studies of carrier diffusion in GaN. <i>Applied Physics Letters</i> , 2006, 89, 072107.	1.5	10
96	Resolution of discrete excited states in In <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells using degenerate four-wave mixing. <i>Physical Review B</i> , 2006, 73, .	1.1	10
97	Non-polar AlN and GaN/AlN on $\bar{r}$ -plane sapphire. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, S780.	0.8	10
98	In-Plane Optical Anisotropy of GaN Refractive Index in Visible Light Region. <i>IEEE Photonics Technology Letters</i> , 2009, 21, 966-968.	1.3	10
99	Semipolar (202 $\bar{1}$ ..3) nitrides grown on 3C $\bar{2}$ SiC/(001) Si substrates. <i>Semiconductor Science and Technology</i> , 2015, 30, 125007.	1.0	10
100	Self-Healing Thermal Annealing: Surface Morphological Restructuring Control of GaN Nanorods. <i>Crystal Growth and Design</i> , 2016, 16, 6769-6775.	1.4	10
101	Carrier dynamics near a crack in GaN microwires with AlGaIn multiple quantum wells. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	10
102	The growth and characterization of cadmium selenide and cadmium zinc selenide epilayers by MOVPE. <i>Journal of Crystal Growth</i> , 1993, 128, 639-645.	0.7	9
103	Effect of Si doping on the relaxation mechanism of InGaAs on GaAs. <i>Applied Physics Letters</i> , 2002, 81, 2773-2775.	1.5	9
104	Compositional analysis of AlInGaIn quaternary layers grown by metalorganic vapour phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 2478-2481.	0.8	9
105	Direct, Independent Measurement of Twist and Tilt Mosaic as a Function of Thickness in Epitaxial GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 542-545.	0.8	9
106	Room temperature operation of AlGaIn/GaN quantum well infrared photodetectors at a 3 $\bar{4}$ $\mu$ m wavelength range. <i>Semiconductor Science and Technology</i> , 2007, 22, 1240-1244.	1.0	9
107	Characterization of gate recessed GaN/AlGaIn/GaN high electron mobility transistors fabricated using a SiCl <sub>4</sub> /SF <sub>6</sub> dry etch recipe. <i>Journal of Applied Physics</i> , 2010, 108, 013711.	1.1	9
108	Multi-wavelength emission from a single InGaN/GaN nanorod analyzed by cathodoluminescence hyperspectral imaging. <i>Scientific Reports</i> , 2018, 8, 1742.	1.6	9

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109	Significant contribution from impurity-band transport to the room temperature conductivity of silicon-doped AlGa <sub>N</sub> . Journal Physics D: Applied Physics, 2018, 51, 06LT01.	1.3	9
110	A systematic comparison of polar and semipolar Si-doped AlGa <sub>N</sub> alloys with high AlN content. Journal Physics D: Applied Physics, 2021, 54, 035302.	1.3	9
111	Highly improved performance of a 350nm ultraviolet light-emitting diode containing Al <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N distributed Bragg reflectors. Journal of Crystal Growth, 2004, 267, 583-587.	0.7	8
112	Study of stimulated emission from InGa <sub>N</sub> /Ga <sub>N</sub> multiple quantum well structures. Journal of Crystal Growth, 2004, 273, 48-53.	0.7	8
113	AlGa <sub>N</sub> -based Bragg mirrors and hybrid microcavities for the ultra-violet spectral region. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 813-816.	0.8	8
114	Crystal defect topography of Stranski-Krastanow quantum dots by atomic force microscopy. Applied Physics Letters, 2010, 97, .	1.5	8
115	Role of substrate quality on the performance of semipolar (112̂ <sup>2</sup> ) InGa <sub>N</sub> light-emitting diodes. Journal of Applied Physics, 2016, 120, .	1.1	8
116	Development of semipolar (11-22) LEDs on Ga <sub>N</sub> templates. Proceedings of SPIE, 2016, , .	0.8	8
117	Electron beam excitation of II-VI compound strained layer superlattices. Journal of Luminescence, 1991, 48-49, 773-777.	1.5	7
118	CdZnSe-ZnSe Multilayers by Metalorganic Vapour Phase Epitaxy Using Dimethylselenide. Japanese Journal of Applied Physics, 1993, 32, 669-673.	0.8	7
119	Electrical characteristics of AlGa <sub>N</sub> /Ga <sub>N</sub> metal-insulator semiconductor heterostructure field-effect transistors on sapphire substrates. Journal of Electronic Materials, 2003, 32, 350-354.	1.0	7
120	MOCVD growth and optical investigation of the AlInGa <sub>N</sub> quaternary system. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2019-2022.	0.8	7
121	Crack formation and development in AlGa <sub>N</sub> /Ga <sub>N</sub> structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2055-2058.	0.8	7
122	The 310-340nm ultraviolet light emitting diodes grown using a thin Ga <sub>N</sub> interlayer on a high temperature AlN buffer. Journal Physics D: Applied Physics, 2008, 41, 094003.	1.3	7
123	Optical and microstructural studies of InGa <sub>N</sub> /Ga <sub>N</sub> quantum dot ensembles. Applied Physics Letters, 2009, 95, 111903.	1.5	7
124	Composition dependence of photoluminescence properties of In <sub>x</sub> Al <sub>1-x</sub> N/AlGa <sub>N</sub> quantum wells. Journal Physics D: Applied Physics, 2016, 49, 385105.	1.3	7
125	Optical and structural characterisation of epitaxial nanoporous Ga <sub>N</sub> grown by CVD. Nanotechnology, 2017, 28, 375701.	1.3	7
126	Reduction of threading dislocation density in top-down fabricated Ga <sub>N</sub> nanocolumns via their lateral overgrowth by MOCVD. Journal of Applied Physics, 2020, 127, .	1.1	7



