

# Achim Trampert

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1413036/publications.pdf>

Version: 2024-02-01

261  
papers

8,843  
citations

53794

45  
h-index

56724

83  
g-index

265  
all docs

265  
docs citations

265  
times ranked

6527  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Nitride semiconductors free of electrostatic fields for efficient white light-emitting diodes. <i>Nature</i> , 2000, 406, 865-868.  | 27.8 | 1,662     |
| 2  | Origin of high-temperature ferromagnetism in (Ga,Mn)N layers grown on 4H-SiC(0001) by reactive molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2003, 82, 2077-2079.                                  | 3.3  | 197       |
| 3  | On the mechanisms of spontaneous growth of III-nitride nanocolumns by plasma-assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2008, 310, 4035-4045.  | 1.5  | 165       |
| 4  | Wurtzite GaN nanocolumns grown on Si(001) by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2006, 88, 2131-14.  | 3.3  | 153       |
| 5  | Growth, morphology, and structural properties of group-III-nitride nanocolumns and nanodisks. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 2816-2837.  | 1.5  | 148       |
| 6  | High resolution transmission electron microscopy studies of the Ag/MgO interface. <i>Acta Metallurgica Et Materialia</i> , 1992, 40, S227-S236.   | 1.8  | 144       |
| 7  | Impact of nucleation conditions on the structural and optical properties of M-plane GaN(11 $\bar{1}$ ,00) grown on $\bar{1}^3$ -LiAlO <sub>2</sub> . <i>Journal of Applied Physics</i> , 2002, 92, 5714-5719. | 2.5  | 143       |
| 8  | Continuous-flux MOVPE growth of position-controlled N-face GaN nanorods and embedded InGaN quantum wells. <i>Nanotechnology</i> , 2010, 21, 305201.   | 2.6  | 142       |
| 9  | Correlation of structure and magnetism in GaAs with embedded Mn(Ga)As magnetic nanoclusters. <i>Journal of Applied Physics</i> , 2002, 92, 4672-4677.   | 2.5  | 130       |
| 10 | The nanorod approach: GaN NanoLEDs for solid state lighting. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2296-2301.  | 0.8  | 128       |
| 11 | Metal-Semiconductor Phase Transition in WSe <sub>2</sub> (1 $\times$ 1 $\times$ )Te <sub>2</sub> ( $\sqrt{3}\times\sqrt{3}$ ) Monolayer. <i>Advanced Materials</i> , 2017, 29, 1603991.                       | 21.0 | 123       |
| 12 | Clustering in a Precipitate-Free GeMn Magnetic Semiconductor. <i>Physical Review Letters</i> , 2006, 97, 237202.  | 7.8  | 122       |
| 13 | Influence of AlN nucleation layers on growth mode and strain relief of GaN grown on 6H-SiC(0001). <i>Applied Physics Letters</i> , 1999, 74, 3660-3662.   | 3.3  | 113       |
| 14 | Coaxial Multishell (In,Ga)As/GaAs Nanowires for Near-Infrared Emission on Si Substrates. <i>Nano Letters</i> , 2014, 14, 2604-2609.   | 9.1  | 111       |
| 15 | Spontaneous Nucleation and Growth of GaN Nanowires: The Fundamental Role of Crystal Polarity. <i>Nano Letters</i> , 2012, 12, 6119-6125.  | 9.1  | 106       |
| 16 | Polarity in GaN and ZnO: Theory, measurement, growth, and devices. <i>Applied Physics Reviews</i> , 2016, 3, .  | 11.3 | 105       |
| 17 | Understanding the selective area growth of GaN nanocolumns by MBE using Ti nanomasks. <i>Journal of Crystal Growth</i> , 2011, 325, 89-92.  | 1.5  | 97        |
| 18 | Direct experimental determination of the spontaneous polarization of GaN. <i>Physical Review B</i> , 2012, 86, .  | 3.2  | 94        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Critical issues for the growth of high-quality (Al,Ga)N/GaN and GaN/(In,Ga)N heterostructures on SiC(0001) by molecular-beam epitaxy. Applied Physics Letters, 1999, 75, 4019-4021.  | 3.3 | 88        |
| 20 | Effects of nanowire coalescence on their structural and optical properties on a local scale. Applied Physics Letters, 2009, 95, .  | 3.3 | 84        |
| 21 | Quantitative description for the growth rate of self-induced GaN nanowires. Physical Review B, 2012, 85, .   | 3.2 | 80        |
| 22 | Molecular beam epitaxy of single crystalline GaN nanowires on a flexible Ti foil. Applied Physics Letters, 2016, 108, .  | 3.3 | 79        |
| 23 | Direct observation of the initial nucleation and epitaxial growth of metastable cubic GaN on (001) GaAs. Applied Physics Letters, 1997, 70, 583-585.   | 3.3 | 78        |
| 24 | Determination of the azimuthal orientational spread of GaN films by x-ray diffraction. Applied Physics Letters, 2002, 81, 4928-4930.   | 3.3 | 73        |
| 25 | Molecular Beam Epitaxy of GaN Nanowires on Epitaxial Graphene. Nano Letters, 2017, 17, 5213-5221.  | 9.1 | 72        |
| 26 | Columnar AlGaIn/GaN Nanocavities with AlN/GaN Bragg Reflectors Grown by Molecular Beam Epitaxy on Si(111). Physical Review Letters, 2005, 94, 146102.  | 7.8 | 71        |
| 27 | Patterned growth on high-index GaAs (n11) substrates: Application to sidewall quantum wires. Journal of Applied Physics, 1996, 80, 4108-4111.  | 2.5 | 64        |
| 28 | Growth of M-Plane GaN(11-00): A Way to Evade Electrical Polarization in Nitrides. Physica Status Solidi A, 2000, 180, 133-138.   | 1.7 | 64        |
| 29 | Novel plastic strain-relaxation mode in highly mismatched III-V layers induced by two-dimensional epitaxial growth. Applied Physics Letters, 1995, 66, 2265-2267.  | 3.3 | 63        |
| 30 | Macro- and micro-strain in GaN nanowires on Si(111). Nanotechnology, 2011, 22, 295714.   | 2.6 | 61        |
| 31 | Phase-transition-induced residual strain in ferromagnetic MnAs films epitaxially grown on GaAs(001). Applied Physics Letters, 2001, 78, 2461-2463.   | 3.3 | 60        |
| 32 | Annealing effects on the crystal structure of GaInNAs quantum wells with large In and N content grown by molecular beam epitaxy. Journal of Applied Physics, 2003, 94, 2319-2324.  | 2.5 | 60        |
