

Colin Humphreys

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309
papers

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321
ext. papers

8,081
ext. citations

3.9
avg, IF

5.87
L-index

#	Paper	IF	Citations
309	Solid-State Lighting. <i>MRS Bulletin</i> , 2008 , 33, 459-470	3.2	252
308	Electron-beam-induced strain within InGaN quantum wells: False indium cluster detection in the transmission electron microscope. <i>Applied Physics Letters</i> , 2003 , 83, 5419-5421	3.4	231
307	Prospects of III-nitride optoelectronics grown on Si. <i>Reports on Progress in Physics</i> , 2013 , 76, 106501	14.4	205
306	Atom probe tomography today. <i>Materials Today</i> , 2007 , 10, 36-42	21.8	186
305	Optical and microstructural studies of InGaN/GaN single-quantum-well structures. <i>Journal of Applied Physics</i> , 2005 , 97, 103508	2.5	179
304	Machine Learning Predicts Laboratory Earthquakes. <i>Geophysical Research Letters</i> , 2017 , 44, 9276-9282	4.9	150
303	Carrier localization mechanisms in In _x Ga _{1-x} N/GaN quantum wells. <i>Physical Review B</i> , 2011 , 83,	3.3	146
302	Three-dimensional atom probe studies of an In _x Ga _{1-x} N/GaN multiple quantum well structure: Assessment of possible indium clustering. <i>Applied Physics Letters</i> , 2007 , 90, 061903	3.4	142
301	Dopant profiling with the scanning electron microscope—A study of Si. <i>Journal of Applied Physics</i> , 2002 , 91, 9116-9122	2.5	118
300	Chemical mapping and formation of V-defects in InGaN multiple quantum wells. <i>Applied Physics Letters</i> , 2000 , 77, 1274-1276	3.4	118
299	Understanding x-ray diffraction of nonpolar gallium nitride films. <i>Journal of Applied Physics</i> , 2009 , 105, 113501	2.5	114
298	Highlighting threading dislocations in MOVPE-grown GaN using an in situ treatment with SiH ₄ and NH ₃ . <i>Journal of Crystal Growth</i> , 2006 , 289, 506-514	1.6	105
297	Carrier leakage in InGaN quantum well light-emitting diodes emitting at 480 nm. <i>Applied Physics Letters</i> , 2003 , 82, 2755-2757	3.4	102
296	Threading dislocation reduction in (0001) GaN thin films using SiN _x interlayers. <i>Journal of Crystal Growth</i> , 2007 , 300, 70-74	1.6	101
295	Determination of the indium content and layer thicknesses in InGaN/GaN quantum wells by x-ray scattering. <i>Journal of Applied Physics</i> , 2003 , 94, 1565-1574	2.5	99
294	Improvements in a-plane GaN crystal quality by a two-step growth process. <i>Applied Physics Letters</i> , 2008 , 92, 101104	3.4	92
293	On the origin of threading dislocations in GaN films. <i>Journal of Applied Physics</i> , 2009 , 106, 073513	2.5	91

