

# Lutz Kirste

## 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.

169  
papers

2,253  
citations

25  
h-index

37  
g-index

187  
ext. papers

2,611  
ext. citations

2.6  
avg, IF

4.64  
L-index

#	Paper	IF	Citations
169	Effect of V/III ratio and growth pressure on surface and crystal quality of AlN grown on sapphire by metal-organic chemical vapor deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2022</b> , 40, 032702	2.9	0
168	Characterization of Structural Defects in (Cd,Zn)Te Crystals Grown by the Travelling Heater Method. <i>Crystals</i> , <b>2021</b> , 11, 1402	2.3	2
167	3D X-ray Microscopy of Ultrasonically Welded Aluminum/Fiber-Reinforced Polymer Hybrid Joints. <i>Materials</i> , <b>2021</b> , 14,	3.5	1
166	Growth defects in heteroepitaxial diamond. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 165301	2.5	0
165	Wurtzite ScAlN, InAlN, and GaAlN crystals, a comparison of structural, elastic, dielectric, and piezoelectric properties. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 045102	2.5	8
164	Growth and Fabrication of Quasivertical Current Aperture Vertical Electron Transistor Structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2021</b> , 218, 2000379	1.6	5
163	Monolithic Integrated AlGaIn/GaN Power Converter Topologies on High-Voltage AlN/GaN Superlattice Buffer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2021</b> , 218, 2000404	1.6	4
162	Improved AlScN/GaN heterostructures grown by metal-organic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , <b>2021</b> , 36, 034003	1.8	14
161	Structural Analysis of Low Defect Ammonothermally Grown GaN Wafers by Borrmann Effect X-ray Topography. <i>Materials</i> , <b>2021</b> , 14,	3.5	6
160	Investigations of the Deuterium Permeability of As-Deposited and Oxidized TiAlN Coatings. <i>Materials</i> , <b>2020</b> , 13,	3.5	2
159	Metalorganic chemical vapor phase deposition of AlScN/GaN heterostructures. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 195704	2.5	17
158	Enhanced electromechanical coupling in SAW resonators based on sputtered non-polar Al <sub>0.77</sub> Sc <sub>0.23</sub> N <sub>112</sub> thin films. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 101903	3.4	9
157	Epitaxial growth of GaN/Ga <sub>2</sub> O <sub>3</sub> and Ga <sub>2</sub> O <sub>3</sub> /GaN heterostructures for novel high electron mobility transistors. <i>Journal of Crystal Growth</i> , <b>2020</b> , 534, 125511	1.6	16
156	. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 2471-2477	2.9	5
155	Metal-Organic Chemical Vapor Deposition of Aluminum Scandium Nitride. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2020</b> , 14, 1900535	2.5	34
154	Optimization of Metal-Organic Chemical Vapor Deposition Regrown n-GaN. <i>Physica Status Solidi (B): Basic Research</i> , <b>2020</b> , 257, 1900436	1.3	4
153	Microstructural and optical emission properties of diamond multiply twinned particles. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 025303	2.5	2