| 33 | Self Assembled InAs/InP Quantum Dots for Telecom Applications in the 1.55 $\mu\text{m}$ Wavelength Range: Wavelength Tuning, Stacking, Polarization Control, and Lasing. Japanese Journal of Applied Physics, 2006, 45, 6544-6549. | 1.5 | 60        |
| 34 | Scaling growth kinetics of self-induced GaN nanowires. Applied Physics Letters, 2012, 100, .   | 3.3 | 60        |
| 35 | Nonuniform segregation of Ga at AlAs/GaAs heterointerfaces. Physical Review B, 1997, 55, 1689-1695.  | 3.2 | 59        |
| 36 | Phase formation and strain relaxation of Ga <sub>2</sub> O <sub>3</sub> on c-plane and a-plane sapphire substrates as studied by synchrotron-based x-ray diffraction. Applied Physics Letters, 2017, 111, .                        | 3.3 | 58        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Nanoscale analysis of the In and N spatial redistributions upon annealing of GaInNAs quantum wells. Applied Physics Letters, 2004, 84, 2503-2505.   | 3.3  | 57        |
| 38 | Micro-Photoluminescence Study at Room Temperature of Sidewall Quantum Wires Formed on Patterned GaAs (311)A Substrates by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1996, 35, L297-L300. | 1.5  | 54        |
| 39 | Mono- and few-layer nanocrystalline graphene grown on Al <sub>2</sub> O <sub>3</sub> (0 0 1) by molecular beam epitaxy. Carbon, 2013, 56, 339-350.  | 10.3 | 54        |
| 40 | Selective area growth of In(Ga)N/GaN nanocolumns by molecular beam epitaxy on GaN-buffered Si(111): from ultraviolet to infrared emission. Nanotechnology, 2013, 24, 175303.                                | 2.6  | 54        |
| 41 | Scaling thermodynamic model for the self-induced nucleation of GaN nanowires. Physical Review B, 2012, 85, .  | 3.2  | 53        |
| 42 | Current path in light emitting diodes based on nanowire ensembles. Nanotechnology, 2012, 23, 465301.  | 2.6  | 50        |
| 43 | Interface analysis of InAs/GaSb superlattice grown by MBE. Journal of Crystal Growth, 2007, 301-302, 889-892.   | 1.5  | 47        |
| 44 | Self-organized quantum wires formed by elongated dislocation-free islands in (In,Ga)As/GaAs(100). Applied Physics Letters, 2001, 78, 1297-1299.   | 3.3  | 46        |
| 45 | <i>In situ</i> analysis of strain relaxation during catalyst-free nucleation and growth of GaN nanowires. Nanotechnology, 2010, 21, 245705.   | 2.6  | 46        |
| 46 | Collector Phase Transitions during Vapor-Solid-Solid Nucleation of GaN Nanowires. Nano Letters, 2010, 10, 3426-3431.  | 9.1  | 46        |
| 47 | GaSbBi/GaSb quantum well laser diodes. Applied Physics Letters, 2017, 110, .  | 3.3  | 45        |
| 48 | Reactive molecular-beam epitaxy of GaN layers directly on 6H-SiC(0001). Applied Physics Letters, 1999, 75, 944-946.   | 3.3  | 44        |
| 49 | Microstructure of M-plane GaN epilayers grown on <sup>3</sup> LiAlO <sub>2</sub> by plasma-assisted molecular beam epitaxy. Philosophical Magazine Letters, 2004, 84, 435-441.                              | 1.2  | 44        |
| 50 | N-face GaN nanorods: Continuous-flux MOVPE growth and morphological properties. Journal of Crystal Growth, 2011, 315, 164-167.  | 1.5  | 44        |
| 51 | Formation and phase transformation of Bi-containing QD-like clusters in annealed GaAsBi. Nanotechnology, 2014, 25, 205605.  | 2.6  | 44        |
| 52 | Thickness dependence of the magnetic properties of MnAs films on GaAs(001) and GaAs(113)A: Role of a natural array of ferromagnetic stripes. Journal of Applied Physics, 2004, 96, 5056-5062.               | 2.5  | 42        |
| 53 | Control over the Number Density and Diameter of GaAs Nanowires on Si(111) Mediated by Droplet Epitaxy. Nano Letters, 2013, 13, 3607-3613.   | 9.1  | 41        |
| 54 | Optimized growth conditions for the epitaxial nucleation of <sup>2</sup> GaN on GaAs(001) by molecular beam epitaxy. Applied Physics Letters, 1997, 71, 473-475.  | 3.3  | 40        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Decomposition in as-grown (Ga,In)(N,As) quantum wells. Applied Physics Letters, 2005, 87, 171901.   | 3.3 | 40        |
| 56 | Observation of Dielectrically Confined Excitons in Ultrathin GaN Nanowires up to Room Temperature. Nano Letters, 2016, 16, 973-980.   | 9.1 | 40        |
| 57 | Surfactant-mediated molecular-beam epitaxy of III-V strained-layer heterostructures. Journal of Crystal Growth, 1995, 150, 460-466.   | 1.5 | 39        |
| 58 | Monolithic integration of InGaN segments emitting in the blue, green, and red spectral range in single ordered nanocolumns. Applied Physics Letters, 2013, 102, 181103.   | 3.3 | 39        |
| 59 | GaNAs/GaAs quantum wells grown by molecular-beam epitaxy emitting above 1.5 $\mu$ m. Applied Physics Letters, 2003, 82, 1845-1847.  | 3.3 | 38        |
| 60 | Ge <sub>1-x</sub> Mn <sub>x</sub> Clusters: Central Structural and Magnetic Building Blocks of Nanoscale Wire-Like Self-Assembly in a Magnetic Semiconductor. Nano Letters, 2009, 9, 3743-3748.   | 9.1 | 37        |
| 61 | Nanoscale Imaging of InN Segregation and Polymorphism in Single Vertically Aligned InGaN/GaN Multi Quantum Well Nanorods by Tip-Enhanced Raman Scattering. Nano Letters, 2013, 13, 3205-3212.   | 9.1 | 37        |
| 62 | Interplay between the growth temperature, microstructure, and optical properties of GaInAs quantum wells. Applied Physics Letters, 2003, 82, 3451-3453.   | 3.3 | 36        |
| 63 | Critical Role of Two-Dimensional Island-Mediated Growth on the Formation of Semiconductor Heterointerfaces. Physical Review Letters, 2012, 109, 126101.   | 7.8 | 35        |
| 64 | Anomalous Strain Relaxation in Core-Shell Nanowire Heterostructures via Simultaneous Coherent and Incoherent Growth. Nano Letters, 2017, 17, 136-142.   | 9.1 | 35        |
| 65 | Device quality submicron arrays of stacked sidewall quantum wires on patterned GaAs (311)A substrates. Applied Physics Letters, 1998, 72, 2002-2004.  | 3.3 | 34        |
| 66 | Structural properties of GaN layers on Si(001) grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 1998, 83, 3800-3806.  | 2.5 | 34        |