292	The consequences of high injected carrier densities on carrier localization and efficiency droop in InGaN/GaN quantum well structures. <i>Journal of Applied Physics</i> , 2012 , 111, 083512	2.5	90
291	Tunable optoelectronic and ferroelectric properties in Sc-based III-nitrides. <i>Journal of Applied Physics</i> , 2013 , 114, 133510	2.5	84
290	Nanometer scale electron beam lithography in inorganic materials. <i>Applied Physics Letters</i> , 1984 , 45, 1289-129183	3.4	73
289	Characteristics and applications of micro-pixelated GaN-based light emitting diodes on Si substrates. <i>Journal of Applied Physics</i> , 2014 , 115, 033112	2.5	80
288	Equilibrium critical thickness for misfit dislocations in III-nitrides. <i>Journal of Applied Physics</i> , 2008 , 104, 123514	2.5	79
287	Three-dimensional atom probe analysis of green- and blue-emitting In _x Ga _{1-x} N/GaN multiple quantum well structures. <i>Journal of Applied Physics</i> , 2008 , 104, 013524	2.5	77
286	Growth and characterisation of GaN with reduced dislocation density. <i>Superlattices and Microstructures</i> , 2004 , 36, 393-401	2.8	76
285	Microstructural origins of localization in InGaN quantum wells. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 354003	3	75
284	Electrophoretic manipulation of single DNA molecules in nanofabricated capillaries. <i>Lab on A Chip</i> , 2004 , 4, 225-9	7.2	74
283	Accurate experimental determination of the Poisson's ratio of GaN using high-resolution x-ray diffraction. <i>Journal of Applied Physics</i> , 2007 , 102, 023505	2.5	73
282	Does In form In-rich clusters in InGaN quantum wells?. <i>Philosophical Magazine</i> , 2007 , 87, 1971-1982	1.6	72
281	Electron beam writing on a 20-Å scale in metal Aluminas. <i>Applied Physics Letters</i> , 1983 , 42, 392-394	3.4	71
280	Role of gross well-width fluctuations in bright, green-emitting single InGaN/GaN quantum well structures. <i>Applied Physics Letters</i> , 2007 , 90, 121911	3.4	68
279	Elastic constants and critical thicknesses of ScGaN and ScAlN. <i>Journal of Applied Physics</i> , 2013 , 114, 243516	3.4	64
278	Dislocation reduction in gallium nitride films using scandium nitride interlayers. <i>Applied Physics Letters</i> , 2007 , 91, 152101	3.4	63
277	Morphological, structural, and emission characterization of trench defects in InGaN/GaN quantum well structures. <i>Applied Physics Letters</i> , 2012 , 101, 212107	3.4	62
276	Effect of growth interruptions on the light emission and indium clustering of InGaN/GaN multiple quantum wells. <i>Applied Physics Letters</i> , 2001 , 79, 2594-2596	3.4	62
275	Electronic structure of GaN and In _x Ga _{1-x} N measured with electron energy-loss spectroscopy. <i>Physical Review B</i> , 2002 , 66,	3.3	60

274	Novel fabrication method for nanometer-scale silicon dots and wires. <i>Applied Physics Letters</i> , 1993 , 62, 1949-1951	3.4	58
273	The nature of carrier localisation in polar and nonpolar InGaN/GaN quantum wells. <i>Journal of Applied Physics</i> , 2016 , 119, 181505	2.5	56
272	Structure and chemistry of the Si(111)/AlN interface. <i>Applied Physics Letters</i> , 2012 , 100, 011910	3.4	54
271	The effects of Si doping on dislocation movement and tensile stress in GaN films. <i>Journal of Applied Physics</i> , 2011 , 109, 073509	2.5	51
270	Segregation of In to dislocations in InGaN. <i>Nano Letters</i> , 2015 , 15, 923-30	11.5	49
269	Structural, electronic, and optical properties of m-plane InGaN/GaN quantum wells: Insights from experiment and atomistic theory. <i>Physical Review B</i> , 2015 , 92,	3.3	48
268	Effects of quantum well growth temperature on the recombination efficiency of InGaN/GaN multiple quantum wells that emit in the green and blue spectral regions. <i>Applied Physics Letters</i> , 2015 , 107, 132106	3.4	48
267	Defect reduction in (112̄0̄) semipolar GaN grown on m-plane sapphire using ScN interlayers. <i>Applied Physics Letters</i> , 2009 , 94, 161109	3.4	48
266	Current-voltage instabilities in GaN/AlGaIn resonant tunnelling structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003 , 2389-2392		47
265	Electron-beam-induced damage in amorphous SiO ₂ and the direct fabrication of silicon nanostructures. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1998 , 78, 491-506		46
264	The impact of gross well width fluctuations on the efficiency of GaN-based light emitting diodes. <i>Applied Physics Letters</i> , 2013 , 103, 141114	3.4	45
263	Mg doping affects dislocation core structures in GaN. <i>Physical Review Letters</i> , 2013 , 111, 025502	7.4	45
262	Scanning transmission electron microscopy investigation of the Si(111)/AlN interface grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2010 , 97, 251901	3.4	45
261	High resolution quantitative two-dimensional dopant mapping using energy-filtered secondary electron imaging. <i>Journal of Applied Physics</i> , 2006 , 100, 054901	2.5	45
260	Carrier distribution in InGaIn/GaN tricolor multiple quantum well light emitting diodes. <i>Applied Physics Letters</i> , 2009 , 95, 151103	3.4	44
259	Misfit dislocations in In-rich InGaIn/GaN quantum well structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1729-1732	1.6	44
258	Nanoscale-accuracy transfer printing of ultra-thin AlInGaIn light-emitting diodes onto mechanically flexible substrates. <i>Applied Physics Letters</i> , 2013 , 103, 253302	3.4	43
257	Atom probe tomography assessment of the impact of electron beam exposure on In _x Ga _{1-x} N/GaN quantum wells. <i>Applied Physics Letters</i> , 2011 , 99, 021906	3.4	43

