

# Andrew G Norman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/654754/publications.pdf>

Version: 2024-02-01

189  
papers

6,092  
citations

94415

37  
h-index

82542

72  
g-index

191  
all docs

191  
docs citations

191  
times ranked

6576  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | PbTe Colloidal Nanocrystals: Synthesis, Characterization, and Multiple Exciton Generation. Journal of the American Chemical Society, 2006, 128, 3241-3247.   | 13.7 | 660       |
| 2  | Nanocrystalline TiO <sub>2</sub> Solar Cells Sensitized with InAs Quantum Dots. Journal of Physical Chemistry B, 2006, 110, 25451-25454.   | 2.6  | 443       |
| 3  | 40.8% efficient inverted triple-junction solar cell with two independently metamorphic junctions. Applied Physics Letters, 2008, 93, .   | 3.3  | 433       |
| 4  | Six-junction III-V solar cells with 47.1% conversion efficiency under 143% Suns concentration. Nature Energy, 2020, 5, 326-335.  | 39.5 | 408       |
| 5  | An artificial interphase enables reversible magnesium chemistry in carbonate electrolytes. Nature Chemistry, 2018, 10, 532-539.  | 13.6 | 347       |
| 6  | Theoretical and experimental examination of the intermediate-band concept for strain-balanced (In,Ga)As/Ga(As,P) quantum dot solar cells. Physical Review B, 2008, 78, .   | 3.2  | 215       |
| 7  | Combinatorial insights into doping control and transport properties of zinc tin nitride. Journal of Materials Chemistry C, 2015, 3, 11017-11028.   | 5.5  | 128       |
| 8  | Transmission electron microscope and transmission electron diffraction observations of alloy clustering in liquid-phase epitaxial (001) GaInAsP layers. Journal of Applied Physics, 1985, 57, 4715-4720.   | 2.5  | 114       |
| 9  | Mechanism for CuPt-type ordering in mixed III-V epitaxial layers. Journal of Crystal Growth, 1994, 140, 249-263.   | 1.5  | 107       |
| 10 | Observation of {111} ordering and [110] modulation in molecular beam epitaxial GaAs <sub>1-y</sub> Sb <sub>y</sub> layers: Possible relationship to surface reconstruction occurring during layer growth. Journal of Applied Physics, 1990, 67, 2310-2319. | 2.5  | 96        |
| 11 | BGaInAs alloys lattice matched to GaAs. Applied Physics Letters, 2000, 76, 1443-1445.  | 3.3  | 94        |
| 12 | Tandem Heterogeneous Catalysis for Polyethylene Depolymerization via an Olefin-Intermediate Process. ACS Sustainable Chemistry and Engineering, 2021, 9, 623-628.  | 6.7  | 85        |
| 13 | Effects of Disorder on Carrier Transport in $\text{Cu}_{1-x}\text{Mn}_x\text{Sb}_2\text{S}_6$ . Physical Review Applied, 2015, 4, .  | 3.8  | 73        |
| 14 | Structural studies of natural superlattices in group III-V alloy epitaxial layers. Semiconductor Science and Technology, 1993, 8, S9-S15.  | 2.0  | 63        |
| 15 | Epitaxial growth of BGaAs and BGaInAs by MOCVD. Journal of Crystal Growth, 2001, 225, 372-376.   | 1.5  | 60        |
| 16 | Lattice-mismatched GaAsP Solar Cells Grown on Silicon by OMVPE. , 2006, , .  |      | 60        |
| 17 | Molecular beam epitaxial growth of InAsSb strained layer superlattices. Can nature do it better?. Applied Physics Letters, 1991, 59, 3324-3326.  | 3.3  | 59        |
| 18 | Three-dimensional electronic resistivity mapping of solid electrolyte interphase on Si anode materials. Nano Energy, 2019, 55, 477-485.  | 16.0 | 56        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Electronic structure of self-organized InAs/GaAs quantum dots bounded by {136} facets. Physical Review B, 2000, 61, 2784-2793.  | 3.2  | 53        |
| 20 | Atomic ordering and phase separation in MBE GaAs <sub>1-x</sub> Bix. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 03C121.   | 1.2  | 53        |