| 67 | Correlation between interface structure and light emission at 1.3-1.5 $\mu$ m of (Ga,In)(N,As) diluted nitride heterostructures on GaAs substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2195. | 1.6 | 34        |
| 68 | Growth of freestanding GaN using pillar-epitaxial lateral overgrowth from GaN nanocolumns. Journal of Crystal Growth, 2007, 309, 113-120.   | 1.5 | 34        |
| 69 | Insight into the Growth and Control of Single-Crystal Layers of Ge-Sb-Te Phase-Change Material. Crystal Growth and Design, 2011, 11, 4606-4610.   | 3.0 | 34        |
| 70 | Selective area growth and characterization of InGaN nano-disks implemented in GaN nanocolumns with different top morphologies. Applied Physics Letters, 2012, 100, .  | 3.3 | 34        |
| 71 | Strong alignment of self-assembling InP quantum dots. Physical Review B, 1996, 54, 4913-4918.   | 3.2 | 33        |
| 72 | Strain accommodation in Ga-assisted GaAs nanowires grown on silicon (111). Nanotechnology, 2012, 23, 305703.  | 2.6 | 33        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | Observation of atomic ordering of triple-period-A and -B type in GaAsBi. Applied Physics Letters, 2014, 105, 041602.  | 3.3 | 33        |
| 74 | Formation of Quasicrystalline AlCuFe by Physical Vapor Deposition: Phase Selection via Nanocluster Nucleation. Physical Review Letters, 1997, 78, 262-265.  | 7.8 | 32        |
| 75 | Heteroepitaxy of dissimilar materials: effect of interface structure on strain and defect formation. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 1119-1125.                  | 2.7 | 32        |
| 76 | Plasmon excitation in electron energy-loss spectroscopy for determination of indium concentration in (In,Ga)N/GaN nanowires. Nanotechnology, 2012, 23, 485701.                                    | 2.6 | 32        |
| 77 | Correlations between structural and optical properties of GaInNAs quantum wells grown by MBE. Journal of Crystal Growth, 2003, 251, 383-387.  | 1.5 | 31        |
| 78 | Molecular-beam epitaxy of InSb/GaSb quantum dots. Journal of Applied Physics, 2007, 101, 124309.  | 2.5 | 31        |
| 79 | Epitaxial growth and characterization of InN nanorods and compact layers on silicon substrates. Physica Status Solidi (B): Basic Research, 2006, 243, 1490-1493.                                  | 1.5 | 30        |
| 80 | Formation of High-Quality GaN Microcrystals by Pendeoepitaxial Overgrowth of GaN Nanowires on Si(111) by Molecular Beam Epitaxy. Crystal Growth and Design, 2011, 11, 4257-4260.                  | 3.0 | 30        |
| 81 | Strain Relief of Heteroepitaxial bcc-Fe(001) Films. Physical Review Letters, 2004, 93, 236101.  | 7.8 | 29        |
| 82 | Polarity determination by electron energy-loss spectroscopy: application to ultra-small III-nitride semiconductor nanocolumns. Nanotechnology, 2011, 22, 415701.                                  | 2.6 | 29        |
| 83 | Emission control of InGaN nanocolumns grown by molecular-beam epitaxy on Si(111) substrates. Applied Physics Letters, 2011, 99, .   | 3.3 | 29        |
| 84 | Epitaxial phase exchange materials. Physica Status Solidi - Rapid Research Letters, 2012, 6, 415-417.   | 2.4 | 29        |
| 85 | Interplay between Surface Stabilization, Growth Mode and Strain Relaxation during Molecular-Beam Epitaxy of Highly Mismatched III-V Semiconductor Layers. Europhysics Letters, 1994, 25, 663-668. | 2.0 | 28        |
| 86 | Chapter 7 Crystal Structure of Group III Nitrides. Semiconductors and Semimetals, 1997, 50, 167-192.  | 0.7 | 28        |
| 87 | AlGaN Nanocolumns and AlGaN/GaN/AlGaN Nanostructures Grown by Molecular Beam Epitaxy. Physica Status Solidi (B): Basic Research, 2002, 234, 717-721.  | 1.5 | 27        |
| 88 | MnAs nanoclusters embedded in GaAs: synthesis and properties. Applied Surface Science, 2004, 234, 16-21.  | 6.1 | 27        |
| 89 | Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs <sub>1-x</sub> Bi <sub>x</sub> /GaAs quantum wells. Nanotechnology, 2016, 27, 325603.                     | 2.6 | 27        |
| 90 | High-density, uniform InSb <sup>δ</sup> •GaSb quantum dots emitting in the midinfrared region. Applied Physics Letters, 2006, 89, 263118.   | 3.3 | 26        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 91  | Enhanced Performances of Quantum Dot Lasers Operating at 1.3 $\mu\text{m}$ . IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1188-1196.  | 2.9 | 26        |
| 92  | High-quality distributed Bragg reflectors based on $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{GaN}$ multilayers grown by molecular-beam epitaxy. Applied Physics Letters, 2001, 79, 2136-2138.                            | 3.3 | 25        |
| 93  | Spontaneous formation of nanostructures by surface spinodal decomposition in $\text{GaAs}_{1-x}\text{Bi}_x$ epilayers. Journal of Applied Physics, 2015, 117, .  | 2.5 | 25        |
| 94  | Defect control during growth of highly mismatched (100). Journal of Crystal Growth, 1995, 146, 368-373.  | 1.5 | 24        |
| 95  | Indentation of GaN: A Study of the Optical Activity and Strain State of Extended Defects. Physica Status Solidi A, 2002, 192, 79-84.   | 1.7 | 24        |
| 96  | Nitrogen-dependent optimum annealing temperature of Ga(As,N). Journal of Crystal Growth, 2004, 267, 60-66.   | 1.5 | 24        |
| 97  | Epitaxial Heusler alloy films on GaAs(001) substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 32, 371-374.   | 2.7 | 24        |
| 98  | Growth temperature dependent interfacial reaction of Heusler-alloy $\text{Co}_2\text{FeSi}/\text{GaAs}(001)$ hybrid structures. Journal Physics D: Applied Physics, 2007, 40, 1631-1634.                                 | 2.8 | 24        |
| 99  | Indium distribution at the interfaces of $(\text{Ga},\text{In})(\text{N},\text{As})/\text{GaAs}$ quantum wells. Applied Physics Letters, 2008, 92, .   | 3.3 | 24        |
| 100 | Interface engineering for improved growth of GaSb on Si(111). Journal of Crystal Growth, 2011, 323, 401-404.   | 1.5 | 24        |