256	The impact of electron beam damage on the detection of indium-rich localisation centres in InGaN quantum wells using transmission electron microscopy. <i>Journal of Materials Science</i> , 2006 , 41, 2729-2737	4.3	42
255	Nanometre hole formation in MgO using electron beams. <i>Philosophical Magazine Letters</i> , 1990 , 61, 181-193		42
254	Microstructural evolution of nonpolar (11-20) GaN grown on (1-102) sapphire using a 3D-2D method. <i>Journal of Applied Physics</i> , 2009 , 105, 073102	2.5	41
253	Revealing all types of threading dislocations in GaN with improved contrast in a single plan view image. <i>Applied Physics Letters</i> , 2004 , 85, 3411-3413	3.4	41
252	The Spatial Distribution of Threading Dislocations in Gallium Nitride Films. <i>Advanced Materials</i> , 2009 , 21, 3941-3944	24	40
251	High-quality III-nitride films on conductive, transparent (2 01)-oriented α -Ga ₂ O ₃ using a GaN buffer layer. <i>Scientific Reports</i> , 2016 , 6, 29747	4.9	39
250	The impact of trench defects in InGaN/GaN light emitting diodes and implications for the green gap problem. <i>Applied Physics Letters</i> , 2014 , 105, 112110	3.4	39
249	Dislocation movement in GaN films. <i>Applied Physics Letters</i> , 2010 , 97, 261907	3.4	39
248	X-ray topography of the coherency breakdown in $GexSi_{1-x}/Si(100)$. <i>Applied Physics Letters</i> , 1988 , 53, 2083-2085	3.4	38
247	Efficiency measurement of GaN-based quantum well and light-emitting diode structures grown on silicon substrates. <i>Journal of Applied Physics</i> , 2011 , 109, 014502	2.5	37
246	GaN-based LEDs grown on 6-inch diameter Si (111) substrates by MOVPE 2009 ,		37
245	Carrier localization in the vicinity of dislocations in InGaN. <i>Journal of Applied Physics</i> , 2017 , 121, 013104	2.5	36
244	A quantitative model for doping contrast in the scanning electron microscope using calculated potential distributions and Monte Carlo simulations. <i>Journal of Applied Physics</i> , 2011 , 109, 013109	2.5	36
243	Comment on AlN/GaN double-barrier resonant tunneling diodes grown by rf-plasma-assisted molecular-beam epitaxy [<i>Appl. Phys. Lett.</i> 81, 1729 (2002)]. <i>Applied Physics Letters</i> , 2003 , 83, 3626-3627	3.4	35
242	Optical properties of GaN/AlGaN quantum wells grown on nonpolar substrates. <i>Applied Physics Letters</i> , 2008 , 93, 101901	3.4	34
241	Towards predictive modeling of near-edge structures in electron energy-loss spectra of AlN-based ternary alloys. <i>Physical Review B</i> , 2011 , 83,	3.3	33
240	Electronic and optical properties of nonpolar a-plane GaN quantum wells. <i>Physical Review B</i> , 2010 , 82,	3.3	33
239	Optimisation of GaN LEDs and the reduction of efficiency droop using active machine learning. <i>Scientific Reports</i> , 2016 , 6, 24862	4.9	32

