

Lutz Kirste

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4920834/lutz-kirste-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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 | Size-dependent reactivity of diamond nanoparticles. <i>ACS Nano</i> , 2010 , 4, 4824-30 | 16.7 | 292 |
| 168 | Chemically ordered Al _x Ga _{1-x} N alloys: Spontaneous formation of natural quantum wells. <i>Physical Review B</i> , 2005 , 71, | 3.3 | 47 |
| 167 | Preparation of deep UV transparent AlN substrates with high structural perfection for optoelectronic devices. <i>CrystEngComm</i> , 2016 , 18, 3488-3497 | 3.3 | 47 |
| 166 | Long wavelength emitting GaInN quantum wells on metamorphic GaInN buffer layers with enlarged in-plane lattice parameter. <i>Applied Physics Letters</i> , 2014 , 105, 111111 | 3.4 | 45 |
| 165 | GaN-Based Submicrometer HEMTs With Lattice-Matched InAlGaN Barrier Grown by MBE. <i>IEEE Electron Device Letters</i> , 2010 , 31, 671-673 | 4.4 | 41 |
| 164 | Elastic modulus and coefficient of thermal expansion of piezoelectric Al _{1-x} Sc _x N (up to x = 0.41) thin films. <i>APL Materials</i> , 2018 , 6, 076105 | 5.7 | 39 |
| 163 | Diffusion of Mg dopant in metal-organic vapor-phase epitaxy grown GaN and Al _x Ga _{1-x} N. <i>Journal of Applied Physics</i> , 2013 , 113, 073514 | 2.5 | 39 |
| 162 | Near infrared absorption and room temperature photovoltaic response in AlN/GaN superlattices grown by metal-organic vapor-phase epitaxy. <i>Applied Physics Letters</i> , 2006 , 89, 041106 | 3.4 | 35 |
| 161 | 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> , 2009 , 105, 033504 | 2.5 | 34 |
| 160 | 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> , 2007 , 1, 238-240 | 2.5 | 34 |
| 159 | Metal-Organic Chemical Vapor Deposition of Aluminum Scandium Nitride. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 1900535 | 2.5 | 34 |
| 158 | The role of surface electron accumulation and bulk doping for gas-sensing explored with single-crystalline In ₂ O ₃ thin films. <i>Sensors and Actuators B: Chemical</i> , 2016 , 236, 909-916 | 8.5 | 33 |
| 157 | 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> , 2010 , 28, 394-399 | 2.9 | 33 |
| 156 | GaInAs _{1-x} AlAsSb quantum-cascade lasers operating up to 400K. <i>Applied Physics Letters</i> , 2005 , 86, 131107 | 3.4 | 32 |
| 155 | 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> , 2009 , 106, 023535 | 2.5 | 31 |
| 154 | Influence of the surface potential on electrical properties of Al _x Ga _{1-x} N/GaN heterostructures with different Al-content: Effect of growth method. <i>Journal of Applied Physics</i> , 2010 , 107, 053711 | 2.5 | 30 |
| 153 | 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> , 2002 , 91-92, 425-432 | 3.1 | 30 |

| | | | |
|-----|---|-----|----|
| 152 | Analysis of the mosaic structure of an ordered (Al,Ga)N layer. <i>Journal of Applied Crystallography</i> , 2005 , 38, 183-192 | 3.8 | 30 |
| 151 | Compositional variation of nearly lattice-matched InAlGa _N alloys for high electron mobility transistors. <i>Applied Physics Letters</i> , 2010 , 96, 252108 | 3.4 | 29 |
| 150 | Experimental determination of the electro-acoustic properties of thin film AlScN using surface acoustic wave resonators. <i>Journal of Applied Physics</i> , 2019 , 126, 075106 | 2.5 | 28 |
| 149 | Investigation of growth parameters for ScAlN-barrier HEMT structures by plasma-assisted MBE. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SC1045 | 1.4 | 27 |
| 148 | Optical properties and ordering of Al _x Ga _{1-x} N MBE-layers. <i>Journal of Crystal Growth</i> , 2001 , 227-228, 453-457 | 1.6 | 27 |
| 147 | Microstructure and mechanical properties of stress-tailored piezoelectric AlN thin films for electro-acoustic devices. <i>Applied Surface Science</i> , 2017 , 407, 307-314 | 6.7 | 26 |