| 101 | Nitrogen-enhanced indium segregation in $(\text{Ga},\text{In})(\text{N},\text{As})/\text{GaAs}$ multiple quantum wells grown by molecular-beam epitaxy. New Journal of Physics, 2007, 9, 405-405.                        | 2.9 | 23        |
| 102 | Interface properties of $(\text{Ga},\text{In})(\text{N},\text{As})$ and $(\text{Ga},\text{In})(\text{As},\text{Sb})$ materials systems grown by molecular beam epitaxy. Journal of Crystal Growth, 2009, 311, 1739-1744. | 1.5 | 23        |
| 103 | Structural characterization of thin GaN epilayers directly grown on on-axis 6H-SiC(0001) by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 1998, 73, 3869-3871.  | 3.3 | 22        |
| 104 | Structural and optical characterization of thick InGaN layers and InGaN/GaN MQW grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 131-134.  | 3.5 | 22        |
| 105 | Growth of Fe <sub>3</sub> Si/Ge/Fe <sub>3</sub> Si trilayers on GaAs(001) using solid-phase epitaxy. Applied Physics Letters, 2017, 110, .   | 3.3 | 22        |
| 106 | Green photoluminescence from cubic In <sub>0.4</sub> Ga <sub>0.6</sub> N grown by radio frequency plasma-assisted molecular beam epitaxy. Applied Physics Letters, 1998, 73, 1230-1232.                                  | 3.3 | 21        |
| 107 | Properties of cubic (In,Ga)N grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 59, 73-79.   | 3.5 | 20        |
| 108 | Epitaxial Fe <sub>3</sub> Si/Ge/Fe <sub>3</sub> Si thin film multilayers grown on GaAs(001). Thin Solid Films, 2014, 556, 120-124.   | 1.8 | 20        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Lateral piezoelectric fields in strained semiconductor heterostructures. <i>Physical Review B</i> , 1994, 50, 17111-17119.  | 3.2 | 19        |
| 110 | Optical properties of heavily doped GaN/(Al,Ga)N multiple quantum wells grown on 6H-SiC(0001) by reactive molecular-beam epitaxy. <i>Physical Review B</i> , 2000, 61, 16025-16028.                                     | 3.2 | 19        |
| 111 | Toward edges-rich MoS <sub>2</sub> layers via chemical liquid exfoliation triggering distinctive magnetism. <i>Materials Research Letters</i> , 2017, 5, 267-275.   | 8.7 | 19        |
| 112 | Properties of cubic GaN grown by MBE. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 43, 215-221.  | 3.5 | 18        |
| 113 | Atomically engineered interfaces for spin injection: ultrathin epitaxial Fe films grown on As- and Ga-terminated GaAs(001) substrates. <i>Applied Surface Science</i> , 2004, 237, 181-188.                             | 6.1 | 18        |
| 114 | Ferromagnetic Ge(Mn) nanostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 32, 422-425.  | 2.7 | 18        |
| 115 | Nanofocus x-ray diffraction and cathodoluminescence investigations into individual core-shell (In,Ga)N/GaN rod light-emitting diodes. <i>Nanotechnology</i> , 2016, 27, 325707.   | 2.6 | 18        |
| 116 | Polarity-Induced Selective Area Epitaxy of GaN Nanowires. <i>Nano Letters</i> , 2017, 17, 63-70.  | 9.1 | 18        |
| 117 | Crystal Phase Control during Epitaxial Hybridization of III-V Semiconductors with Silicon. <i>Advanced Electronic Materials</i> , 2022, 8, 2100777.   | 5.1 | 18        |
| 118 | Anisotropic misfit dislocation nucleation in two-dimensional grown InAs/GaAs(001) heterostructures. <i>Applied Physics Letters</i> , 1998, 73, 1074-1076.   | 3.3 | 17        |
| 119 | Molecular beam epitaxial growth window for high-quality (Ga,In)(N,As) quantum wells for long wavelength emission. <i>Applied Physics Letters</i> , 2006, 88, 191115.  | 3.3 | 17        |
| 120 | Correlation among Growth Conditions, Morphology, and Optical Properties of Nanocolumnar InGaN/GaN Heterostructures Selectively Grown by Molecular Beam Epitaxy. <i>Crystal Growth and Design</i> , 2015, 15, 2661-2666. | 3.0 | 17        |
| 121 | Study of 3D-growth conditions for selective area MOVPE of high aspect ratio GaN fins with non-polar vertical sidewalls. <i>Journal of Crystal Growth</i> , 2017, 476, 90-98.  | 1.5 | 17        |
| 122 | Excitonic properties of isolated nanometer-sized InAs islands in a GaAs matrix. <i>Journal of Applied Physics</i> , 1995, 78, 1980-1983.  | 2.5 | 16        |
| 123 | MBE-grown high-quality (Al,Ga)N/GaN distributed Bragg reflectors for resonant cavity LEDs. <i>Semiconductor Science and Technology</i> , 2001, 16, 913-917.   | 2.0 | 16        |
| 124 | Critical parameters for the molecular beam epitaxial growth of 1.55- $\mu$ m (Ga,In)(N,As) multiple quantum wells. <i>Applied Physics Letters</i> , 2006, 89, 181910.   | 3.3 | 16        |
| 125 | Striated surface morphology and crystal orientation of m-plane GaN films grown on $\beta$ -LiAlO <sub>2</sub> (100). <i>Applied Physics Letters</i> , 2010, 96, 231914.   | 3.3 | 16        |
| 126 | Electron channeling contrast imaging studies of nonpolar nitrides using a scanning electron microscope. <i>Applied Physics Letters</i> , 2013, 102, .   | 3.3 | 16        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 127 | Plan-view transmission electron microscopy investigation of GaAs/(In,Ga)As core-shell nanowires. Applied Physics Letters, 2014, 105, 121602.  | 3.3  | 16        |
| 128 | Detecting lateral composition modulation in dilute Ga(As,Bi) epilayers. Nanotechnology, 2015, 26, 425701.   | 2.6  | 16        |
| 129 | Interface structure and strain state of InAs nano-clusters embedded in silicon. Acta Materialia, 2015, 90, 133-139.   | 7.9  | 16        |
| 130 | InAs/GaSb short-period superlattice injection lasers operating in 2.5-3.5 $\mu\text{m}$ mid-infrared wavelength range. Electronics Letters, 2007, 43, 1285.   | 1.0  | 15        |
| 131 | Impact of carrier localization on the photoluminescence characteristics of (Ga,In)(N,As) and (Ga,In)(N,As,Sb) quantum wells. Journal of Applied Physics, 2008, 104, .   | 2.5  | 15        |