152	Toward AlGa <sub>N</sub> Focal Plane Arrays for Solar-Blind Ultraviolet Detection. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900769	1.6	7
151	Hybrid Evaporation/Spray-Coating Process for a Simplified and Controllable Production of Perovskite Solar Cells. <i>IEEE Journal of Photovoltaics</i> , <b>2020</b> , 10, 276-286	3.7	2
150	Impact of Surface Chemistry and Doping Concentrations on Biofunctionalization of GaN/Ga-In-N Quantum Wells. <i>Sensors</i> , <b>2020</b> , 20,	3.8	1
149	Evidence of strong electron-phonon interaction in a GaN-based quantum cascade emitter. <i>Superlattices and Microstructures</i> , <b>2020</b> , 145, 106631	2.8	
148	In situ approach to fabricate heterojunction p-n CuO <sub>2</sub> /nO nanostructures for efficient photocatalytic reactions. <i>New Journal of Chemistry</i> , <b>2020</b> , 44, 19742-19752	3.6	5
147	Characterisation of thin boron-doped diamond films using Raman spectroscopy and chemometrics. <i>Analytical Methods</i> , <b>2019</b> , 11, 582-586	3.2	5
146	Investigation of growth parameters for ScAlN-barrier HEMT structures by plasma-assisted MBE. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1045	1.4	27
145	Epitaxial growth optimization of AlGa <sub>N</sub> /Ga <sub>N</sub> high electron mobility transistor structures on 3C-SiC/Si. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 235701	2.5	7
144	AlGa <sub>N</sub> avalanche Schottky diodes with high Al-content. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC11	1.4	7
143	Measurement of Internal Polarization by QCSE Induced Level Shift in AlGa <sub>N</sub> Quantum Cascade Emitters. <i>IEEE Photonics Technology Letters</i> , <b>2019</b> , 31, 657-660	2.2	1
142	Broadly tunable hetero-cascading quantum cascade lasers: Design, growth, and external cavity operation. <i>Journal of Crystal Growth</i> , <b>2019</b> , 513, 1-5	1.6	0
141	Formation of icosahedron twins during initial stages of heteroepitaxial diamond nucleation and growth. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 075305	2.5	3
140	Experimental determination of the electro-acoustic properties of thin film AlScN using surface acoustic wave resonators. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 075106	2.5	28
139	Optical constants and band gap of wurtzite Al <sub>1-x</sub> Sc <sub>x</sub> N/Al <sub>2</sub> O <sub>3</sub> prepared by magnetron sputter epitaxy for scandium concentrations up to x = 0.41. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 045715	2.5	25
138	Optimizing reactive ion etching to remove sub-surface polishing damage on diamond. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 244502	2.5	8
137	Industrialization of type-II superlattice infrared detector technology at Fraunhofer IAF <b>2019</b> ,		1
136	High operating temperature InAs/GaSb type-II superlattice detectors on GaAs substrate for the long wavelength infrared. <i>Infrared Physics and Technology</i> , <b>2019</b> , 96, 141-144	2.7	10
135	Temperature Dependence of the Pyroelectric Coefficient of AlScN Thin Films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700831	1.6	12

134	Piezoelectric characterization of Sc <sub>0.26</sub> Al <sub>0.74</sub> N layers on Si (001) substrates. <i>Materials Research Express</i> , <b>2018</b> , 5, 036407	1.7	6
133	Avalanche multiplication in AlGaIn-based heterostructures for the ultraviolet spectral range. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 151102	3.4	11
132	Suppression of Iron Memory Effect in GaN Epitaxial Layers. <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1700377	1.3	17
131	Microstructural investigations of polycrystalline Ti <sub>2</sub> AlN prepared by physical vapor deposition of Ti-AlN multilayers. <i>Surface and Coatings Technology</i> , <b>2018</b> , 343, 166-171	4.4	10
130	Pulsed laser deposition of ferroelectric potassium tantalate-niobate optical waveguiding thin films. <i>Optical Materials Express</i> , <b>2018</b> , 8, 541	2.6	3
129	Elastic modulus and coefficient of thermal expansion of piezoelectric Al <sub>1-x</sub> Sc <sub>x</sub> N (up to x = 0.41) thin films. <i>APL Materials</i> , <b>2018</b> , 6, 076105	5.7	39
128	Electrical Properties of Schottky-Diodes Based on B Doped Diamond. <i>Materials Science Forum</i> , <b>2018</b> , 924, 931-934	0.4	1
127	Surface Morphology and Microstructure of Pulsed DC Magnetron Sputtered Piezoelectric AlN and AlScN Thin Films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700559	1.6	26
126	Microstructure and mechanical properties of stress-tailored piezoelectric AlN thin films for electro-acoustic devices. <i>Applied Surface Science</i> , <b>2017</b> , 407, 307-314	6.7	26
125	Anisotropic optical constants, birefringence, and dichroism of wurtzite GaN between 0.6 eV and 6 eV. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 045706	2.5	6
124	Potassium tantalate-niobate mixed crystal thin films for applications in nonlinear integrated optics. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 867, 012020	0.3	1
123	AlN/GaN HEMTs grown by MBE and MOCVD: Impact of Al distribution. <i>Physica Status Solidi (B): Basic Research</i> , <b>2017</b> , 254, 1600715	1.3	14
122	Structural and electron transport properties of single-crystalline In <sub>2</sub> O <sub>3</sub> films compensated by Ni acceptors. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 262103	3.4	3
121	The role of surface electron accumulation and bulk doping for gas-sensing explored with single-crystalline In <sub>2</sub> O <sub>3</sub> thin films. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 236, 909-916	8.5	33
120	Doping behavior of GaN grown on patterned sapphire substrates. <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 164-168	1.3	5
119	Piezoelectric AlN Films for FPW Sensors with Improved Device Performance. <i>Procedia Engineering</i> , <b>2016</b> , 168, 1040-1043		3
118	Piezoelectric AlN Films for FPW Sensors with Improved Device Performance. <i>Procedia Engineering</i> , <b>2016</b> , 168, 537-540		1
117	Analysis and optimization of sputter deposited AlN-layers for flexural plate wave devices. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2016</b> , 34, 052001	1.3	13