| 21 | Dielectric function spectra and critical-point energies of Cu <sub>2</sub> ZnSnSe <sub>4</sub> from 0.5 to 9.0 eV. Journal of Applied Physics, 2012, 111, .   | 2.5  | 53        |
| 22 | Growth of antiphase-domain-free GaP on Si substrates by metalorganic chemical vapor deposition using an <i>in situ</i> AsH <sub>3</sub> surface preparation. Applied Physics Letters, 2015, 107, .                              | 3.3  | 51        |
| 23 | Nanocomposite Counter Electrode Materials for Electrochromic Windows. Journal of the Electrochemical Society, 2010, 157, H328.  | 2.9  | 49        |
| 24 | Solar energy conversion properties and defect physics of ZnSiP <sub>2</sub> . Energy and Environmental Science, 2016, 9, 1031-1041.   | 30.8 | 49        |
| 25 | Atomic ordering and domain structures in metal organic chemical vapor deposition grown InGaAs (001) layers. Journal of Applied Physics, 1994, 75, 7852-7865.  | 2.5  | 48        |
| 26 | 4-11 $\mu$ m infrared emission and 300 K light emitting diodes from arsenic-rich InAs <sub>1-x</sub> Sbx strained layer superlattices. Semiconductor Science and Technology, 1995, 10, 1177-1180.                               | 2.0  | 48        |
| 27 | Optimization of crystalline tungsten oxide nanoparticles for improved electrochromic applications. Solid State Ionics, 2007, 178, 895-900.  | 2.7  | 48        |
| 28 | Atomic ordering in molecular beam epitaxial InAs <sub>y</sub> Sb <sub>1-y</sub> natural strained layer superlattices and homogeneous layers. Applied Physics Letters, 1994, 64, 3593-3595.                                      | 3.3  | 47        |
| 29 | Atom Probe Analysis of III-V and Si-Based Semiconductor Photovoltaic Structures. Microscopy and Microanalysis, 2007, 13, 493-502.   | 0.4  | 47        |
| 30 | High-efficiency inverted metamorphic 1.7/1.1 eV GaInAsP/GaInAs dual-junction solar cells. Applied Physics Letters, 2018, 112, .   | 3.3  | 47        |
| 31 | Strain-dependent morphology of spontaneous lateral composition modulations in (AlAs) <sub>m</sub> (InAs) <sub>n</sub> short-period superlattices grown by molecular beam epitaxy. Applied Physics Letters, 1998, 73, 1844-1846. | 3.3  | 45        |
| 32 | Characterizing composition modulations in InAs/AlAs short-period superlattices. Physical Review B, 1999, 60, 13619-13635.   | 3.2  | 45        |
| 33 | Direct measurement of polarization resolved transition dipole moment in InGaAs/GaAs quantum dots. Applied Physics Letters, 2003, 82, 4552-4554.   | 3.3  | 45        |
| 34 | In situ stress measurement for MOVPE growth of high efficiency lattice-mismatched solar cells. Journal of Crystal Growth, 2008, 310, 2339-2344.   | 1.5  | 43        |
| 35 | Understanding the charge transport mechanisms through ultrathin SiO <sub>2</sub> layers in passivated contacts for high-efficiency silicon solar cells. Applied Physics Letters, 2019, 114, .                                   | 3.3  | 41        |
| 36 | Selective and non-planar epitaxy of InP, GaInAs and GaInAsP using low pressure MOCVD. Journal of Crystal Growth, 1992, 124, 249-254.  | 1.5  | 40        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Use of a GaAsSb buffer layer for the formation of small, uniform, and dense InAs quantum dots. Applied Physics Letters, 2010, 96, .  | 3.3 | 40        |
| 38 | Lattice-Mismatched 0.7-eV GaInAs Solar Cells Grown on GaAs Using GaInP Compositionally Graded Buffers. IEEE Journal of Photovoltaics, 2014, 4, 190-195.  | 2.5 | 39        |
