

Armin Dadgar

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.

238
papers

6,686
citations

46
h-index

73
g-index

259
ext. papers

7,149
ext. citations

2.7
avg, IF

5.46
L-index

#	Paper	IF	Citations
238	Desorption induced formation of low-density GaN quantum dots: nanoscale correlation of structural and optical properties. <i>Journal Physics D: Applied Physics</i> , 2022 , 55, 145102	3	
237	Defect characterization of heavy-ion irradiated AlInN/GaN on Si high-electron-mobility transistors. <i>Journal Physics D: Applied Physics</i> , 2022 , 55, 115107	3	0
236	Low-resistivity vertical current transport across AlInN/GaN interfaces. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, 010905	1.4	0
235	Understanding High-Energy 75-MeV Sulfur-Ion Irradiation-Induced Degradation in GaN-Based Heterostructures: The Role of the GaN Channel Layer. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 24-28	2.9	2
234	Raman tensor determination of transparent uniaxial crystals and their thin films—plane GaN as exemplary case. <i>Applied Physics Letters</i> , 2021 , 119, 121109	3.4	
233	Demonstration of lateral epitaxial growth of AlN on Si (1 1 1) at low temperatures by pulsed reactive sputter epitaxy. <i>Journal of Crystal Growth</i> , 2021 , 571, 126250	1.6	0
232	Reliable GaN-Based THz Gunn Diodes With Side-Contact and Field-Plate Technologies. <i>IEEE Access</i> , 2020 , 8, 84116-84122	3.5	9
231	The impurity size-effect and phonon deformation potentials in wurtzite GaN. <i>Semiconductor Science and Technology</i> , 2020 , 35, 095033	1.8	1
230	Nitride Microcavities and Single Quantum Dots for Classical and Non-classical Light Emitters. <i>Springer Series in Solid-state Sciences</i> , 2020 , 453-504	0.4	
229	Methodology for the investigation of threading dislocations as a source of vertical leakage in AlGaIn/GaN-HEMT heterostructures for power devices. <i>Journal of Applied Physics</i> , 2019 , 125, 095704	2.5	21
228	Nitride Semiconductors 2019 , 109-147		1
227	Outstanding Reliability of Heavy-Ion-Irradiated AlInN/GaN on Silicon HFETs. <i>IEEE Transactions on Nuclear Science</i> , 2019 , 66, 2417-2421	1.7	3
226	GaN-On-Si Epitaxy 2019 , 1-13		1
225	Impact of AlN/Si Nucleation Layers Grown Either by NH ₃ -MBE or MOCVD on the Properties of AlGaIn/GaN HFETs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700638	1.6	
224	Flexible Modulation of Electronic Band Structures of Wide Band Gap GaN Semiconductors Using Bioinspired, Nonbiological Helical Peptides. <i>Advanced Functional Materials</i> , 2018 , 28, 1704034	15.6	5
223	Electronic excitations stabilized by a degenerate electron gas in semiconductors. <i>Communications Physics</i> , 2018 , 1,	5.4	5
222	Gallium nitride vertical power devices on foreign substrates: a review and outlook. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 273001	3	109