116	Preparation of deep UV transparent AlN substrates with high structural perfection for optoelectronic devices. <i>CrystEngComm</i> , <b>2016</b> , 18, 3488-3497	3.3	47
115	Synchrotron White-Beam X-Ray Topography Analysis of the Defect Structure of HVPE-GaN Substrates. <i>ECS Journal of Solid State Science and Technology</i> , <b>2015</b> , 4, P324-P330	2	18
114	Aluminium nitride membranes with embedded buried idt electrodes for novel flexural plate wave devices <b>2015</b> ,		2
113	Birefringence and refractive indices of wurtzite GaN in the transparency range. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 092104	3.4	20
112	(Invited) Synchrotron White-Beam X-Ray Topography Analysis of the Defect Structure of HVPE-GaN Substrates. <i>ECS Transactions</i> , <b>2015</b> , 66, 93-106	1	3
111	Growth model investigation for AlN/Al(Ga)InN interface growth by plasma-assisted molecular beam epitaxy for high electron mobility transistor applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 2854-2860	1.6	5
110	Growth and doping of semipolar GaN grown on patterned sapphire substrates. <i>Journal of Crystal Growth</i> , <b>2014</b> , 405, 97-101	1.6	26
109	Long wavelength emitting GaInN quantum wells on metamorphic GaInN buffer layers with enlarged in-plane lattice parameter. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 111111	3.4	45
108	Mid-infrared electro-luminescence and absorption from AlGaIn/GaN-based multi-quantum well inter-subband structures. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 241107	3.4	9
107	Changes of electronic properties of AlGaIn/GaN HEMTs by surface treatment. <i>Materials Research Society Symposia Proceedings</i> , <b>2014</b> , 1736, 1		1
106	Elastic properties of ultrathin diamond/AlN membranes. <i>Thin Solid Films</i> , <b>2014</b> , 558, 267-271	2.2	8
105	Enhanced mechanical performance of AlN/nanodiamond micro-resonators. <i>Journal of Micromechanics and Microengineering</i> , <b>2013</b> , 23, 125017	2	15
104	InGaAs infrared detector development for SWIR imaging applications <b>2013</b> ,		3
103	Transparent diamond electrodes for tunable micro-optical devices. <i>Diamond and Related Materials</i> , <b>2013</b> , 38, 101-103	3.5	10
102	Grain size dependent physical and chemical properties of thick CVD diamond films for high energy density physics experiments. <i>Diamond and Related Materials</i> , <b>2013</b> , 40, 75-81	3.5	21
101	Four-component superlattice empirical pseudopotential method for InAs/GaSb superlattices. <i>Infrared Physics and Technology</i> , <b>2013</b> , 61, 129-133	2.7	10
100	Diffusion of Mg dopant in metal-organic vapor-phase epitaxy grown GaN and Al <sub>x</sub> Ga <sub>1-x</sub> N. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 073514	2.5	39
99	Defects and noise in Type-II superlattice infrared detectors <b>2013</b> ,		2