| 132 | Monodisperse (In, Ga)N insertions in catalyst-free-grown GaN(0001) nanowires. Nanotechnology, 2011, 22, 365703.   | 2.6  | 15        |
| 133 | <i>In situ</i> doping of catalyst-free InAs nanowires with Si: Growth, polytypism, and local vibrational modes of Si. Applied Physics Letters, 2013, 103, .   | 3.3  | 15        |
| 134 | Selective area growth and characterization of GaN nanocolumns, with and without an InGaN insertion, on semi-polar (11 $\bar{2}$ ) GaN templates. Applied Physics Letters, 2013, 103, .                                  | 3.3  | 15        |
| 135 | Thermal expansion of single-crystalline $\text{In}_2\text{O}_3$ -Ga <sub>2</sub> O <sub>3</sub> from RT to 1200 K studied by synchrotron-based high resolution x-ray diffraction. Applied Physics Letters, 2018, 113, . | 3.3  | 15        |
| 136 | Efficiency optimization of p-type doping in GaN:Mg layers grown by molecular-beam epitaxy. Journal of Crystal Growth, 2004, 270, 542-546.   | 1.5  | 14        |
| 137 | Epitaxial growth of 6H-AlN on M-plane SiC by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2007, 300, 127-129.   | 1.5  | 14        |
| 138 | Epitaxial growth and structure of (La <sub>1-x</sub> Lu <sub>x</sub> ) <sub>2</sub> O <sub>3</sub> alloys on Si(111). Applied Physics Letters, 2010, 97, 031911.  | 3.3  | 14        |
| 139 | Delayed crystallization of ultrathin Gd <sub>2</sub> O <sub>3</sub> layers on Si(111) observed by in situ X-ray diffraction. Nanoscale Research Letters, 2012, 7, 203.  | 5.7  | 14        |
| 140 | Counterintuitive strain distribution in axial (In,Ga)N/GaN nanowires. Applied Physics Letters, 2016, 108, .   | 3.3  | 14        |
| 141 | Microstructure and interface analysis of emerging Ga(Sb,Bi) epilayers and Ga(Sb,Bi)/GaSb quantum wells for optoelectronic applications. Applied Physics Letters, 2018, 112, .   | 3.3  | 14        |
| 142 | Excitonic Aharonov-Bohm Oscillations in Core-Shell Nanowires. Advanced Materials, 2019, 31, 1805645.  | 21.0 | 14        |
| 143 | Coaxial GaAs/(In,Ga)As Dot-in-a-Well Nanowire Heterostructures for Electrically Driven Infrared Light Generation on Si in the Telecommunication O Band. ACS Applied Nano Materials, 2020, 3, 165-174.                   | 5.0  | 14        |
| 144 | Growth, interface structure, and magnetic properties of Fe/GaAs and Fe <sub>3</sub> Si/GaAs hybrid systems. International Journal of Materials Research, 2006, 97, 1026-1036.   | 0.3  | 13        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Effect of indium incorporation on optical and structural properties of m-plane InGaN/GaN MQW on LiAlO <sub>2</sub> substrates. <i>Journal of Crystal Growth</i> , 2011, 315, 246-249.   | 1.5 | 13        |
| 146 | GaAs/Fe <sub>3</sub> Si Core/Shell Nanowires: Nanobar Magnets. <i>Nano Letters</i> , 2013, 13, 6203-6209.   | 9.1 | 13        |
| 147 | Magnetic properties of Gd-doped GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2014, 251, 1673-1684.   | 1.5 | 13        |
| 148 | Growth and stability of rocksalt Zn <sub>1-x</sub> Mg <sub>x</sub> O epilayers and ZnO/MgO superlattice on MgO (100) substrate by molecular beam epitaxy. <i>Journal of Chemical Physics</i> , 2016, 144, 214704.   | 3.0 | 13        |
| 149 | Interfacial reactions during the molecular beam epitaxy of GaN nanowires on Ti/Al <sub>2</sub> O <sub>3</sub> . <i>Nanotechnology</i> , 2019, 30, 114001.   | 2.6 | 13        |
| 150 | MBE growth and characteristics of cubic GaN. <i>Thin Solid Films</i> , 1997, 306, 231-236.  | 1.8 | 12        |
| 151 | Linear increase of the modal gain in 1.3 μm InAs/GaAs quantum dot lasers containing up to seven-stacked QD layers. <i>Nanotechnology</i> , 2008, 19, 275401.  | 2.6 | 12        |
| 152 | Epitaxial Heusler alloy Co <sub>2</sub> FeSi films on Si(100) substrates grown by molecular beam epitaxy. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 305004.   | 2.8 | 12        |
| 153 | $\frac{1}{N} \int_0^1 \ln \left( \frac{1}{1 - \frac{1}{N}} \right) dx = \frac{1}{N} \int_0^1 \ln \left( \frac{1}{1 - x} \right) dx = -\frac{1}{N} \ln N$<br>Based on Nanofocus X-Ray Diffraction and Scanning Transmission Electron Microscopy. <i>Physical Chemistry</i> | 3.8 | 12        |
| 154 | On the origin of threading dislocations during epitaxial growth of III-Sb on Si(001): A comprehensive transmission electron tomography and microscopy study. <i>Acta Materialia</i> , 2018, 143, 121-129.   | 7.9 | 12        |
| 155 | Growth mode evolution during (100)-oriented In <sub>2</sub> -Ga <sub>2</sub> O <sub>3</sub> homoepitaxy. <i>Nanotechnology</i> , 2018, 29, 395705.  | 2.6 | 12        |
| 156 | SnO <sub>2</sub> -Ga <sub>2</sub> O <sub>3</sub> heterojunction field-effect transistors and vertical p-n diodes. <i>Applied Physics Letters</i> , 2022, 120, .   | 3.3 | 12        |
| 157 | MBE growth and interface formation of compound semiconductor heterostructures for optoelectronics. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 2683-2696.   | 1.5 | 11        |
| 158 | Oxygen-Deficient Oxide Growth by Subliming the Oxide Source Material: The Cause of Silicide Formation in Rare Earth Oxides on Silicon. <i>Crystal Growth and Design</i> , 2013, 13, 3645-3650.  | 3.0 | 11        |
| 159 | Electron tomography on nanopores embedded in epitaxial GaSb thin films. <i>Micron</i> , 2015, 73, 54-62.  | 2.2 | 11        |
| 160 | Strategies for Analyzing Noncommon Atom Heterovalent Interfaces: The Case of CdTe/InSb. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901658.  | 3.7 | 11        |
| 161 | Gallium nitride heterostructures on 3D structured silicon. <i>Nanotechnology</i> , 2008, 19, 405301.  | 2.6 | 10        |
| 162 | Morphology and stress evolution of InAs QD grown and annealed in-situ at high temperature. <i>Journal of Crystal Growth</i> , 2010, 312, 447-451.   | 1.5 | 10        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Direct observation of N-(group V) bonding defects in dilute nitride semiconductors using hard x-ray photoelectron spectroscopy. Applied Physics Letters, 2011, 98, 121915.                                   | 3.3 | 10        |