238	Structure and strain relaxation effects of defects in In _x Ga _{1-x} N epilayers. <i>Journal of Applied Physics</i> , 2014 , 116, 103513	2.5	31
237	Characterization of InGa _N quantum wells with gross fluctuations in width. <i>Journal of Applied Physics</i> , 2007 , 102, 013513	2.5	30
236	The effect of dislocations on the efficiency of InGa _N /Ga _N solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 117, 279-284	6.4	29
235	The dissociation of the [a + c] dislocation in GaN. <i>Philosophical Magazine</i> , 2013 , 93, 3925-3938	1.6	29
234	Analysis of InGa _N /Ga _N single quantum wells by X-ray scattering and transmission electron microscopy. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 240, 297-300	1.3	29
233	Nanocathodoluminescence Reveals Mitigation of the Stark Shift in InGa _N Quantum Wells by Si Doping. <i>Nano Letters</i> , 2015 , 15, 7639-43	11.5	28
232	Correlations between the morphology and emission properties of trench defects in InGa _N /Ga _N quantum wells. <i>Journal of Applied Physics</i> , 2013 , 113, 073505	2.5	28
231	High excitation carrier density recombination dynamics of InGa _N /Ga _N quantum well structures: Possible relevance to efficiency droop. <i>Applied Physics Letters</i> , 2013 , 102, 022106	3.4	27
230	Electron-beam induced crystallization transition in self-developing amorphous AlF ₃ resists. <i>Applied Physics Letters</i> , 1996 , 69, 170-172	3.4	27
229	X-ray diffraction analysis of cubic zincblende III-nitrides. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 433002	3.0	26
228	3D Strain in 2D Materials: To What Extent is Monolayer Graphene Graphite?. <i>Physical Review Letters</i> , 2019 , 123, 135501	7.4	26
227	Degradation of InGa _N /Ga _N laser diodes analyzed by microphotoluminescence and microelectroluminescence mappings. <i>Applied Physics Letters</i> , 2008 , 92, 151110	3.4	24
226	Imaging dislocation cores the way forward. <i>Philosophical Magazine</i> , 2006 , 86, 4781-4796	1.6	24
225	Insights into the origin of threading dislocations in Ga _N /Al ₂ O ₃ from atomic force microscopy. <i>Applied Physics Letters</i> , 2006 , 89, 011914	3.4	24
224	Structural and Optical Emission Uniformity of m-Plane InGa _N Single Quantum Wells in Core/Shell Nanorods. <i>Crystal Growth and Design</i> , 2016 , 16, 1907-1916	3.5	23
223	Correlating electroluminescence characterization and physics-based models of InGa _N /Ga _N LEDs: Pitfalls and open issues. <i>AIP Advances</i> , 2014 , 4, 067118	1.5	23
222	Coincident electron channeling and cathodoluminescence studies of threading dislocations in Ga _N . <i>Microscopy and Microanalysis</i> , 2014 , 20, 55-60	0.5	23
221	Dislocations in AlGa _N : Core Structure, Atom Segregation, and Optical Properties. <i>Nano Letters</i> , 2017 , 17, 4846-4852	11.5	23

220	Structural properties of wurtzitelike ScGaN films grown by NH ₃ -molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2009 , 106, 113533	2.5	23
219	Optical polarization anisotropy of a-plane GaN/AlGaN multiple quantum well structures grown on r-plane sapphire substrates. <i>Journal of Applied Physics</i> , 2009 , 105, 123112	2.5	22
218	The effect of wafer curvature on x-ray rocking curves from gallium nitride films. <i>Journal of Applied Physics</i> , 2008 , 103, 093528	2.5	22
217	Direct observation of depth-dependent atomic displacements associated with dislocations in gallium nitride. <i>Physical Review Letters</i> , 2014 , 113, 135503	7.4	21
216	Low temperature photoluminescence and cathodoluminescence studies of nonpolar GaN grown using epitaxial lateral overgrowth. <i>Journal of Applied Physics</i> , 2010 , 108, 033523	2.5	21
215	Determination of relative internal quantum efficiency in InGaN/GaN quantum wells. <i>Journal of Applied Physics</i> , 2005 , 98, 053509	2.5	21
214	The effect of growth condition on the structure of 2H AlN films deposited on Si(111) by plasma-assisted molecular beam epitaxy. <i>Journal of Materials Research</i> , 1999 , 14, 2036-2042	2.5	21
213	Vertical leakage mechanism in GaN on Si high electron mobility transistor buffer layers. <i>Journal of Applied Physics</i> , 2018 , 124, 055702	2.5	20
212	The ABC model of recombination reinterpreted: Impact on understanding carrier transport and efficiency droop in InGaN/GaN light emitting diodes. <i>Journal of Applied Physics</i> , 2017 , 122, 234505	2.5	20
211	The atomic structure of polar and non-polar InGaN quantum wells and the green gap problem. <i>Ultramicroscopy</i> , 2017 , 176, 93-98	3.1	19
210	Structural impact on the nanoscale optical properties of InGaN core-shell nanorods. <i>Applied Physics Letters</i> , 2017 , 110, 172105	3.4	19
209	The microstructure of non-polar a-plane (11 2̄0̄) InGaN quantum wells. <i>Journal of Applied Physics</i> , 2016 , 119, 175703	2.5	19
208	Temperature and Bias Dependent Trap Capture Cross Section in AlGaN/GaN HEMT on 6-in Silicon With Carbon-Doped Buffer. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4868-4874	2.9	18
207	Assessment of the performance of scanning capacitance microscopy for n-type gallium nitride. <i>Journal of Vacuum Science & Technology B</i> , 2008 , 26, 611		18
206	The origin and reduction of dislocations in Gallium Nitride. <i>Journal of Materials Science: Materials in Electronics</i> , 2008 , 19, 208-214	2.1	18
205	Effects of KOH etching on the properties of Ga-polar n-GaN surfaces. <i>Philosophical Magazine</i> , 2006 , 86, 2315-2327	1.6	18
204	Mapping the potential within a nanoscale undoped GaAs region using a scanning electron microscope. <i>Applied Physics Letters</i> , 2004 , 84, 2109-2111	3.4	18
203	Atomic Arrangement of a Z-Shape Faulted Dipole within Deformed GaAs. <i>Physical Review Letters</i> , 1998 , 81, 5350-5353	7.4	18