| 146 | Growth and doping of semipolar GaN grown on patterned sapphire substrates. <i>Journal of Crystal Growth</i> , 2014 , 405, 97-101 | 1.6 | 26 |
| 145 | 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> , 2018 , 215, 1700559 | 1.6 | 26 |
| 144 | Optical constants and band gap of wurtzite Al _{1-x} Sc _x N/Al ₂ O ₃ prepared by magnetron sputter epitaxy for scandium concentrations up to x = 0.41. <i>Journal of Applied Physics</i> , 2019 , 126, 045715 | 2.5 | 25 |
| 143 | Structural and compositional homogeneity of InAlN epitaxial layers nearly lattice-matched to GaN. <i>Acta Materialia</i> , 2010 , 58, 4120-4125 | 8.4 | 25 |
| 142 | Pyramidal-plane ordering in AlGa _N alloys. <i>Applied Physics Letters</i> , 2003 , 82, 547-549 | 3.4 | 25 |
| 141 | Tunneling effects and intersubband absorption in AlN/GaN superlattices. <i>Applied Physics Letters</i> , 2005 , 86, 032110 | 3.4 | 25 |
| 140 | Near band-edge transitions in AlN thin films grown on different substrates. <i>Diamond and Related Materials</i> , 2001 , 10, 1300-1303 | 3.5 | 24 |
| 139 | Diamond nanophotonics. <i>Beilstein Journal of Nanotechnology</i> , 2012 , 3, 895-908 | 3 | 23 |
| 138 | AlGa _N /Ga _N epitaxy and technology. <i>International Journal of Microwave and Wireless Technologies</i> , 2010 , 2, 3-11 | 0.8 | 22 |
| 137 | Structural and mechanical properties of spark plasma sintered n- and p-type bismuth telluride alloys. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007 , 1, 235-237 | 2.5 | 22 |
| 136 | Grain size dependent physical and chemical properties of thick CVD diamond films for high energy density physics experiments. <i>Diamond and Related Materials</i> , 2013 , 40, 75-81 | 3.5 | 21 |
| 135 | AlGa _N Ultraviolet A and Ultraviolet C Photodetectors with Very High Specific DetectivityD*. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 08JB28 | 1.4 | 21 |

| | | | |
|-----|---|-----|----|
| 134 | The surface potential of GaN:Si. <i>Journal of Applied Physics</i> , 2008 , 103, 023706 | 2.5 | 21 |
| 133 | Birefringence and refractive indices of wurtzite GaN in the transparency range. <i>Applied Physics Letters</i> , 2015 , 107, 092104 | 3.4 | 20 |
| 132 | Growth mechanism and electronic properties of epitaxial In ₂ O ₃ films on sapphire. <i>Journal of Applied Physics</i> , 2011 , 110, 093712 | 2.5 | 20 |
| 131 | The realization of long-wavelength (λ=2.3 μm) Ga _{1-x} In _x As _{1-y} N _y quantum wells on InP by molecular-beam epitaxy. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, S2995-S3008 | 1.8 | 20 |
| 130 | Sputtered p-Type Sb ₂ Te ₃ /(Bi,Sb) ₂ Te ₃ Soft Superlattices Created by Nanoalloying. <i>Journal of Electronic Materials</i> , 2012 , 41, 1322-1331 | 1.9 | 19 |
| 129 | AlGa _N -Based 355 nm UV Light-Emitting Diodes with High Power Efficiency. <i>Applied Physics Express</i> , 2012 , 5, 032101 | 2.4 | 19 |
| 128 | Optical investigation of Al _x Ga _{1-x} N epitaxial films grown on AlN buffer layers. <i>Diamond and Related Materials</i> , 2002 , 11, 892-895 | 3.5 | 19 |
| 127 | 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> , 2015 , 4, P324-P330 | 2 | 18 |
| 126 | Strain control of AlGa _N /Ga _N high electron mobility transistor structures on silicon (111) by plasma assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2012 , 111, 114516 | 2.5 | 18 |
| 125 | An advanced fabrication method of highly ordered ZnO nanowire arrays on silicon substrates by atomic layer deposition. <i>Nanotechnology</i> , 2012 , 23, 235607 | 3.4 | 18 |
| 124 | Threading dislocation propagation in AlGa _N /Ga _N based HEMT structures grown on Si (111) by plasma assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2012 , 357, 35-41 | 1.6 | 18 |