98	Piezoelectrically actuated diamond cantilevers for high-frequency applications. <i>Diamond and Related Materials</i> , <b>2013</b> , 38, 69-72	3.5	
97	Corrugated piezoelectric membranes for energy harvesting from aperiodic vibrations. <i>Sensors and Actuators A: Physical</i> , <b>2013</b> , 195, 32-37	3.9	7
96	Dynamics of thermalization in GaInN/GaN quantum wells grown on ammonothermal GaN. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 223504	2.5	12
95	Mechanical and electrical properties of plasma and thermal atomic layer deposited Al <sub>2</sub> O <sub>3</sub> films on GaAs and Si. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2013</b> , 31, 041502	2.9	15
94	Crystallographic Texture of Submicron Thin Aluminum Nitride Films on Molybdenum Electrode for Suspended Micro and Nanosystems. <i>ECS Journal of Solid State Science and Technology</i> , <b>2013</b> , 2, P180-P184	2	2
93	Infrared photodetector development at Fraunhofer IAF <b>2013</b> ,		2
92	N-type conductivity and properties of carbon-doped InN(0001) films grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 033501	2.5	9
91	Piezo-actuated tunable diamond/AlN micro lenses <b>2013</b> ,		1
90	AlGaN Ultraviolet A and Ultraviolet C Photodetectors with Very High Specific DetectivityD*. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JB28	1.4	21
89	High Power Efficiency AlGaN-Based Ultraviolet Light-Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JG16	1.4	5
88	Strain control of AlGaN/GaN high electron mobility transistor structures on silicon (111) by plasma assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 114516	2.5	18
87	An advanced fabrication method of highly ordered ZnO nanowire arrays on silicon substrates by atomic layer deposition. <i>Nanotechnology</i> , <b>2012</b> , 23, 235607	3.4	18
86	Threading dislocation propagation in AlGaN/GaN based HEMT structures grown on Si (111) by plasma assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , <b>2012</b> , 357, 35-41	1.6	18
85	Diamond nanophotonics. <i>Beilstein Journal of Nanotechnology</i> , <b>2012</b> , 3, 895-908	3	23
84	Hafnium oxide passivation of InGaAs/InP heterostructure bipolar transistors by electron beam evaporation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 381-384		3
83	Substrate removal of dual-colour InAs/GaSb superlattice focal plane arrays. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 318-321		2
82	GaN-based high-frequency devices and circuits: A Fraunhofer perspective. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 491-496	1.6	7
81	Influence of plasma treatments on the properties of GaN/AlGaN/GaN HEMT structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 1096-1098		8