| 39 | Transmission electron microscopy and transmission electron diffraction structural studies of heteroepitaxial InAs <sub>1-x</sub> Sb <sub>x</sub> molecular beam epitaxial layers. Journal of Applied Physics, 1993, 73, 8227-8236. | 2.5 | 38        |
| 40 | Midinfrared picosecond spectroscopy studies of Auger recombination in InSb. Physical Review B, 1995, 52, 2516-2521.  | 3.2 | 38        |
| 41 | Optical anisotropy and charge-transfer transition energies in BiFeO <sub>3</sub> from 1.0 to 5.5 eV. Physical Review B, 2011, 83, .  | 3.2 | 38        |
| 42 | Efficient Photoinduced Charge Injection from Chemical Bath Deposited CdS into Mesoporous TiO <sub>2</sub> Probed with Time-Resolved Microwave Conductivity. Journal of Physical Chemistry C, 2008, 112, 7742-7749.                 | 3.1 | 35        |
| 43 | Laterally modulated composition profiles in AlAs/InAs short-period superlattices. Journal of Applied Physics, 1998, 84, 6088-6094.   | 2.5 | 34        |
| 44 | Ge-related faceting and segregation during the growth of metastable (GaAs) <sub>1-x</sub> (Ge) <sub>2x</sub> alloy layers by metal-organic vapor-phase epitaxy. Applied Physics Letters, 1999, 74, 1382-1384.                      | 3.3 | 34        |
| 45 | Bimodal size distribution of self-assembled In <sub>x</sub> Ga <sub>1-x</sub> As quantum dots. Physical Review B, 2002, 66, .  | 3.2 | 34        |
| 46 | Raman scattering in InAs <sub>1-x</sub> Sb <sub>x</sub> alloys grown on GaAs by molecular beam epitaxy. Semiconductor Science and Technology, 1992, 7, 567-570.  | 2.0 | 32        |
| 47 | Spectral optical properties of Cu <sub>2</sub> ZnSnS <sub>4</sub> thin film between 073 and 65 eV. Optics Express, 2012, 20, A327.   | 3.4 | 32        |
| 48 | Control of misfit dislocation glide plane distribution during strain relaxation of CuPt-ordered GaInAs and GaInP. Journal of Applied Physics, 2012, 112, 023520.   | 2.5 | 32        |
| 49 | GaSb/InGaAs quantum dot/well hybrid structure active regions in solar cells. Solar Energy Materials and Solar Cells, 2013, 114, 165-171.   | 6.2 | 31        |
| 50 | Carrier-selective, passivated contacts for high efficiency silicon solar cells based on transparent conducting oxides. , 2014, , .   |     | 31        |
| 51 | Nanoscale insight into the p-n junction of alkali-incorporated Cu(In,Ga)Se <sub>2</sub> solar cells. Progress in Photovoltaics: Research and Applications, 2017, 25, 764-772.  | 8.1 | 31        |
| 52 | The characterisation of Ga <sub>1-x</sub> In <sub>x</sub> As, Al <sub>1-x</sub> In <sub>x</sub> As and InP epitaxial layers prepared by metal organic chemical vapour deposition. Journal of Crystal Growth, 1984, 68, 319-325.    | 1.5 | 29        |
| 53 | Initiation and evolution of phase separation in heteroepitaxial InAlAs films. Applied Physics Letters, 2002, 80, 3292-3294.  | 3.3 | 29        |
| 54 | Temperature dependence of the band gap of GaAsSb epilayers. Journal of Applied Physics, 2002, 92, 6939-6941.   | 2.5 | 28        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 55 | Enhanced Current Collection in 1.7 eV GaInAsP Solar Cells Grown on GaAs by Metalorganic Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2017, 7, 927-933.   | 2.5  | 26        |
| 56 | Investigating PID shunting in polycrystalline silicon modules via multiscale, multitechnique characterization. Progress in Photovoltaics: Research and Applications, 2018, 26, 377-384.   | 8.1  | 26        |
| 57 | Microscopic Observation of Solid Electrolyte Interphase Bilayer Inversion on Silicon Oxide. ACS Energy Letters, 2020, 5, 3657-3662.   | 17.4 | 26        |
| 58 | Theoretical and experimental study of highly textured GaAs on silicon using a graphene buffer layer. Journal of Crystal Growth, 2015, 425, 268-273.   | 1.5  | 25        |