| 123 | Influence of Group IV-Te Alloying on Nanocomposite Structure and Thermoelectric Properties of Bi ₂ Te ₃ Compounds. <i>Journal of Electronic Materials</i> , 2009 , 38, 1450-1455 | 1.9 | 18 |
| 122 | Metalorganic chemical vapor phase deposition of AlSc _N /Ga _N heterostructures. <i>Journal of Applied Physics</i> , 2020 , 127, 195704 | 2.5 | 17 |
| 121 | Suppression of Iron Memory Effect in Ga _N Epitaxial Layers. <i>Physica Status Solidi (B): Basic Research</i> , 2018 , 255, 1700377 | 1.3 | 17 |
| 120 | Epitaxial growth of Ga _N /Ga ₂ O ₃ and Ga ₂ O ₃ /Ga _N heterostructures for novel high electron mobility transistors. <i>Journal of Crystal Growth</i> , 2020 , 534, 125511 | 1.6 | 16 |
| 119 | Enhanced mechanical performance of AlN/nanodiamond micro-resonators. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 125017 | 2 | 15 |
| 118 | Mechanical and electrical properties of plasma and thermal atomic layer deposited Al ₂ O ₃ films on GaAs and Si. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 041502 | 2.9 | 15 |
| 117 | AlN/GaN HEMTs grown by MBE and MOCVD: Impact of Al distribution. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600715 | 1.3 | 14 |

| | | | |
|-----|--|-----|----|
| 116 | 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> , 2009 , 6, 1480-1483 | | 14 |
| 115 | Improved AlScN/GaN heterostructures grown by metal-organic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , 2021 , 36, 034003 | 1.8 | 14 |
| 114 | Nonuniformity of electron density in In-rich InGaN films deduced from electrolyte capacitance-voltage profiling. <i>Applied Physics Letters</i> , 2010 , 96, 082106 | 3.4 | 13 |
| 113 | Improved Structural and Chemical Properties of Nearly Lattice-Matched Ternary and Quaternary Barriers for GaN-Based HEMTs. <i>Crystal Growth and Design</i> , 2011 , 11, 2588-2591 | 3.5 | 13 |
| 112 | GaNAs _{1-x} AlGaAsSb quantum-cascade lasers. <i>Applied Physics Letters</i> , 2005 , 86, 131109 | 3.4 | 13 |
| 111 | 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> , 2016 , 34, 052001 | 1.3 | 13 |
| 110 | Temperature Dependence of the Pyroelectric Coefficient of AlScN Thin Films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700831 | 1.6 | 12 |
| 109 | Dynamics of thermalization in GaInN/GaN quantum wells grown on ammonothermal GaN. <i>Journal of Applied Physics</i> , 2013 , 114, 223504 | 2.5 | 12 |
| 108 | Growth and electrical properties of Al _x Ga _{1-x} N/GaN heterostructures with different Al-content. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 2652-2657 | 1.6 | 12 |
| 107 | Molecular beam epitaxy and doping of AlN at high growth temperatures. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, 4616-4620 | 3 | 12 |
| 106 | Avalanche multiplication in AlGaN-based heterostructures for the ultraviolet spectral range. <i>Applied Physics Letters</i> , 2018 , 112, 151102 | 3.4 | 11 |
| 105 | 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> , 2010 , 207, 1450-1454 | 1.6 | 11 |
| 104 | Microstructural investigations of polycrystalline Ti ₂ AlN prepared by physical vapor deposition of Ti-AlN multilayers. <i>Surface and Coatings Technology</i> , 2018 , 343, 166-171 | 4.4 | 10 |
| 103 | Transparent diamond electrodes for tunable micro-optical devices. <i>Diamond and Related Materials</i> , 2013 , 38, 101-103 | 3.5 | 10 |
| 102 | Four-component superlattice empirical pseudopotential method for InAs/GaSb superlattices. <i>Infrared Physics and Technology</i> , 2013 , 61, 129-133 | 2.7 | 10 |
| 101 | Growth of thick films CdTe from the vapor phase. <i>Journal of Crystal Growth</i> , 2008 , 310, 2062-2066 | 1.6 | 10 |
| 100 | High operating temperature InAs/GaSb type-II superlattice detectors on GaAs substrate for the long wavelength infrared. <i>Infrared Physics and Technology</i> , 2019 , 96, 141-144 | 2.7 | 10 |