202	What is red? On the chromaticity of orange-red InGaN/GaN based LEDs. <i>Journal of Applied Physics</i> , 2018 , 124, 183102	2.5	18
201	Optimizing GaN () hetero-epitaxial templates grown on () sapphire. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 61-66	1.3	17
200	Defect reduction in non-polar (11 $\bar{2}$ 0) GaN grown on (1 $\bar{1}$ 02) sapphire. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 1190-1193	1.6	17
199	InGaN/GaN LEDs grown on Si(111): dependence of device performance on threading dislocation density and emission wavelength. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 2168-2170		17
198	High resolution transmission electron microscopy and three-dimensional atom probe microscopy as complementary techniques for the high spatial resolution analysis of GaN based quantum well systems. <i>Materials Science and Technology</i> , 2008 , 24, 675-681	1.5	17
197	Comparative studies of efficiency droop in polar and non-polar InGaN quantum wells. <i>Applied Physics Letters</i> , 2016 , 108, 252101	3.4	17
196	Dislocation-related trap levels in nitride-based light emitting diodes. <i>Applied Physics Letters</i> , 2014 , 104, 211102	3.4	16
195	Growth of non-polar (11-20) InGaN quantum dots by metal organic vapour phase epitaxy using a two temperature method. <i>APL Materials</i> , 2014 , 2, 126101	5.7	16
194	The effects of Si-doped prelayers on the optical properties of InGaN/GaN single quantum well structures. <i>Applied Physics Letters</i> , 2014 , 105, 092106	3.4	16
193	Low temperature carrier redistribution dynamics in InGaN/GaN quantum wells. <i>Journal of Applied Physics</i> , 2014 , 115, 113505	2.5	16
192	Practical issues in carrier-contrast imaging of GaN structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007 , 4, 2576-2580		16
191	Dielectric response of wurtzite gallium nitride in the terahertz frequency range. <i>Solid State Communications</i> , 2016 , 247, 68-71	1.6	15
190	The significance of Bragg's law in electron diffraction and microscopy, and Bragg's second law. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2013 , 69, 45-50		15
189	Study of efficiency droop and carrier localisation in an InGaN/GaN quantum well structure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2194-2196		15
188	Scanning capacitance microscopy studies of unintentional doping in epitaxial lateral overgrowth GaN. <i>Journal of Applied Physics</i> , 2009 , 106, 104503	2.5	15
187	Low dislocation density nonpolar (11-20) GaN films achieved using scandium nitride interlayers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 1778-1780		15
186	Resonant excitation photoluminescence studies of InGaN/GaN single quantum well structures. <i>Applied Physics Letters</i> , 2006 , 89, 211901	3.4	15
185	Exciton localization in InGaN/GaN single quantum well structures. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 240, 344-347	1.3	15