80	Effect of In incorporation into the quantum well active region on the efficiency of AlGaIn-based ultraviolet light-emitting diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 794-797		1
79	Plasma affected 2DEG properties on GaN/AlGaIn/GaN HEMTs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 938-941		2
78	First principle studies on molecular doping of ZnO thin films by As <sub>2</sub> O <sub>3</sub> . <i>Crystal Research and Technology</i> , <b>2012</b> , 47, 293-298	1.3	
77	Sputtered p-Type Sb <sub>2</sub> Te <sub>3</sub> /(Bi,Sb) <sub>2</sub> Te <sub>3</sub> Soft Superlattices Created by Nanoalloying. <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 1322-1331	1.9	19
76	AlGaIn-Based 355 nm UV Light-Emitting Diodes with High Power Efficiency. <i>Applied Physics Express</i> , <b>2012</b> , 5, 032101	2.4	19
75	Passivation of InP heterojunction bipolar transistors by strain controlled plasma assisted electron beam evaporated hafnium oxide. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 014102	3.4	2
74	Influence of AlGaIn barrier thickness on electrical and device properties in Al <sub>0.14</sub> Ga <sub>0.86</sub> N/GaN high electron mobility transistor structures. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 053718	2.5	6
73	Current developments for type-II superlattice imaging systems <b>2011</b> ,		1
72	Efficient 350 nm LEDs on low edge threading dislocation density AlGaIn buffer layers <b>2011</b> ,		1
71	Comprehensive surface analysis of GaN-capped AlGaIn/GaN high electron mobility transistors: Influence of growth method. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 083527	2.5	4
70	Defect density reduction in InAs/GaSb type II superlattice focal plane array infrared detectors <b>2011</b> ,		4
69	Electrical properties of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterostructures with low Al content. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 053705	2.5	6
68	Reactor dependent starting transients of doping profiles in MOVPE grown GaN. <i>Journal of Crystal Growth</i> , <b>2011</b> , 321, 15-18	1.6	9
67	Electron and hole accumulation in InN/InGaIn heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 485-487		2
66	AlN based microgenerators for powering implantable sensor devices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 476-478		7
65	Dynamic characterization of thin aluminum nitride microstructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 479-481		3
64	Growth and characterization of InAlN layers nearly lattice-matched to GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2500-2502		4
63	Controlling the Mg doping profile in MOVPE-grown GaN/Al <sub>0.2</sub> Ga <sub>0.8</sub> N light-emitting diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2072-2074		8

62	Quaternary barriers for improved performance of GaN-based HEMTs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2439-2441		1
61	Improved quantum efficiency of 350 nm LEDs grown on low dislocation density AlGaIn buffer layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2363-2365		2
60	InAs/GaSb superlattice technology. <i>Infrared Physics and Technology</i> , <b>2011</b> , 54, 237-242	2.7	9
59	Improved Structural and Chemical Properties of Nearly Lattice-Matched Ternary and Quaternary Barriers for GaN-Based HEMTs. <i>Crystal Growth and Design</i> , <b>2011</b> , 11, 2588-2591	3.5	13
58	Growth mechanism and electronic properties of epitaxial In <sub>2</sub> O <sub>3</sub> films on sapphire. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 093712	2.5	20
57	Molecular beam epitaxial growth of metamorphic AlInSb/GaInSb high-electron-mobility-transistor structures on GaAs substrates for low power and high frequency applications. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 033706	2.5	5
56	Atomic Layer Deposition of Aluminum Oxide for Surface Passivation of InGaAsInP Heterojunction Bipolar Transistors. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, H1279	3.9	4
55	Low-Temperature Grown High-Quality Piezoelectric AlN Film for Sensor Applications. <i>ECS Transactions</i> , <b>2011</b> , 35, 35-43	1	1
54	Vibrational mode and dielectric function spectra of BGaP probed by Raman scattering and spectroscopic ellipsometry. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 053504	2.5	9
53	Absorption and Emission Properties of Light Emitting Diode Structures Containing GaInN/GaN QWs. <i>Acta Physica Polonica A</i> , <b>2011</b> , 120, 918-920	0.6	1
52	Compositional variation of nearly lattice-matched InAlGaIn alloys for high electron mobility transistors. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 252108	3.4	29
51	Residual stress stability in fiber textured stoichiometric AlN film grown using rf magnetron sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2010</b> , 28, 394-399	2.9	33
50	Influence of the surface potential on electrical properties of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterostructures with different Al-content: Effect of growth method. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 053711	2.5	30
49	GaN-Based Submicrometer HEMTs With Lattice-Matched InAlGaIn Barrier Grown by MBE. <i>IEEE Electron Device Letters</i> , <b>2010</b> , 31, 671-673	4.4	41
48	Nonuniformity of electron density in In-rich InGaIn films deduced from electrolyte capacitance-voltage profiling. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 082106	3.4	13
47	Size-dependent reactivity of diamond nanoparticles. <i>ACS Nano</i> , <b>2010</b> , 4, 4824-30	16.7	292
46	InAs/GaSb type II superlattices for advanced 2nd and 3rd generation detectors <b>2010</b> ,		5
45	AlGaIn/GaN epitaxy and technology. <i>International Journal of Microwave and Wireless Technologies</i> , <b>2010</b> , 2, 3-11	0.8	22