| 99 | Enhanced electromechanical coupling in SAW resonators based on sputtered non-polar Al _{0.77} Sc _{0.23} N ₁₁₂ thin films. <i>Applied Physics Letters</i> , 2020 , 116, 101903 | 3.4 | 9 |

| | | | |
|----|--|-----|---|
| 98 | Mid-infrared electro-luminescence and absorption from AlGa _N /Ga _N -based multi-quantum well inter-subband structures. <i>Applied Physics Letters</i> , 2014 , 104, 241107 | 3.4 | 9 |
| 97 | N-type conductivity and properties of carbon-doped InN(0001) films grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2013 , 113, 033501 | 2.5 | 9 |
| 96 | Reactor dependent starting transients of doping profiles in MOVPE grown Ga _N . <i>Journal of Crystal Growth</i> , 2011 , 321, 15-18 | 1.6 | 9 |
| 95 | InAs/GaSb superlattice technology. <i>Infrared Physics and Technology</i> , 2011 , 54, 237-242 | 2.7 | 9 |
| 94 | Vibrational mode and dielectric function spectra of BGaP probed by Raman scattering and spectroscopic ellipsometry. <i>Journal of Applied Physics</i> , 2011 , 109, 053504 | 2.5 | 9 |
| 93 | Doping of single crystalline diamond with nickel. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 2054-2057 | 1.6 | 9 |
| 92 | High-quality GaInAs/AlAsSb quantum cascade lasers grown by molecular beam epitaxy in continuous growth mode. <i>Journal of Crystal Growth</i> , 2005 , 280, 75-80 | 1.6 | 9 |
| 91 | Growth of AlGa _N /Ga _N based electronic device structures with semi-insulating Ga _N buffer and Al _N interlayer. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 2639-2642 | | 9 |
| 90 | Optimizing reactive ion etching to remove sub-surface polishing damage on diamond. <i>Journal of Applied Physics</i> , 2019 , 125, 244502 | 2.5 | 8 |
| 89 | Elastic properties of ultrathin diamond/Al _N membranes. <i>Thin Solid Films</i> , 2014 , 558, 267-271 | 2.2 | 8 |
| 88 | Influence of plasma treatments on the properties of Ga _N /AlGa _N /Ga _N HEMT structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 1096-1098 | | 8 |
| 87 | Controlling the Mg doping profile in MOVPE-grown Ga _N /Al _{0.2} Ga _{0.8} N light-emitting diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2072-2074 | | 8 |
| 86 | Reduction of the threading edge dislocation density in AlGa _N epilayers by Ga _N nucleation for efficient 350 nm light emitting diodes. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 1710-1712 | 1.3 | 8 |
| 85 | SIMS depth profiling of Mg back-diffusion in (AlGa _N) _N light-emitting diodes. <i>Journal of Materials Science: Materials in Electronics</i> , 2008 , 19, 176-181 | 2.1 | 8 |
| 84 | Epitaxy and characterisation of dilute IIIAs _{1-x} N _x on GaAs and InP. <i>IEE Proceedings: Optoelectronics</i> , 2004 , 151, 247-253 | | 8 |
| 83 | Wurtzite ScAl _N , InAl _N , and GaAl _N crystals, a comparison of structural, elastic, dielectric, and piezoelectric properties. <i>Journal of Applied Physics</i> , 2021 , 130, 045102 | 2.5 | 8 |
| 82 | Epitaxial growth optimization of AlGa _N /Ga _N high electron mobility transistor structures on 3C-SiC/Si. <i>Journal of Applied Physics</i> , 2019 , 125, 235701 | 2.5 | 7 |
| 81 | AlGa _N avalanche Schottky diodes with high Al-content. <i>Japanese Journal of Applied Physics</i> , 2019 , 58, SCCC11 | 1.4 | 7 |

| | | | |
|----|--|-----|---|
| 80 | GaN-based high-frequency devices and circuits: A Fraunhofer perspective. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012 , 209, 491-496 | 1.6 | 7 |
| 79 | Corrugated piezoelectric membranes for energy harvesting from aperiodic vibrations. <i>Sensors and Actuators A: Physical</i> , 2013 , 195, 32-37 | 3.9 | 7 |
| 78 | AlN based microgenerators for powering implantable sensor devices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 476-478 | | 7 |