221	Two charge states of the CN acceptor in GaN: Evidence from photoluminescence. <i>Physical Review B</i> , 2018 , 98,	3.3	58
220	Accurate determination of polarization fields in (0 0 0 1) c-plane InAlN/GaN heterostructures with capacitance-voltage-measurements. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 485103	3	3
219	Transparente leitfähige Nitride. <i>Vakuum in Forschung Und Praxis</i> , 2018 , 30, 26-31	0.3	1
218	Valence band tomography of wurtzite GaN by spectroscopic ellipsometry. <i>Applied Physics Express</i> , 2018 , 11, 101001	2.4	7
217	LED Materials: GaN on Si 2017 , 123-147		1
216	Radiation-induced alloy rearrangement in In _x Ga _{1-x} N. <i>Applied Physics Letters</i> , 2017 , 110, 132104	3.4	8
215	All metalorganic chemical vapor phase epitaxy of p/n-GaN tunnel junction for blue light emitting diode applications. <i>Applied Physics Letters</i> , 2017 , 110, 102104	3.4	48
214	Observation of individual stacking faults in GaN microcrystals by x-ray nanodiffraction. <i>Applied Physics Letters</i> , 2017 , 110, 121905	3.4	5
213	Properties of C-doped GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600708	1.3	23
212	High-Performance 500 V Quasi- and Fully-Vertical GaN-on-Si pn Diodes. <i>IEEE Electron Device Letters</i> , 2017 , 38, 248-251	4.4	61
211	Breakdown of Far-Field Raman Selection Rules by Light-Plasmon Coupling Demonstrated by Tip-Enhanced Raman Scattering. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 5462-5471	6.4	14
210	Reduction of on-resistance and current crowding in quasi-vertical GaN power diodes. <i>Applied Physics Letters</i> , 2017 , 111, 163506	3.4	32
209	Leakage currents and Fermi-level shifts in GaN layers upon iron and carbon-doping. <i>Journal of Applied Physics</i> , 2017 , 122, 025704	2.5	19
208	Termination of hollow core nanopipes in GaN by an AlN interlayer. <i>Journal of Crystal Growth</i> , 2016 , 455, 43-48	1.6	3
207	Clustered quantum dots in single GaN islands formed at threading dislocations. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 05FF04	1.4	4
206	Metalorganic chemical vapor phase epitaxy of narrow-band distributed Bragg reflectors realized by GaN:Ge modulation doping. <i>Journal of Crystal Growth</i> , 2016 , 440, 6-12	1.6	10
205	Unintentional indium incorporation into barriers of InGaN/GaN multiple quantum wells studied by photoreflectance and photoluminescence excitation spectroscopy. <i>Journal of Applied Physics</i> , 2016 , 120, 015703	2.5	4
204	On reduction of current leakage in GaN by carbon-doping. <i>Applied Physics Letters</i> , 2016 , 109, 212102	3.4	18

203	Polarization engineering of c-plane InGaN quantum wells by pulsed-flow growth of AlInGaN barriers. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 118-125	1.3	4
202	Nanoscale cathodoluminescence of stacking faults and partial dislocations in a-plane GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 73-77	1.3	2
201	Sixteen years GaN on Si. <i>Physica Status Solidi (B): Basic Research</i> , 2015 , 252, 1063-1068	1.3	63
200	Growth of III/Vs on Silicon 2015 , 1249-1300		8
199	Direct evidence of single quantum dot emission from GaN islands formed at threading dislocations using nanoscale cathodoluminescence: A source of single photons in the ultraviolet. <i>Applied Physics Letters</i> , 2015 , 106, 252101	3.4	24
198	Enhanced sheet carrier densities in polarization controlled AlInN/AlN/GaN/InGaN field-effect transistor on Si (111). <i>AIP Advances</i> , 2015 , 5, 077146	1.5	4
197	Germanium – the superior dopant in n-type GaN. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015 , 9, 716-721	2.5	32
196	Growth of AlInN/GaN distributed Bragg reflectors with improved interface quality. <i>Journal of Crystal Growth</i> , 2015 , 414, 105-109	1.6	18
195	LED Materials: GaN on Si 2015 , 1-21		1
194	High-pressure Raman scattering in InGaN heteroepitaxial layers: Effect of the substrate on the phonon pressure coefficients. <i>Applied Physics Letters</i> , 2014 , 104, 142101	3.4	2
193	Wafer curvature, temperature inhomogeneity, plastic deformation and their impact on the properties of GaN on silicon power and opto-electronic structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014 , 11, 397-400		6
192	Band gap renormalization and Burstein-Moss effect in silicon- and germanium-doped wurtzite GaN up to 1020 cm ⁻¹ . <i>Physical Review B</i> , 2014 , 90,	3.3	112
191	Characterization of AlInN/AlN/GaN FET structures using x-ray diffraction, x-ray reflectometry and grazing incidence x-ray fluorescence analysis. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 355106	3	5
190	High-frequency detection of cell activity of <i>Physarum polycephalum</i> by a planar open gate AlGaInN/GaN HEMT. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 425401	3	4
189	Anisotropic bow and plastic deformation of GaN on silicon. <i>Journal of Crystal Growth</i> , 2013 , 370, 278-281	1.6	10
188	Green to blue polarization compensated c-axis oriented multi-quantum wells by AlGaInN barrier layers. <i>Applied Physics Letters</i> , 2013 , 102, 062110	3.4	11
187	In-situ growth monitoring of AlInN/AlGaIn distributed Bragg reflectors for the UV-spectral range. <i>Journal of Crystal Growth</i> , 2013 , 370, 87-91	1.6	16
186	MOVPE growth of semi-polar GaN light-emitting diode structures on planar Si(112) and Si(113) substrates. <i>Journal of Crystal Growth</i> , 2013 , 370, 288-292	1.6	15