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127	Exciton localization in polar and semipolar (112̄...2) In <sub>0.2</sub> Ga <sub>0.8</sub> N/GaN multiple quantum wells. <i>Semiconductor Science and Technology</i> , 2016, 31, 085006.	1.0	7
128	Phonon-assisted exciton luminescence in a CdSe-ZnSe disordered superlattice. <i>Journal of Luminescence</i> , 1992, 53, 427-430.	1.5	6
129	Static and growing InP and InAs surfaces: reflection-anisotropy spectroscopy under the conditions of solid-source MBE. <i>Thin Solid Films</i> , 2000, 364, 6-11.	0.8	6
130	The influence of acceptor anneal temperature on the performance of InGaN/GaN quantum well light-emitting diodes. <i>Journal of Applied Physics</i> , 2006, 99, 024507.	1.1	6
131	Phonon satellites and time-resolved studies of carrier recombination dynamics in InGaN quantum wells. <i>Superlattices and Microstructures</i> , 2007, 41, 419-424.	1.4	6
132	InAlN high electron mobility transistor Ti/Al/Ni/Au Ohmic contact optimisation assisted by in-situ high temperature transmission electron microscopy. <i>Applied Physics Letters</i> , 2015, 107, 113506.	1.5	6
133	A comparison of the <sup>60</sup> Co gamma radiation hardness, breakdown characteristics and the effect of SiNx capping on InAlN and AlGaIn HEMTs for space applications. <i>Semiconductor Science and Technology</i> , 2016, 31, 025008.	1.0	6
134	(Invited) Simulation Study of High Voltage Vertical GaN Nanowire Field Effect Transistors. <i>ECS Transactions</i> , 2017, 80, 69-85.	0.3	6
135	Metastable rocksalt phase in epitaxial GaN on sapphire. <i>Applied Physics Letters</i> , 2003, 83, 2808-2810.	1.5	5
136	Comparison of damage introduced into GaN/AlGaIn/GaN heterostructures using selective dry etch recipes. <i>Semiconductor Science and Technology</i> , 2009, 24, 075020.	1.0	5
137	The effect of a varied NH <sub>3</sub> flux on growth of AlN interlayers for InAlN/GaN heterostructures. <i>Applied Physics Letters</i> , 2013, 103, 081602.	1.5	5
138	Characterisation of III-nitride materials by synchrotron X-ray microdiffraction reciprocal space mapping. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 481-485.	0.8	5
139	Over 20 MHz modulation bandwidth on 250 nm emission of AlGaIn microLEDs. <i>Electronics Letters</i> , 2015, 51, 354-355.	0.5	5
140	Polar and semipolar (112) InAlN layers grown on AlN templates using MOVPE. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 99-104.	0.7	5
141	Thermal Stability of Crystallographic Planes of GaN Nanocolumns and Their Overgrowth by Metal Organic Vapor Phase Epitaxy. <i>Crystal Growth and Design</i> , 2020, 20, 3686-3700.	1.4	5
142	High brightness low voltage mesa style ZnSe light emitting diodes. <i>Electronics Letters</i> , 1994, 30, 1090-1091.	0.5	4
143	Optical monitoring of InP monolayer growth rates. <i>Applied Physics Letters</i> , 1998, 73, 345-347.	1.5	4
144	Spatial inhomogeneity investigation of QW emission in InGaIn MQW LEDs. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 234-238.	1.7	4

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145	Photoluminescence of single InGaN quantum dots grown at low surface densities by MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 2721-2724.	0.8	4
146	Picosecond carrier dynamics in AlInGaN multiple quantum wells. <i>Applied Physics Letters</i> , 2005, 87, 232106.	1.5	4
147	Characterisation of nitride thin films by electron backscatter diffraction and electron channelling contrast imaging. <i>Materials Science and Technology</i> , 2006, 22, 1352-1358.	0.8	4
148	Optically-detected magnetic resonance of spin-paired complexes emitting in the 2.3 eV spectral region in Mg-doped GaN. <i>Physical Review B</i> , 2006, 74, .	1.1	4
149	Inductively coupled plasma etching of GaN using SiCl <sub>4</sub> /Cl <sub>2</sub> /Ar for submicron-sized features fabrication. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2634-2637.	0.8	4
150	Thermal modelling of transferable bonded thin film gallium arsenide laser diode. <i>IET Optoelectronics</i> , 2016, 10, 51-56.	1.8	4
151	Tailoring Wettability Properties of GaN Epitaxial Layers through Surface Porosity Induced during CVD Deposition. <i>Langmuir</i> , 2021, 37, 14622-14627.	1.6	4
152	Thermal stability of nitrogen-doped ZnSe grown by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 1995, 150, 807-811.	0.7	3
153	Crack initiation and termination in III-V epitaxial layers. <i>Philosophical Magazine</i> , 2003, 83, 3077-3092.	0.7	3
154	Effects of depletion on the emission from individual InGaN dots. <i>Applied Physics Letters</i> , 2006, 88, 122115.	1.5	3
155	Temperature dependent behaviour of 340 nm light emitting diodes incorporating a gallium nitride interlayer. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 094004.	1.3	3
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