| 77 | Structural properties of MBE AlInN and AlGaInN barrier layers for GaN-HEMT structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 1338-1341 | 1.6 | 7 |
| 76 | Toward AlGaIn Focal Plane Arrays for Solar-Blind Ultraviolet Detection. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 1900769 | 1.6 | 7 |
| 75 | Piezoelectric characterization of Sc _{0.26} Al _{0.74} N layers on Si (001) substrates. <i>Materials Research Express</i> , 2018 , 5, 036407 | 1.7 | 6 |
| 74 | Anisotropic optical constants, birefringence, and dichroism of wurtzite GaN between 0.6 eV and 6 eV. <i>Journal of Applied Physics</i> , 2017 , 122, 045706 | 2.5 | 6 |
| 73 | Electrical properties of Al _x Ga _{1-x} N/GaN heterostructures with low Al content. <i>Journal of Applied Physics</i> , 2011 , 109, 053705 | 2.5 | 6 |
| 72 | Quaternary GaInAsSb/AlGaAsSb vertical-external-cavity surface-emitting lasers: A challenge for MBE growth. <i>Journal of Crystal Growth</i> , 2009 , 311, 1920-1922 | 1.6 | 6 |
| 71 | Influence of AlGaIn barrier thickness on electrical and device properties in Al _{0.14} Ga _{0.86} N/GaN high electron mobility transistor structures. <i>Journal of Applied Physics</i> , 2012 , 112, 053718 | 2.5 | 6 |
| 70 | Structural Analysis of Low Defect Ammonothermally Grown GaN Wafers by Borrmann Effect X-ray Topography. <i>Materials</i> , 2021 , 14, | 3.5 | 6 |
| 69 | Characterisation of thin boron-doped diamond films using Raman spectroscopy and chemometrics. <i>Analytical Methods</i> , 2019 , 11, 582-586 | 3.2 | 5 |
| 68 | Doping behavior of GaN grown on patterned sapphire substrates. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 164-168 | 1.3 | 5 |
| 67 | 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> , 2014 , 211, 2854-2860 | 1.6 | 5 |
| 66 | High Power Efficiency AlGaIn-Based Ultraviolet Light-Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , 2013 , 52, 08JG16 | 1.4 | 5 |
| 65 | 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> , 2011 , 109, 033706 | 2.5 | 5 |
| 64 | InAs/GaSb type II superlattices for advanced 2nd and 3rd generation detectors 2010 , | | 5 |
| 63 | 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> , 2010 , 7, 1958-1960 | | 5 |

| | | | |
|----|---|-----|---|
| 62 | Structural investigations of epitaxial InN by x-ray photoelectron diffraction and x-ray diffraction. <i>Applied Physics Letters</i> , 2007 , 90, 191912 | 3.4 | 5 |
| 61 | . <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 2471-2477 | 2.9 | 5 |
| 60 | In situ approach to fabricate heterojunction p-n CuO/ZnO nanostructures for efficient photocatalytic reactions. <i>New Journal of Chemistry</i> , 2020 , 44, 19742-19752 | 3.6 | 5 |
| 59 | Growth and Fabrication of Quasivertical Current Aperture Vertical Electron Transistor Structures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021 , 218, 2000379 | 1.6 | 5 |
| 58 | Comprehensive surface analysis of GaN-capped AlGaIn/GaN high electron mobility transistors: Influence of growth method. <i>Journal of Applied Physics</i> , 2011 , 110, 083527 | 2.5 | 4 |
| 57 | Defect density reduction in InAs/GaSb type II superlattice focal plane array infrared detectors 2011 , | | 4 |
| 56 | Growth and characterization of InAlN layers nearly lattice-matched to GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2500-2502 | | 4 |
| 55 | Determination of the surface potential of GaN:Si. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, S937-S939 | | 4 |
| 54 | Atomic Layer Deposition of Aluminum Oxide for Surface Passivation of InGaAs/InP Heterojunction Bipolar Transistors. <i>Journal of the Electrochemical Society</i> , 2011 , 158, H1279 | 3.9 | 4 |