| 164 | Lattice-engineered Si <sub>1-x</sub> Gex-buffer on Si(001) for GaP integration. Journal of Applied Physics, 2014, 115, 103501.   | 2.5 | 10        |
| 165 | Epitaxial polymorphism of La <sub>2</sub> O <sub>3</sub> on Si(111) studied by <i>in situ</i> x-ray diffraction. Applied Physics Letters, 2014, 105, .   | 3.3 | 10        |
| 166 | Fano-like resonances sustained by Si doped InAsSb plasmonic resonators integrated in GaSb matrix. Optics Express, 2015, 23, 29423.   | 3.4 | 10        |
| 167 | Exciton recombination at crystal-phase quantum rings in GaAs/In <sub>x</sub> Ga <sub>1-x</sub> As core/multishell nanowires. Applied Physics Letters, 2016, 109, .   | 3.3 | 10        |
| 168 | Nature of excitons bound to inversion domain boundaries: Origin of the 3.45-eV luminescence lines in spontaneously formed GaN nanowires on Si(111). Physical Review B, 2016, 94, .                           | 3.2 | 10        |
| 169 | Epitaxial pulsed laser crystallization of amorphous germanium on GaAs. Journal of Applied Physics, 2001, 90, 2575-2581.  | 2.5 | 9         |
| 170 | As-mediated stacking fault in wurtzite GaN epilayers. Applied Physics Letters, 2002, 81, 3407-3409.  | 3.3 | 9         |
| 171 | Type II transition in InSb-based nanostructures for midinfrared applications. Journal of Applied Physics, 2008, 103, 114516.   | 2.5 | 9         |
| 172 | InN nanocolumns grown by plasma-assisted molecular beam epitaxy on A-plane GaN templates. Applied Physics Letters, 2009, 94, 221908.   | 3.3 | 9         |
| 173 | Electron tomography on III-Sb heterostructures on vicinal Si(001) substrates: Anti-phase boundaries as a sink for threading dislocations. Scripta Materialia, 2017, 132, 5-8.                                | 5.2 | 9         |
| 174 | Phase Stability and Anisotropic Sublimation of Cubic Ge <sub>1-x</sub> Sb <sub>x</sub> Te Alloy Observed by In Situ Transmission Electron Microscopy. Journal of Physical Chemistry C, 2018, 122, 2968-2974. | 3.1 | 9         |
| 175 | Interface electronic transition observed by optical second-harmonic spectroscopy in In <sub>2</sub> As <sub>2</sub> GaN/GaAs(001) heterostructures. Physical Review B, 1998, 57, 3722-3725.                  | 3.2 | 8         |
| 176 | Growth and Properties of Ferromagnet-Semiconductor Hetero-Structures for Spin Injection. Phase Transitions, 2003, 76, 445-458.   | 1.3 | 8         |
| 177 | Growth and characterization of In <sub>1-x</sub> MnxAs diluted magnetic semiconductors quantum dots. Journal of Crystal Growth, 2005, 280, 32-43.  | 1.5 | 8         |
| 178 | Structural and optical properties of InSb quantum dots for mid-IR applications. Physica Status Solidi (B): Basic Research, 2006, 243, 3959-3962.   | 1.5 | 8         |
| 179 | Role of ionized nitrogen species in the optical and structural properties of GaInNAs/GaAs quantum wells grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2007, 101, 103526.      | 2.5 | 8         |
| 180 | Faceted growth of Fe <sub>3</sub> Si shells around GaAs nanowires on Si(111). Journal of Crystal Growth, 2015, 427, 21-23.   | 1.5 | 8         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 181 | Tailoring of microstructure and optoelectronic properties of Aluminum doped Zinc Oxide changing gun tilt. <i>Materials Science in Semiconductor Processing</i> , 2017, 63, 115-121.               | 4.0  | 8         |
| 182 | Memristive resistive switch based on spontaneous barrier creation in metal-chalcogenide junctions. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 385101.                                  | 2.8  | 8         |
| 183 | Phase Transformations and Phase Stability in Epitaxial <sup>12</sup> -GaN Films. <i>Angewandte Chemie International Edition in English</i> , 1997, 36, 2111-2112.                                 | 4.4  | 7         |
| 184 | Morphology of GaN Surfaces and GaN/(Al,Ga)N Interfaces Grown on 6H-SiC(0001) by Reactive Molecular Beam Epitaxy. <i>Physica Status Solidi A</i> , 2000, 180, 73-79.                               | 1.7  | 7         |
| 185 | (In,Ga)As/GaAs quantum wells on GaAs(110). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 651-654.  | 0.8  | 7         |
| 186 | Growth of (In,Ga)As/(Al,Ga)As quantum wells on GaAs(110) by MBE. <i>Journal of Crystal Growth</i> , 2007, 301-302, 158-162.   | 1.5  | 7         |
| 187 | ORDERED GAN/INGAN NANORODS ARRAYS GROWN BY MOLECULAR BEAM EPITAXY FOR PHOSPHOR-FREE WHITE LIGHT EMISSION. <i>International Journal of High Speed Electronics and Systems</i> , 2012, 21, 1250010. | 0.7  | 7         |
| 188 | Coherent GdN clusters in epitaxial GaN:Gd thin films determined by transmission electron microscopy. <i>Nanotechnology</i> , 2013, 24, 255701.  | 2.6  | 7         |
| 189 | Crystal-Phase Quantum Wires: One-Dimensional Heterostructures with Atomically Flat Interfaces. <i>Nano Letters</i> , 2018, 18, 247-254.   | 9.1  | 7         |
| 190 | Ordered arrays of defect-free GaN nanocolumns with very narrow excitonic emission line width. <i>Journal of Crystal Growth</i> , 2019, 525, 125189.   | 1.5  | 7         |
| 191 | Impact of Bi incorporation on the evolution of microstructure during growth of low-temperature GaAs:Bi/Ga(As,Bi) layers. <i>Journal of Applied Physics</i> , 2019, 126, 085305.                   | 2.5  | 7         |
| 192 | Li <sub>2</sub> SnO <sub>3</sub> branched nano- and microstructures with intense and broadband white-light emission. <i>Nano Research</i> , 2019, 12, 441-448.                                    | 10.4 | 7         |
| 193 | 3D GaN Fins as a Versatile Platform for aâ€Planeâ€Based Devices. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800477.   | 1.5  | 7         |
| 194 | Interfacial resistance switching characteristics in metal-chalcogenide junctions using Biâ€Cuâ€Se, Biâ€Agâ€Se, and Sbâ€Cuâ€Te alloys. <i>Journal of Alloys and Compounds</i> , 2020, 824, 153880. | 5.5  | 7         |