44	Structural and compositional homogeneity of InAlN epitaxial layers nearly lattice-matched to GaN. <i>Acta Materialia</i> , <b>2010</b> , 58, 4120-4125	8.4	25
43	Structural properties of MBE AlInN and AlGaInN barrier layers for GaN-HEMT structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 1338-1341	1.6	7
42	Doping of single crystalline diamond with nickel. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 2054-2057	1.6	9
41	Reproducible and uniform growth of GaN based HEMTs on 4 inch SiC by plasma assisted molecular beam epitaxy suitable for production. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 1450-1454	1.6	11
40	Reduction of the threading edge dislocation density in AlGaInN epilayers by GaN nucleation for efficient 350 nm light emitting diodes. <i>Physica Status Solidi (B): Basic Research</i> , <b>2010</b> , 247, 1710-1712	1.3	8
39	Design of near lattice-matched AlGaInN-barriers for highly-scalable GaN-based transistor structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 1958-1960		5
38	Oxygen induced strain field homogenization in AlN nucleation layers and its impact on GaN grown by metal organic vapor phase epitaxy on sapphire: An x-ray diffraction study. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 033504	2.5	34
37	Influence of Group IV-Te Alloying on Nanocomposite Structure and Thermoelectric Properties of Bi <sub>2</sub> Te <sub>3</sub> Compounds. <i>Journal of Electronic Materials</i> , <b>2009</b> , 38, 1450-1455	1.9	18
36	Growth and electrical properties of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterostructures with different Al-content. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 2652-2657	1.6	12
35	Determination of the surface potential of GaN:Si. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S937-S939		4
34	Transport characteristics of indium nitride (InN) films grown by plasma assisted molecular beam epitaxy (PAMBE). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1480-1483		14
33	Quaternary GaInAsSb/AlGaAsSb vertical-external-cavity surface-emitting lasers: A challenge for MBE growth. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 1920-1922	1.6	6
32	Output power enhancement of 100% for quaternary GaInAsSb/AlGaAsSb semiconductor disc lasers grown with a sequential growth scheme. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 4158-4161	1.6	3
31	Impact of GaN cap thickness on optical, electrical, and device properties in AlGaIn/GaN high electron mobility transistor structures. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 023535	2.5	31
30	The surface potential of GaN:Si. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 023706	2.5	21
29	SIMS depth profiling of Mg back-diffusion in (AlGaIn)N light-emitting diodes. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2008</b> , 19, 176-181	2.1	8
28	Plasma assisted molecular beam epitaxy of AlGaIn/GaN high electron mobility transistors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 1902-1905		4
27	Growth of thick films CdTe from the vapor phase. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 2062-2066	1.6	10