| 53 | Plasma assisted molecular beam epitaxy of AlGaIn/GaN high electron mobility transistors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 1902-1905 | | 4 |
| 52 | Structural quality and ordering of MBE grown Al _x Ga _{1-x} N-layers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001 , 82, 9-11 | 3.1 | 4 |
| 51 | Optimization of Metal-Organic Chemical Vapor Deposition Regrown n-GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2020 , 257, 1900436 | 1.3 | 4 |
| 50 | Monolithic Integrated AlGaIn/GaN Power Converter Topologies on High-Voltage AlN/GaN Superlattice Buffer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021 , 218, 2000404 | 1.6 | 4 |
| 49 | Formation of icosahedron twins during initial stages of heteroepitaxial diamond nucleation and growth. <i>Journal of Applied Physics</i> , 2019 , 125, 075305 | 2.5 | 3 |
| 48 | Pulsed laser deposition of ferroelectric potassium tantalate-niobate optical waveguiding thin films. <i>Optical Materials Express</i> , 2018 , 8, 541 | 2.6 | 3 |
| 47 | InGaAs infrared detector development for SWIR imaging applications 2013 , | | 3 |
| 46 | Structural and electron transport properties of single-crystalline In ₂ O ₃ films compensated by Ni acceptors. <i>Applied Physics Letters</i> , 2017 , 111, 262103 | 3.4 | 3 |
| 45 | (Invited) Synchrotron White-Beam X-Ray Topography Analysis of the Defect Structure of HVPE-GaN Substrates. <i>ECS Transactions</i> , 2015 , 66, 93-106 | 1 | 3 |

| | | | |
|----|--|-----|---|
| 44 | 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> , 2012 , 9, 381-384 | | 3 |
| 43 | Dynamic characterization of thin aluminum nitride microstructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 479-481 | | 3 |
| 42 | Output power enhancement of 100% for quaternary GaInAsSb/AlGaAsSb semiconductor disc lasers grown with a sequential growth scheme. <i>Journal of Crystal Growth</i> , 2009 , 311, 4158-4161 | 1.6 | 3 |
| 41 | X-ray topographic imaging of (Al, Ga)N/GaN based electronic device structures on SiC. <i>Applied Surface Science</i> , 2006 , 253, 209-213 | 6.7 | 3 |
| 40 | Piezoelectric AlN Films for FPW Sensors with Improved Device Performance. <i>Procedia Engineering</i> , 2016 , 168, 1040-1043 | | 3 |
| 39 | Investigations of the Deuterium Permeability of As-Deposited and Oxidized TiAlN Coatings. <i>Materials</i> , 2020 , 13, | 3.5 | 2 |
| 38 | Aluminium nitride membranes with embedded buried idt electrodes for novel flexural plate wave devices 2015 , | | 2 |
| 37 | Substrate removal of dual-colour InAs/GaSb superlattice focal plane arrays. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 318-321 | | 2 |
| 36 | Plasma affected 2DEG properties on GaN/AlGaIn/GaN HEMTs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012 , 9, 938-941 | | 2 |
| 35 | Defects and noise in Type-II superlattice infrared detectors 2013 , | | 2 |
| 34 | 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> , 2013 , 2, P180-P184 | | 2 |
| 33 | Infrared photodetector development at Fraunhofer IAF 2013 , | | 2 |
| 32 | Electron and hole accumulation in InN/InGaIn heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 485-487 | | 2 |
| 31 | 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> , 2011 , 8, 2363-2365 | | 2 |
| 30 | Passivation of InP heterojunction bipolar transistors by strain controlled plasma assisted electron beam evaporated hafnium oxide. <i>Applied Physics Letters</i> , 2012 , 100, 014102 | 3.4 | 2 |
| 29 | Wide angle X-ray dynamical diffraction by deformed crystals: recurrence relations. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007 , 204, 2613-2619 | 1.6 | 2 |
| 28 | Characterization of Structural Defects in (Cd,Zn)Te Crystals Grown by the Travelling Heater Method. <i>Crystals</i> , 2021 , 11, 1402 | 2.3 | 2 |