185	Growth and characterization of stacking fault reduced GaN $(1,0, \bar{1}, 3)$ on sapphire. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 125308	3	11
184	Anisotropy of effective electron masses in highly doped nonpolar GaN. <i>Applied Physics Letters</i> , 2013 , 103, 232104	3.4	31
183	Ge as a surfactant in metal-organic vapor phase epitaxy growth of a-plane GaN exceeding carrier concentrations of 10^{20} cm ⁻³ . <i>Applied Physics Letters</i> , 2013 , 103, 012103	3.4	16
182	Systematic Optical Characterization of Two-Dimensional Electron Gases in InAlN/GaN-Based Heterostructures with Different In Content. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 08JK02	1.4	1
181	High Si and Ge n-type doping of GaN doping - Limits and impact on stress. <i>Applied Physics Letters</i> , 2012 , 100, 122104	3.4	127
180	Luminescence from two-dimensional electron gases in InAlN/GaN heterostructures with different In content. <i>Applied Physics Letters</i> , 2012 , 100, 212101	3.4	10
179	Thermally Oxidized InAlN of Different Compositions for InAlN/GaN Heterostructure Field-Effect Transistors. <i>Journal of Electronic Materials</i> , 2012 , 41, 3013-3016	1.9	3
178	Cathodoluminescence directly performed in a transmission electron microscope: nanoscale correlation of structural and optical properties. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1834-1835	0.5	1
177	Role of low-temperature AlGaIn interlayers in thick GaN on silicon by metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 2012 , 111, 124505	2.5	32
176	Optical anisotropy of a-plane Al _{0.8} In _{0.2} N grown on an a-plane GaN pseudosubstrate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012 , 209, 29-32	1.6	
175	Growth of AlInN/AlGaIn distributed Bragg reflectors for high quality microcavities. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 1253-1258		8
174	Growth and stacking fault reduction in semi-polar GaN films on planar Si(112) and Si(113). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 507-510		15
173	Stranski-Krastanov transition and self-organized structures in low-strained AlInN/GaN multilayer structures. <i>Semiconductor Science and Technology</i> , 2011 , 26, 014041	1.8	4
172	Comment on [The effects of Si doping on dislocation movement and tensile stress in GaN films[J. Appl. Phys. 109, 073509 (2011)]. <i>Journal of Applied Physics</i> , 2011 , 110, 096101	2.5	2
171	Electrical investigations of AlGaIn/AlN structures for LEDs on Si(111). <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011 , 208, 1597-1599	1.6	7
170	Impact of AlN seeding layer growth rate in MOVPE growth of semi-polar gallium nitride structures on high index silicon. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 594-599	1.3	6
169	Heavy Si doping: The key in heteroepitaxial growth of a-plane GaN without basal plane stacking faults?. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 578-582	1.3	17
168	Characterization of AlGaInN layers using X-ray diffraction and fluorescence. <i>Physica Status Solidi (B): Basic Research</i> , 2011 , 248, 622-626	1.3	6