| 59 | Carrier Selective, Passivated Contacts for High Efficiency Silicon Solar Cells based on Transparent Conducting Oxides. Energy Procedia, 2014, 55, 733-740.  | 1.8  | 24        |
| 60 | Heteroepitaxial Integration of ZnGeN <sub>2</sub> on GaN Buffers Using Molecular Beam Epitaxy. Crystal Growth and Design, 2020, 20, 1868-1875.  | 3.0  | 24        |
| 61 | CuPt ordering in high bandgap GaIn <sub>1-x</sub> P alloys on relaxed GaAsP step grades. Journal of Applied Physics, 2009, 106, .   | 2.5  | 22        |
| 62 | Comparison of hydrazine, dimethylhydrazine, and t-butylamine nitrogen sources for MOVPE growth of GaInNAs for solar cells. Journal of Crystal Growth, 2000, 208, 11-17.   | 1.5  | 21        |
| 63 | Observation of large optical anisotropy and valence band splitting in AlInAs self-assembled lateral quantum wells. Applied Physics Letters, 2002, 80, 243-245.  | 3.3  | 21        |
| 64 | Complex dielectric function and refractive index spectra of epitaxial CdO thin film grown on r-plane sapphire from 0.74 to 6.45 eV. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2010, 28, 1120-1124. | 1.2  | 21        |
| 65 | Growth of lattice-matched GaInAsP grown on vicinal GaAs(001) substrates within the miscibility gap for solar cells. Journal of Crystal Growth, 2017, 458, 1-7.  | 1.5  | 21        |
| 66 | Intrinsic Properties of Individual Inorganic Silicon Electrolyte Interphase Constituents. ACS Applied Materials & Interfaces, 2019, 11, 46993-47002.  | 8.0  | 21        |
| 67 | Lateral composition modulation in (InAs) <sub>n</sub> /(AlAs) <sub>m</sub> short-period superlattices investigated by high-resolution x-ray scattering. Physical Review B, 2002, 66, .  | 3.2  | 20        |
| 68 | Ordering-enhanced dislocation glide in III-V alloys. Journal of Applied Physics, 2013, 114, .   | 2.5  | 20        |
| 69 | III-V/Si wafer bonding using transparent, conductive oxide interlayers. Applied Physics Letters, 2015, 106, .   | 3.3  | 20        |
| 70 | Interband magneto-optics of InAs <sub>1-x</sub> Sb <sub>x</sub> . Semiconductor Science and Technology, 1992, 7, 900-906.   | 2.0  | 19        |
| 71 | 0.7-eV GaInAs Junction for a GaInP/GaAs/GaInAs(1eV)/GaInAs(0.7eV) Four-Junction Solar Cell. , 2006, , .   |      | 19        |
| 72 | Development of ZnSiP <sub>2</sub> for Si-Based Tandem Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 17-21.   | 2.5  | 19        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Evolution of solid electrolyte interphase and active material in the silicon wafer model system. Journal of Power Sources, 2021, 482, 228946.  | 7.8 | 19        |
| 74 | Performance and reliability of $\text{In}^{2-}\text{Ga}_2\text{O}_3$ Schottky barrier diodes at high temperature. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .                                | 2.1 | 19        |
| 75 | Intragrain defects in polycrystalline silicon thin-film solar cells on glass by aluminum-induced crystallization and subsequent epitaxy. Thin Solid Films, 2008, 516, 6409-6412.   | 1.8 | 18        |
| 76 | Growth of amorphous and epitaxial $\text{ZnSiP}_2$ "Si alloys on Si. Journal of Materials Chemistry C, 2018, 6, 2696-2703.   | 5.5 | 18        |
| 77 | Atomic Ordering and Alloy Clustering in MBE-Grown $\text{InAs}_y\text{Sb}_{1-y}$ Epitaxial Layers. Materials Research Society Symposia Proceedings, 1989, 163, 907.  | 0.1 | 17        |
| 78 | Growth and assessment of $\text{InGaAs/InGaAlAs/InP}$ multiple quantum well lasers. Journal of Crystal Growth, 1991, 107, 784-789.   | 1.5 | 17        |