26	Epitaxial growth of GaInAs/AlGaAsSb quantum cascade lasers. <i>Journal of Crystal Growth</i> , <b>2007</b> , 301-302, 893-896	1.6	1
25	Wide angle X-ray dynamical diffraction by deformed crystals: recurrence relations. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2007</b> , 204, 2613-2619	1.6	2
24	Structural and mechanical properties of spark plasma sintered n- and p-type bismuth telluride alloys. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2007</b> , 1, 235-237	2.5	22
23	Structure and thermoelectric properties of nanocomposite bismuth telluride prepared by melt spinning or by partially alloying with IV-VI compounds. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2007</b> , 1, 238-240	2.5	34
22	Structural investigations of epitaxial InN by x-ray photoelectron diffraction and x-ray diffraction. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 1919-12	3.4	5
21	Molecular beam epitaxy and doping of AlN at high growth temperatures. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, 4616-4620	3	12
20	Near infrared absorption and room temperature photovoltaic response in AlN/GaN superlattices grown by metal-organic vapor-phase epitaxy. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 041106	3.4	35
19	Spatially resolved X-ray diffraction measurements on (Al,Ga)N/GaN/4H-SiC heterostructures for electronic devices. <i>Materials Science in Semiconductor Processing</i> , <b>2006</b> , 9, 8-14	4.3	1
18	X-ray topographic imaging of (Al, Ga)N/GaN based electronic device structures on SiC. <i>Applied Surface Science</i> , <b>2006</b> , 253, 209-213	6.7	3
17	GaInAs/AlGaAsSb quantum-cascade lasers. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 131109	3.4	13
16	High-quality GaInAs/AlAsSb quantum cascade lasers grown by molecular beam epitaxy in continuous growth mode. <i>Journal of Crystal Growth</i> , <b>2005</b> , 280, 75-80	1.6	9
15	Analysis of the mosaic structure of an ordered (Al,Ga)N layer. <i>Journal of Applied Crystallography</i> , <b>2005</b> , 38, 183-192	3.8	30
14	Resonant tunnelling and intersubband absorption in AlN/GaN superlattices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 1014-1018		1
13	Growth of AlGaIn/GaN based electronic device structures with semi-insulating GaN buffer and AlN interlayer. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 2639-2642		9
12	Tunneling effects and intersubband absorption in AlN/GaN superlattices. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 032110	3.4	25
11	Chemically ordered Al <sub>x</sub> Ga <sub>1-x</sub> N alloys: Spontaneous formation of natural quantum wells. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	47
10	GaInAs/AlAsSb quantum-cascade lasers operating up to 400K. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 131107	3.4	32
9	The realization of long-wavelength (λ = 2.3 μm) Ga <sub>1-x</sub> In <sub>x</sub> As <sub>1-y</sub> N <sub>y</sub> quantum wells on InP by molecular-beam epitaxy. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S2995-S3008	1.8	20

8	Epitaxy and characterisation of dilute IIIAs <sub>1-x</sub> Ny on GaAs and InP. <i>IEE Proceedings: Optoelectronics</i> , <b>2004</b> , 151, 247-253		8
7	Pyramidal-plane ordering in AlGaN alloys. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 547-549	3.4	25
6	X-ray determination of the composition of partially strained group-III nitride layers using the Extended Bond Method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2002</b> , 91-92, 425-432	3.1	30
5	Optical investigation of Al <sub>x</sub> Ga <sub>1-x</sub> N epitaxial films grown on AlN buffer layers. <i>Diamond and Related Materials</i> , <b>2002</b> , 11, 892-895	3.5	19
4	Structural quality and ordering of MBE grown Al <sub>x</sub> Ga <sub>1-x</sub> N-layers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2001</b> , 82, 9-11	3.1	4
3	Optical properties and ordering of Al <sub>x</sub> Ga <sub>1-x</sub> N MBE-layers. <i>Journal of Crystal Growth</i> , <b>2001</b> , 227-228, 453-457	1.6	27
2	Near band-edge transitions in AlN thin films grown on different substrates. <i>Diamond and Related Materials</i> , <b>2001</b> , 10, 1300-1303	3.5	24
1	Manipulation of the In Situ Nitrogen-Vacancy Doping Efficiency in CVD-Grown Diamond. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2100756	1.6	2