167	Improving GaN-on-silicon properties for GaN device epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 1503-1508		51
166	Al _x Ga _{1-x} N/GaN heterostructures on a thin silicon-on-insulator substrate for metal-semiconductor-metal photodetectors. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 365102	3	5
165	Influence of exciton-phonon coupling and strain on the anisotropic optical response of wurtzite AlN around the band edge. <i>Physical Review B</i> , 2011 , 83,	3-3	41
164	Optical investigation of a hybrid GaN based microcavity with AlInN/GaN bottom and dielectric top distributed Bragg mirror. <i>Superlattices and Microstructures</i> , 2011 , 49, 187-192	2.8	2
163	Unintentional doping of a-plane GaN by insertion of in situ SiN masks. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 085102	3	1
162	Eliminating stacking faults in semi-polar GaN by AlN interlayers. <i>Applied Physics Letters</i> , 2011 , 99, 021905	3.4	19
161	Crack-Free, Highly Conducting GaN Layers on Si Substrates by Ge Doping. <i>Applied Physics Express</i> , 2011 , 4, 011001	2.4	63
160	Thin-film InGaN/GaN Vertical Light Emitting Diodes Using GaN on Silicon-On-Insulator Substrates. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H460		13
159	Stress Relaxation in Low-Strain AlInN/GaN Bragg Mirrors. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 031002	1.4	
158	Stress Relaxation in Low-Strain AlInN/GaN Bragg Mirrors. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 031002	1.4	1
157	Luminescence Properties of Photonic Crystal InGaN/GaN Light Emitting Layers on Silicon-on-Insulator. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H343		6
156	Direct microscopic correlation of crystal orientation and luminescence in spontaneously formed nonpolar and semipolar GaN growth domains. <i>Applied Physics Letters</i> , 2010 , 96, 172102	3.4	6
155	Semipolar single component GaN on planar high index Si(11h) substrates. <i>Applied Physics Letters</i> , 2010 , 97, 142102	3.4	21
154	Strain evaluation in AlInN/GaN Bragg mirrors by in situ curvature measurements and ex situ x-ray grazing incidence and transmission scattering. <i>Applied Physics Letters</i> , 2010 , 97, 181105	3.4	19
153	InAlN/GaN/Si heterostructures and field-effect transistors with lattice matched and tensely or compressively strained InAlN. <i>Applied Physics Letters</i> , 2010 , 97, 173505	3.4	17
152	Microstructure of gallium nitride films grown on silicon (110). <i>Applied Physics Letters</i> , 2010 , 96, 231908	3.4	11
151	X-ray Study of Step Induced Lateral Correlation Lengths in Thin AlGaIn Nucleation Layers. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 025503	1.4	
150	Temperature rise in InGaIn/GaN vertical light emitting diode on copper transferred from silicon probed by Raman scattering. <i>Journal of Applied Physics</i> , 2010 , 108, 114501	2.5	12

149	Dielectric function and optical properties of Al-rich AlInN alloys pseudomorphically grown on GaN. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 365102	3	54
148	Metalorganic vapor-phase epitaxy of GaN layers on Si(1 1 0) and other high-index surfaces. <i>Journal of Crystal Growth</i> , 2010 , 312, 180-184	1.6	17
147	Strain profiling of AlInN/GaN distributed Bragg reflectors using in situ curvature measurements and ex situ X-ray diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 528, 58-64	5.3	7
146	Monitoring glycolytic oscillations using AlGaIn/GaN high electron mobility transistors (HEMTs). <i>Sensors and Actuators B: Chemical</i> , 2010 , 149, 310-313	8.5	6
145	Valence-band splitting and optical anisotropy of AlN. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 1679-1682	1.3	26
144	Impedance spectroscopy of AlGaIn/GaN HEMTs in contact with culture media. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 464-467		4
143	Light extraction from GaN-based LED structures on silicon-on-insulator substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 88-91		6
142	Metal organic vapor phase epitaxy growth of single crystalline GaN on planar Si(211) substrates. <i>Applied Physics Letters</i> , 2009 , 95, 242101	3.4	21
141	Photoelectric properties of the undoped GaN/AlN interlayer/high purity Si(1 1 1) interface. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 205103	3	3
140	InGaIn/GaN light-emitting diodes on Si(1 1 0) substrates grown by metalorganic vapour phase epitaxy. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 055107	3	35
139	GaN-based deep green light emitting diodes on silicon-on-insulator substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S822-S825		3
138	AlInN/GaN based multi quantum well structures [growth and optical properties. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S451-S454		11
137	MOVPE growth of high-quality Al _{0.1} Ga _{0.9} N on Si(111) substrates for UV-LEDs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S455-S458		3
136	Micro-structural anisotropy of a-plane GaN analyzed by high resolution X-ray diffraction. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S498-S501		12
135	Effect of growth conditions on vacancy defects in MOVPE grown AlN thin layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, 2575-2577		4
134	Characterization of defects in undoped non c-plane and high resistance GaN layers dominated by stacking faults. <i>Physica B: Condensed Matter</i> , 2009 , 404, 4922-4924	2.8	6
133	Influence of anisotropic strain on excitonic transitions in a-plane GaN films. <i>Microelectronics Journal</i> , 2009 , 40, 322-324	1.8	10
132	Low-temperature/high-temperature AlN superlattice buffer layers for high-quality Al _x Ga _{1-x} N on Si(1 1 1). <i>Journal of Crystal Growth</i> , 2009 , 311, 3742-3748	1.6	19