| 79 | Improved quantum dot stacking for intermediate band solar cells using strain compensation. Nanotechnology, 2014, 25, 445402.   | 2.6 | 17        |
| 80 | Atomic ordering-induced band gap reductions in $\text{GaAsSb}$ epilayers grown by molecular beam epitaxy. Journal of Applied Physics, 2005, 97, 063701.  | 2.5 | 16        |
| 81 | Synthesis and Characterization of $(\text{Sn,Zn})\text{O}$ Alloys. Chemistry of Materials, 2016, 28, 7765-7772.  | 6.7 | 16        |
| 82 | Study of misfit dislocations by EBIC, CL and HRTEM in $\text{GaAs/InGaAs}$ lattice-strained multi-quantum well p-n solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 42, 43-51. | 3.5 | 15        |
| 83 | Effect of surface steps on the microstructure of lateral composition modulation. Applied Physics Letters, 2000, 77, 669-671.   | 3.3 | 15        |
| 84 | Spontaneous lateral phase separation of $\text{AlInP}$ during thin film growth and its effect on luminescence. Journal of Applied Physics, 2015, 118, .  | 2.5 | 15        |
| 85 | Accelerating Hydrogen Absorption and Desorption Rates in Palladium Nanocubes with an Ultrathin Surface Modification. Nano Letters, 2021, 21, 9131-9137.  | 9.1 | 15        |
| 86 | The shape of self-assembled $\text{InAs}$ islands grown by molecular beam epitaxy. Journal of Electronic Materials, 1999, 28, 481-485.   | 2.2 | 14        |
| 87 | Doping dependence and anisotropy of minority electron mobility in molecular beam epitaxy-grown p type $\text{GaInP}$ . Applied Physics Letters, 2014, 105, .   | 3.3 | 13        |
| 88 | Application of position sensitive atom probe to the study of the microchemistry and morphology of quantum well interfaces. Applied Physics Letters, 1989, 54, 1555-1557.   | 3.3 | 12        |
| 89 | Inverted $\text{GaInP} / (\text{In})\text{GaAs} / \text{InGaAs}$ triple-junction solar cells with low-stress metamorphic bottom junctions. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .              | 0.0 | 12        |
| 90 | Electrodeposited Biaxially Textured Buffer Layers for YBCO Superconductors. IEEE Transactions on Applied Superconductivity, 2009, 19, 3451-3454.   | 1.7 | 12        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | The Nature and Origin of Lateral Composition Modulations in Short-Period Strained-Layer Superlattices. Materials Research Society Symposia Proceedings, 1999, 583, 297.  | 0.1  | 11        |
| 92  | Quadruple-period ordering along [110] in aGaAs <sub>0.87</sub> Sb <sub>0.13</sub> alloy. Physical Review B, 2001, 63, .  | 3.2  | 11        |
| 93  | Transmission electron microscope study on electrodeposited Gd <sub>2</sub> O <sub>3</sub> and Gd <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> buffer layers for YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> superconductors. Physica C: Superconductivity and Its Applications, 2008, 468, 1092-1096. | 1.2  | 11        |
| 94  | Low temperature Si/SiO <sub>2</sub> /Si passivated contacts to n-type Si solar cells. , 2014, , .  |      | 11        |
| 95  | Implementation of tunneling pasivated contacts into industrially relevant n-Cz Si solar cells. , 2015, , .   |      | 11        |
| 96  | Studying Perovskite-based Solar Cells with Correlative In-Situ Microscopy. Microscopy and Microanalysis, 2015, 21, 969-970.  | 0.4  | 11        |
| 97  | Optical and Structural Properties of High-Efficiency Epitaxial Cu(In,Ga)Se <sub>2</sub> Grown on GaAs. ACS Applied Materials & Interfaces, 2020, 12, 3150-3160.  | 8.0  | 11        |
| 98  | Sputtered p-Type Cu <sub>x</sub> Zn <sub>1-x</sub> S Back Contact to CdTe Solar Cells. ACS Applied Energy Materials, 2020, 3, 5427-5438.   | 5.1  | 11        |