| 195 | Combined hydride and metal organic vapor-phase epitaxy of GaN on sapphire. <i>Applied Physics Letters</i> , 2005, 87, 181912.   | 3.3  | 6         |
| 196 | 1.31/4m emitting GaInNAs/GaAs quantum well resonant cavity LEDs. <i>Solid-State Electronics</i> , 2010, 54, 492-496.  | 1.4  | 6         |
| 197 | Long-range order and thermal stability of thin Co <sub>2</sub> FeSi films on GaAs(1â€%1â€%1)B. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 285404.                                      | 2.8  | 6         |
| 198 | Residual disorder and diffusion in thin Heusler alloy films. <i>Physical Review B</i> , 2012, 86, .   | 3.2  | 6         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | Molecular beam epitaxy growth and properties of Co <sub>2</sub> TiSi thin films on GaAs(001): the effect of growth temperature. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 025003.                                   | 2.8 | 6         |
| 200 | Real structure of lattice matched GaAs/Fe <sub>3</sub> Si core-shell nanowires. <i>Journal of Crystal Growth</i> , 2015, 410, 1-6.  | 1.5 | 6         |
| 201 | Continuous tuning of two-section, single-mode terahertz quantum-cascade lasers by fiber-coupled, near-infrared illumination. <i>AIP Advances</i> , 2017, 7, .   | 1.3 | 6         |
| 202 | Strain Driven Shape Evolution of Stacked (In,Ga)N Quantum Disks Embedded in GaN Nanowires. <i>Nano Letters</i> , 2017, 17, 4654-4660.   | 9.1 | 6         |
| 203 | Molecular-beam epitaxy of GaInSbBi alloys. <i>Journal of Applied Physics</i> , 2019, 126, .   | 2.5 | 6         |
| 204 | Bismuth-surfactant-induced growth and structure of InAs/GaAs(110) quantum dots. <i>Semiconductor Science and Technology</i> , 2019, 34, 105016.   | 2.0 | 6         |
| 205 | Correlation between quantum well morphology, carrier localization and the optoelectronic properties of GaInNAs/GaAs light emitting diodes. <i>Semiconductor Science and Technology</i> , 2006, 21, 1047-1052.                   | 2.0 | 5         |
| 206 | Formation of a Monocrystalline, $\gamma$ -Plane AlN Layer by the Nitridation of $\gamma$ -LiAlO <sub>2</sub> (100). <i>Applied Physics Express</i> , 2012, 5, 105501.   | 2.4 | 5         |
| 207 | Investigation of III-V Nanowires by Plan-View Transmission Electron Microscopy: InN Case Study. <i>Microscopy and Microanalysis</i> , 2014, 20, 1471-1478.  | 0.4 | 5         |
| 208 | Perpendicular magnetic anisotropy in the Heusler alloy Co <sub>2</sub> TiSi/GaAs(001) hybrid structure. <i>AIP Advances</i> , 2015, 5, 057130.  | 1.3 | 5         |
| 209 | Electron Tomography of Pencil-Shaped GaN/(In,Ga)N Core-Shell Nanowires. <i>Nanoscale Research Letters</i> , 2019, 14, 232.  | 5.7 | 5         |
| 210 | The Role of Epitaxial Strain on the Spontaneous Formation of Bi-Rich Nanostructures in Ga(As,Bi) Epilayers and Quantum Wells. <i>Nanoscience and Nanotechnology Letters</i> , 2017, 9, 1132-1138.                               | 0.4 | 5         |
| 211 | Laser interference structuring of a-Ge films on GaAs. <i>Journal of Applied Physics</i> , 2002, 91, 2916-2920.  | 2.5 | 4         |
| 212 | Growth and characterization of high-quality 10-period AlGaIn/GaN Bragg reflectors grown by molecular beam epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 31-34. | 3.5 | 4         |
| 213 | Inelastic light scattering spectroscopy of semiconductor nitride nanocolumns. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 2838-2846.  | 1.5 | 4         |
| 214 | Metal-organic vapour-phase epitaxy of gallium nitride nanostructures for optoelectronic applications. <i>Microelectronics Journal</i> , 2009, 40, 333-335.  | 2.0 | 4         |
| 215 | Carrier spin polarization in ferromagnetic semiconductor (Ga,Mn)As/GaAs structures. <i>Journal of Magnetism and Magnetic Materials</i> , 2009, 321, 720-722.  | 2.3 | 4         |
| 216 | GaN and ZnO nanostructures. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 2315-2328.  | 1.5 | 4         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 217 | Rare-earth oxide superlattices on Si(1 1 1). Journal of Crystal Growth, 2011, 323, 95-98.  | 1.5 | 4         |
| 218 | Interface properties of (In,Ga)As/GaAs quantum wells grown by solid-phase epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B108.   | 1.2 | 4         |
| 219 | Strain-induced composition limitation in nitrogen $\delta$ -doped (In,Ga)As/GaAs quantum wells. Applied Physics Letters, 2012, 100, 171906.  | 3.3 | 4         |
| 220 | E-beam nano-patterning for the ordered growth of GaN/InGaN nanorods. Microelectronic Engineering, 2012, 98, 374-377.   | 2.4 | 4         |
| 221 | Atomistic structure and energetics of GdN clusters in Gd-doped GaN. Acta Materialia, 2014, 76, 87-93.  | 7.9 | 4         |
| 222 | Liquid-solid phase transition of Ge-Sb-Te alloy observed by in-situ transmission electron microscopy. Ultramicroscopy, 2017, 178, 27-32.   | 1.9 | 4         |
| 223 | Transmission electron microscopy of Ga(Sb, Bi)/GaSb quantum wells with varying Bi content and quantum well thickness. Semiconductor Science and Technology, 2018, 33, 094006.  | 2.0 | 4         |
| 224 | Toward heterostructured transition metal hybrids with highly promoted electrochemical hydrogen evolution. RSC Advances, 2019, 9, 19924-19929.  | 3.6 | 4         |
| 225 | Application of electron tomography for comprehensive determination of III-V interface properties. Ultramicroscopy, 2021, 224, 113261.  | 1.9 | 4         |
| 226 | Ordered structure of $\text{FeGe}_2$ formed during solid-phase epitaxy. Physical Review Materials, 2018, 2, .  | 2.4 | 4         |
| 227 | In-situ control during molecular beam epitaxy: impurity incorporation and dissimilar materials epitaxial growth. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 75, 157-165.                      | 3.5 | 3         |
| 228 | Characterization of the GaN/GaAs/GaN structure grown by molecular beam epitaxy. Solid-State Electronics, 2003, 47, 539-542.  | 1.4 | 3         |