131	Cathodoluminescence of epitaxial GaN and ZnO thin films for scintillator applications. <i>Journal of Crystal Growth</i> , 2009 , 311, 3984-3988	1.6	9
130	Fabrication, self-assembly, and properties of ultrathin AlN/GaN porous crystalline nanomembranes: tubes, spirals, and curved sheets. <i>ACS Nano</i> , 2009 , 3, 1663-8	16.7	82
129	Analysis of point defects in AlN epilayers by cathodoluminescence spectroscopy. <i>Applied Physics Letters</i> , 2009 , 95, 032106	3.4	25
128	Atomic Arrangement at the AlN/Si(110) Interface. <i>Applied Physics Express</i> , 2008 , 1, 061104	2.4	20
127	MOVPE Growth and Characterization of AlInN FET Structures on Si(111). <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1068, 1		9
126	Two-dimensional electron gas based actuation of piezoelectric AlGaIn/GaN microelectromechanical resonators. <i>Applied Physics Letters</i> , 2008 , 93, 173504	3.4	30
125	GaN-based microdisk light emitting diodes on (111)-oriented nanosilicon-on-insulator templates. <i>Journal of Applied Physics</i> , 2008 , 104, 053106	2.5	5
124	GaN growth on silane exposed AlN seed layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 1675-1677		2
123	MOVPE growth of blue InxGa1-xN/GaN LEDs on 150 mm Si(001). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 2238-2240		5
122	Complex excitonic recombination kinetics in ZnO: Capture, relaxation, and recombination from steady state. <i>Applied Physics Letters</i> , 2007 , 90, 041917	3.4	29
121	MOVPE growth of GaN on Si substrates and strain. <i>Thin Solid Films</i> , 2007 , 515, 4356-4361	2.2	71
120	Crystallographic and electric properties of MOVPE-grown AlGaIn/GaN-based FETs on Si(001) substrates. <i>Journal of Crystal Growth</i> , 2007 , 299, 399-403	1.6	11
119	Homoepitaxial growth of ZnO by metalorganic vapor phase epitaxy in two-dimensional growth mode. <i>Journal of Crystal Growth</i> , 2007 , 308, 170-175	1.6	37
118	Blue light emitting diodes on Si(001) grown by MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007 , 4, 41-44		3
117	Laser-interference lithography tailored for highly symmetrically arranged ZnO nanowire arrays. <i>Small</i> , 2007 , 3, 76-80	11	86
116	Modulation spectroscopy of AlGaIn/GaN heterostructures: The influence of electron-hole interaction. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007 , 204, 447-458	1.6	22
115	InGaIn/GaN light emitting diodes on nanoscale silicon on insulator. <i>Applied Physics Letters</i> , 2007 , 91, 231109	1.9	33
114	Metal-organic vapor phase epitaxy and properties of AlInN in the whole compositional range. <i>Applied Physics Letters</i> , 2007 , 90, 022105	3.4	111

113	Thermal stability of metal organic vapor phase epitaxy grown AlInN. <i>Applied Physics Letters</i> , 2007 , 90, 221906	3.4	50
112	Electrical characterization of defect states in local conductivity domains in ZnO:N,As layers. <i>Journal of Materials Research</i> , 2007 , 22, 1775-1778	2.5	4
111	Metalorganic vapor phase epitaxy of ZnO: towards p-type conductivity 2007 , 6474, 32		9
110	Epitaxy of GaN on silicon: Impact of symmetry and surface reconstruction. <i>New Journal of Physics</i> , 2007 , 9, 389-389	2.9	106
109	Fabry-Perot effects in InGaNGaN heterostructures on Si-substrate. <i>Journal of Applied Physics</i> , 2007 , 101, 033113	2.5	60
108	Electric-Field-Enhanced Thermal Emission from Osmium-Related Deep Level in n-GaAs. <i>Advances in Science and Technology</i> , 2006 , 46, 73-78	0.1	
107	Epitaxy of GaN LEDs on large substrates: Si or sapphire? 2006 ,		20
106	Electrical Characterization of Defect States in Local Conductivity Domains in ZnO:N,As Layers. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 957, 1		
105	Electroreflectance spectroscopy of PtAlGaNGaN heterostructures exposed to gaseous hydrogen. <i>Applied Physics Letters</i> , 2006 , 88, 024101	3.4	15
104	Vapour-transport-deposition growth of ZnO nanostructures: switch between axial wires and axial belts by indium doping. <i>Nanotechnology</i> , 2006 , 17, S231-S239	3.4	89
103	Influence of excitons and electric fields on the dielectric function of GaN: Theory and experiment. <i>Physical Review B</i> , 2006 , 74,	3.3	20
102	Optical and structural microanalysis of GaN grown on SiN submonolayers. <i>Journal of Applied Physics</i> , 2006 , 99, 123518	2.5	31
101	Piezoelectric GaN sensor structures. <i>IEEE Electron Device Letters</i> , 2006 , 27, 309-312	4.4	93
100	Metalorganic vapor phase epitaxy grown InGaNGaN light-emitting diodes on Si(001) substrate. <i>Applied Physics Letters</i> , 2006 , 88, 121114	3.4	40
99	Template-assisted large-scale ordered arrays of ZnO pillars for optical and piezoelectric applications. <i>Small</i> , 2006 , 2, 561-8	11	194
98	Local p-type conductivity in n-GaN and n-ZnO layers due to inhomogeneous dopant incorporation. <i>Physica B: Condensed Matter</i> , 2006 , 376-377, 703-706	2.8	10
97	Well-ordered ZnO nanowire arrays on GaN substrate fabricated via nanosphere lithography. <i>Journal of Crystal Growth</i> , 2006 , 287, 34-38	1.6	97
96	Avoidance of surface-related defects in MOVPE-grown InGaP layers. <i>Journal of Crystal Growth</i> , 2006 , 287, 633-636	1.6	