184	Electron energy loss spectroscopy studies of the amorphous to crystalline transition in FeF ₃ . <i>Journal of Applied Physics</i> , 1999 , 86, 2499-2504	2.5	15
183	Control of threshold voltage in E-mode and D-mode GaN-on-Si metal-insulator-semiconductor heterostructure field effect transistors by in-situ fluorine doping of atomic layer deposition Al ₂ O ₃ gate dielectrics. <i>Applied Physics Letters</i> , 2016 , 108, 072901	3.4	15
182	Growth and coalescence studies of oriented GaN on pre-structured sapphire substrates using marker layers. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 46-53	1.3	15
181	A study of the inclusion of prelayers in InGaN/GaN single- and multiple-quantum-well structures. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 866-872	1.3	14
180	Investigation of indium gallium nitride facet-dependent nonpolar growth rates and composition for core-shell light-emitting diodes. <i>Journal of Nanophotonics</i> , 2016 , 10, 016010	1.1	14
179	Investigation of unintentional indium incorporation into GaN barriers of InGaN/GaN quantum well structures. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 928-935	1.3	14
178	Growth, microstructure and morphology of epitaxial ScGaN films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012 , 209, 33-40	1.6	14
177	Photoluminescence studies of cubic GaN epilayers. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600733	1.3	13
176	Optical studies of non-polar m-plane ($\bar{1}\bar{1}0$) InGaN/GaN multi-quantum wells grown on freestanding bulk GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 965-970	1.3	13
175	Carrier Density Dependent Localization and Consequences for Efficiency Droop in InGaN/GaN Quantum Well Structures. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 08JK10	1.4	13
174	Optical and microstructural properties of semi-polar ($1\bar{1}0$) InGaN/GaN quantum well structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S727-S730		13
173	Determination of the composition and thickness of semi-polar and non-polar III-nitride films and quantum wells using X-ray scattering. <i>Journal of Applied Physics</i> , 2012 , 111, 043502	2.5	13
172	Highly conductive modulation doped composition graded p-AlGaIn/(AlN)/GaN multiheterostructures grown by metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 2009 , 106, 013720	2.5	13
171	Comparative study of sputtered and spin-coatable aluminum oxide electron beam resists. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000 , 18, 2737		13
170	Microtwin nucleation and propagation in heteroepitaxial II-VI compounds on (001)-oriented GaAs substrates. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1995 , 72, 39-57		13
169	Dislocation core structures in (0001) InGaIn. <i>Journal of Applied Physics</i> , 2016 , 119, 105301	2.5	13
168	Effect of growth temperature and V/III-ratio on the surface morphology of MOVPE-grown cubic zincblende GaN. <i>Journal of Applied Physics</i> , 2018 , 124, 105302	2.5	13
167	Composition and luminescence studies of InGaIn epilayers grown at different hydrogen flow rates. <i>Semiconductor Science and Technology</i> , 2013 , 28, 065011	1.8	12

166	Properties of trench defects in InGaN/GaN quantum well structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 195-198	1.6	12
165	Dislocation core structures in Si-doped GaN. <i>Applied Physics Letters</i> , 2015 , 107, 243104	3.4	12
164	Enhancement mode operation in AlInN/GaN (MIS)HEMTs on Si substrates using a fluorine implant. <i>Semiconductor Science and Technology</i> , 2015 , 30, 105007	1.8	12
163	Morphological study of non-polar (11-20) GaN grown on r-plane (1-102) sapphire. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 1786-1788		12
162	Atom probe reveals the structure of In _x Ga _{1-x} N based quantum wells in three dimensions. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 861-867	1.3	12
161	High quantum efficiency InGaN/GaN structures emitting at 540 nm. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006 , 3, 1970-1973		12
160	Mechanisms of bending of threading dislocations in MOVPE-grown GaN on (0001) sapphire. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006 , 3, 1750-1753		12
159	Mechanical properties of graphene. <i>Applied Physics Reviews</i> , 2021 , 8, 021310	17.3	12
158	A comparison of the optical properties of InGaN/GaN multiple quantum well structures grown with and without Si-doped InGaN prelayers. <i>Journal of Applied Physics</i> , 2016 , 119, 055708	2.5	12
157	Effect of humidity on the interlayer interaction of bilayer graphene. <i>Physical Review B</i> , 2019 , 99,	3.3	12
156	Polarized photoluminescence excitation spectroscopy of a-plane InGaN/GaN multiple quantum wells grown on r-plane sapphire. <i>Journal of Applied Physics</i> , 2014 , 115, 113106	2.5	11
155	Atom probe tomography characterisation of a laser diode structure grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2012 , 111, 053508	2.5	11
154	Coherent terahertz acoustic vibrations in polar and semipolar gallium nitride-based superlattices. <i>Applied Physics Letters</i> , 2009 , 94, 011909	3.4	11
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