| 27 | Microstructural and optical emission properties of diamond multiply twinned particles. <i>Journal of Applied Physics</i> , 2020 , 127, 025303 | 2.5 | 2 |

| | | | |
|----|--|-----|---|
| 26 | Hybrid Evaporation/Spray-Coating Process for a Simplified and Controllable Production of Perovskite Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2020 , 10, 276-286 | 3.7 | 2 |
| 25 | 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 |
| 24 | Measurement of Internal Polarization by QCSE Induced Level Shift in AlGaIn Quantum Cascade Emitters. <i>IEEE Photonics Technology Letters</i> , 2019 , 31, 657-660 | 2.2 | 1 |
| 23 | Electrical Properties of Schottky-Diodes Based on B Doped Diamond. <i>Materials Science Forum</i> , 2018 , 924, 931-934 | 0.4 | 1 |
| 22 | Potassium tantalate-niobate mixed crystal thin films for applications in nonlinear integrated optics. <i>Journal of Physics: Conference Series</i> , 2017 , 867, 012020 | 0.3 | 1 |
| 21 | Changes of electronic properties of AlGaIn/GaN HEMTs by surface treatment. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1736, 1 | | 1 |
| 20 | 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> , 2012 , 9, 794-797 | | 1 |
| 19 | Piezo-actuated tunable diamond/AlN micro lenses 2013 , | | 1 |
| 18 | Current developments for type-II superlattice imaging systems 2011 , | | 1 |
| 17 | Efficient 350 nm LEDs on low edge threading dislocation density AlGaIn buffer layers 2011 , | | 1 |
| 16 | Quaternary barriers for improved performance of GaN-based HEMTs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2439-2441 | | 1 |
| 15 | Low-Temperature Grown High-Quality Piezoelectric AlN Film for Sensor Applications. <i>ECS Transactions</i> , 2011 , 35, 35-43 | 1 | 1 |
| 14 | Epitaxial growth of GaInAs/AlGaAsSb quantum cascade lasers. <i>Journal of Crystal Growth</i> , 2007 , 301-302, 893-896 | 1.6 | 1 |
| 13 | Spatially resolved X-ray diffraction measurements on (Al,Ga)N/GaN/4H-SiC heterostructures for electronic devices. <i>Materials Science in Semiconductor Processing</i> , 2006 , 9, 8-14 | 4.3 | 1 |
| 12 | Resonant tunnelling and intersubband absorption in AlN/GaN superlattices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 1014-1018 | | 1 |
| 11 | Absorption and Emission Properties of Light Emitting Diode Structures Containing GaInN/GaN QWs. <i>Acta Physica Polonica A</i> , 2011 , 120, 918-920 | 0.6 | 1 |
| 10 | Industrialization of type-II superlattice infrared detector technology at Fraunhofer IAF 2019 , | | 1 |
| 9 | Impact of Surface Chemistry and Doping Concentrations on Biofunctionalization of GaN/Ga-In-N Quantum Wells. <i>Sensors</i> , 2020 , 20, | 3.8 | 1 |

| | | | |
|---|--|-----|---|
| 8 | 3D X-ray Microscopy of Ultrasonically Welded Aluminum/Fiber-Reinforced Polymer Hybrid Joints. <i>Materials</i> , 2021 , 14, | 3.5 | 1 |
| 7 | Piezoelectric AlN Films for FPW Sensors with Improved Device Performance. <i>Procedia Engineering</i> , 2016 , 168, 537-540 | | 1 |
| 6 | Broadly tunable hetero-cascading quantum cascade lasers: Design, growth, and external cavity operation. <i>Journal of Crystal Growth</i> , 2019 , 513, 1-5 | 1.6 | 0 |
| 5 | Growth defects in heteroepitaxial diamond. <i>Journal of Applied Physics</i> , 2021 , 129, 165301 | 2.5 | 0 |
| 4 | 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> , 2022 , 40, 032702 | 2.9 | 0 |
| 3 | First principle studies on molecular doping of ZnO thin films by As ₂ O ₃ . <i>Crystal Research and Technology</i> , 2012 , 47, 293-298 | 1.3 | |
| 2 | Piezoelectrically actuated diamond cantilevers for high-frequency applications. <i>Diamond and Related Materials</i> , 2013 , 38, 69-72 | 3.5 | |
| 1 | Evidence of strong electron-phonon interaction in a GaN-based quantum cascade emitter. <i>Superlattices and Microstructures</i> , 2020 , 145, 106631 | 2.8 | |