95	Growth of single-domain GaN layers on Si(001) by metalorganic vapor-phase epitaxy. <i>Journal of Crystal Growth</i> , 2006 , 289, 485-488	1.6	29
94	Growth of blue GaN LED structures on 150-mm Si(1 1 1). <i>Journal of Crystal Growth</i> , 2006 , 297, 279-282	1.6	109
93	MOVPE growth of high-quality AlN. <i>Journal of Crystal Growth</i> , 2006 , 297, 306-310	1.6	64
92	GaN micromachined FBAR structures for microwave applications. <i>Superlattices and Microstructures</i> , 2006 , 40, 426-431	2.8	14
91	Metalorganic chemical vapor phase epitaxy and structural properties of Ga _{1-x} P _x N on GaN/Si(111) substrates. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 82, 733-735	2.6	3
90	Recording of cell action potentials with AlGaIn/GaN field-effect transistors. <i>Applied Physics Letters</i> , 2005 , 86, 033901	3.4	107
89	Arrays of vertically aligned and hexagonally arranged ZnO nanowires: a new template-directed approach. <i>Nanotechnology</i> , 2005 , 16, 913-917	3.4	138
88	Properties of Dislocations in Epitaxial ZnO Layers Analyzed by Transmission Electron Microscopy 2005 , 99-111		1
87	Local p-type conductivity in zinc oxide dual-doped with nitrogen and arsenic. <i>Applied Physics Letters</i> , 2005 , 87, 262105	3.4	86
86	In situ monitoring of the stress evolution in growing group-III-nitride layers. <i>Journal of Crystal Growth</i> , 2005 , 275, 209-216	1.6	37
85	Transient thermal characterization of AlGaIn/GaN HEMTs grown on silicon. <i>IEEE Transactions on Electron Devices</i> , 2005 , 52, 1698-1705	2.9	69
84	A low-temperature evaporation route for ZnO nanoneedles and nanosaws. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 80, 457-460	2.6	17
83	ZnO MOVPE growth: From local impurity incorporation towards p-type doping. <i>Superlattices and Microstructures</i> , 2005 , 38, 245-255	2.8	26
82	High-current AlInN/GaN field effect transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005 , 202, 832-836	1.6	35
81	Simultaneous measurement of wafer curvature and true temperature during metalorganic growth of group-III nitrides on silicon and sapphire. <i>Physica Status Solidi (B): Basic Research</i> , 2005 , 242, 2570-2574	1.3	13
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78	Osmium impurity-related deep levels in n-type GaAs. <i>Journal of Applied Physics</i> , 2005 , 98, 083709	2.5	1

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52	Deep levels in rhodium-doped p-type MOCVD GaAs. <i>Physica B: Condensed Matter</i> , 2003 , 340-342, 362-366.8		2
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49	MOVPE growth of GaN on Si(1 1 1) substrates. <i>Journal of Crystal Growth</i> , 2003 , 248, 556-562	1.6	117
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32	GaN-Based Devices on Si. <i>Physica Status Solidi A</i> , 2002 , 194, 361-375		146
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3	Unstrained InAlN/GaN HEMT structure		3
2	GaN based piezo sensors		1
1	P-channel InGaN-HFET structure based on polarization doping		2