| 229 | On the growth conditions of $5 \times 10^{-4}$ m well-doped AlGaAs/AlAs/GaAs infrared detectors and its relation to the photovoltaic effect studied by transmission electron microscopy. Infrared Physics and Technology, 2003, 44, 391-398. | 2.9 | 3         |
| 230 | Vertical composition fluctuations in (Ga,In)(N,As) quantum wells grown on vicinal (111)B GaAs. Journal of Physics and Chemistry of Solids, 2008, 69, 343-346.  | 4.0 | 3         |
| 231 | Composition fluctuations and clustering in (Ga,In)(N,As)/GaAs(001) heterostructures studied by analytical transmission electron microscopy. Journal of Physics and Chemistry of Solids, 2008, 69, 335-342.                                   | 4.0 | 3         |
| 232 | The role of Sb and N ions on the morphology and localization of (Ga,In) (N,As) quantum wells. Journal of Crystal Growth, 2009, 311, 1728-1732.   | 1.5 | 3         |
| 233 | Electron tomography of (In,Ga)N insertions in GaN nanocolumns grown on semi-polar (112 $\bar{1}$ ,2) GaN templates. APL Materials, 2015, 3, 036102.  | 5.1 | 3         |
| 234 | Morphological and chemical instabilities of nitrogen delta-doped GaAs/(Al, Ga)As quantum wells. Applied Physics Letters, 2017, 110, 201906.  | 3.3 | 3         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | <i>In situ</i> transmission electron microscopy of solid phase epitaxy of Ge on Fe <sub>3</sub> Si. Semiconductor Science and Technology, 2019, 34, 124004.  | 2.0 | 3         |
| 236 | High carbon doping of Ga <sub>1-x</sub> In <sub>x</sub> As (x ≈ 0.01) grown by molecular beam epitaxy. Journal of Crystal Growth, 1995, 150, 251-255.  | 1.5 | 2         |
| 237 | Luminescence and Morphological Properties of GaN Layers Grown on SiC/Si(111) Substrates. Physica Status Solidi A, 2002, 192, 401-406.  | 1.7 | 2         |
| 238 | Arsenic incorporation and its influence on microstructure of wurtzite GaN grown by molecular-beam epitaxy. Journal of Applied Physics, 2003, 94, 7193-7200.  | 2.5 | 2         |
| 239 | Anisotropic properties of MOVPE-grown m-plane GaN layers on LiAlO <sub>2</sub> substrates. Physica Status Solidi (B): Basic Research, 2010, 247, 1750-1752.  | 1.5 | 2         |
| 240 | Atomic Configuration of the MnAs/GaAs (110) Interface Analyzed by High-Resolution Electron Microscopy. Journal of Physical Chemistry C, 2011, 115, 529-533.  | 3.1 | 2         |
| 241 | Atomic interface structure of bixbyite rare-earth sesquioxides grown epitaxially on Si(111). Journal Physics D: Applied Physics, 2012, 45, 295302.   | 2.8 | 2         |
| 242 | Bowling effect in elastic constants of dilute Ga(As,N) alloys. Applied Physics Letters, 2016, 108, .   | 3.3 | 2         |
| 243 | Diffraction at GaAs/Fe <sub>3</sub> Si core/shell nanowires: The formation of nanofacets. AIP Advances, 2016, 6, .   | 1.3 | 2         |
| 244 | Nucleation Chronology and Electronic Properties of InAs <sub>1-x</sub> Sb <sub>x</sub> P <sub>y</sub> Graded Composition Quantum Dots Grown on an InAs(100) Substrate. ACS Applied Electronic Materials, 2020, 2, 646-650. | 4.3 | 2         |
| 245 | Interface Recombination in Ga- and N-Polar GaN/(Al,Ga)N Quantum Wells Grown by Molecular Beam Epitaxy. Physical Review Applied, 2022, 17, .  | 3.8 | 2         |
| 246 | 3D Display and Analysis of Strain Fields at Heterointerfaces. Microscopy and Microanalysis, 2003, 9, 746-747.  | 0.4 | 1         |
| 247 | Axial InAs/GaAs heterostructures on silicon in a nanowire geometry. Nanotechnology, 2014, 25, 485602.  | 2.6 | 1         |
| 248 | Structural properties of Co <sub>2</sub> TiSi films on GaAs(001). Journal of Applied Physics, 2016, 120, .   | 2.5 | 1         |
| 249 | Strain dynamics during La <sub>2</sub> O <sub>3</sub> /Lu <sub>2</sub> O <sub>3</sub> superlattice and alloy formation. Journal of Applied Physics, 2016, 119, 215301.   | 2.5 | 1         |
| 250 | Growth of GaP and AlGaP on GaP(111)B using gas-source molecular-beam-epitaxy. Journal of Crystal Growth, 2017, 477, 91-96.   | 1.5 | 1         |
| 251 | Supernormal hardness increase of dilute Ga(As, N) thin films. Journal of Applied Physics, 2017, 121, 095105.   | 2.5 | 1         |
| 252 | Manifestation of axiotaxy induced by the (10.4) plane in high-temperature-grown bismuth telluride films on InP(111). CrystEngComm, 2018, 20, 983-989.  | 2.6 | 1         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 253 | GaSbBi Alloys and Heterostructures: Fabrication and Properties. Springer Series in Materials Science, 2019, , 125-161.   | 0.6 | 1         |
| 254 | Lattice matched Volmer-Weber growth of Fe <sub>3</sub> Si on GaAs(001)-the influence of the growth rate. Semiconductor Science and Technology, 2019, 34, 124002.                         | 2.0 | 1         |
| 255 | Drastic Effect of Sequential Deposition Resulting from Flux Directionality on the Luminescence Efficiency of Nanowire Shells. ACS Applied Materials & Interfaces, 2021, 13, 50220-50227. | 8.0 | 1         |
| 256 | Atomic hydrogen assisted molecular beam epitaxy on patterned GaAs (311)A substrates: Formation of highly uniform quantum-dot arrays. Journal of Electronic Materials, 1998, 27, 38-42.   | 2.2 | 0         |
| 257 | Semiconductor Heterointerfaces Prepared by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2004, 10, 298-299.  | 0.4 | 0         |
| 258 | Preface: phys. stat. sol. (b) 244/8. Physica Status Solidi (B): Basic Research, 2007, 244, 2679-2679.  | 1.5 | 0         |
| 259 | Distribution of Mn in ferromagnetic (In,Mn)Sb films grown on (001) GaAs using MBE. Journal of Crystal Growth, 2011, 323, 340-343.  | 1.5 | 0         |
| 260 | <i>In Situ</i> Transmission Electron Microscopy of Disorder-Order Transition in Epitaxially Stabilized FeGe <sub>2</sub> . Journal of Physical Chemistry C, 2021, 125, 2779-2784.        | 3.1 | 0         |
| 261 | Heteroepitaxy of Cubic GaN. Journal De Physique III, 1997, 7, 2309-2316.   | 0.3 | 0         |