| 99  | Epitaxial Dirac Semimetal Vertical Heterostructures for Advanced Device Architectures. Advanced Functional Materials, 2022, 32, .  | 14.9 | 11        |
| 100 | Observation of coupled LO phonon-intersubband plasmon modes in GaSb/InAs quantum wells by resonant Raman scattering. Semiconductor Science and Technology, 1993, 8, 2205-2209.   | 2.0  | 10        |
| 101 | Optical properties of spontaneous lateral composition modulation in AlAs/InAs short-period superlattices. Applied Physics Letters, 2000, 77, 1765.   | 3.3  | 10        |
| 102 | Above-band-gap dielectric functions of ZnGeAs <sub>2</sub> . Ellipsometric measurements and quasiparticle self-consistent mathvarian   | 3.2  | 10        |
| 103 | Development of lattice-matched 1.7 eV GaInAsP solar cells grown on GaAs by MOVPE. , 2016, , .  |      | 10        |
| 104 | Surfaces and interfaces governing the OMVPE growth of APD-free GaP on AsH <sub>3</sub> -cleaned vicinal Si(100). Journal of Crystal Growth, 2016, 452, 235-239.  | 1.5  | 10        |
| 105 | Reduced dislocation density in Ga <sub>x</sub> In <sub>1-x</sub> compositionally graded buffer layers through engineered glide plane switch. Journal of Crystal Growth, 2017, 464, 20-27.  | 1.5  | 10        |
| 106 | Improving Interface Stability of Si Anodes by Mg Coating in Li-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 11534-11539.  | 5.1  | 10        |
| 107 | High-Temperature Nucleation of GaP on V-Grooved Si. Crystal Growth and Design, 2020, 20, 6745-6751.  | 3.0  | 10        |
| 108 | Mg <sub>x</sub> Zn <sub>1-x</sub> O contact to CuGa <sub>3</sub> Se <sub>5</sub> absorber for photovoltaic and photoelectrochemical devices. JPhys Energy, 2021, 3, 024001.  | 5.3  | 10        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 109 | Multiscale Characterization of Photovoltaic Modules—Case Studies of Contact and Interconnect Degradation. IEEE Journal of Photovoltaics, 2022, 12, 62-72.  | 2.5 | 10        |
| 110 | Resonance Raman scattering studies of composition-modulated GaP/InP short-period superlattices. Physical Review B, 1999, 60, 4883-4888.  | 3.2 | 9         |
| 111 | Title is missing!. Journal of Materials Science: Materials in Electronics, 1999, 10, 191-197.  | 2.2 | 9         |
| 112 | Comparison of thin epitaxial film silicon photovoltaics fabricated on monocrystalline and polycrystalline seed layers on glass. Progress in Photovoltaics: Research and Applications, 2015, 23, 909-917.                 | 8.1 | 9         |
| 113 | Magnetotransport measurements on InAs-GaSb quantum wells with the application of hydrostatic pressure. Journal of Physics and Chemistry of Solids, 1995, 56, 445-451.  | 4.0 | 8         |
| 114 | Growth Model for Atomic Ordering: The Case for Quadruple-Period Ordering in GaAsSb Alloys. Physical Review Letters, 2003, 90, 026102.  | 7.8 | 8         |
| 115 | Indium zinc oxide mediated wafer bonding for III-V/Si tandem solar cells. , 2015, , .  |     | 8         |
| 116 | Large Area Atomically Flat Surfaces via Exfoliation of Bulk Bi <sub>2</sub> Se <sub>3</sub> Single Crystals. Chemistry of Materials, 2017, 29, 8472-8477.  | 6.7 | 8         |
| 117 | Surfactant-induced chemical ordering of GaAsN:Bi. Applied Physics Letters, 2018, 113, .  | 3.3 | 8         |
| 118 | Characterization and modeling of reverse-bias breakdown in Cu(In,Ga)Se <sub>2</sub> photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2019, 27, 812-823.                                       | 8.1 | 8         |
| 119 | Direct manifestation of the Fermi pressure in a two-dimensional electron system. Physical Review B, 1996, 54, 7651-7653.   | 3.2 | 7         |
| 120 | Intersubband Raman spectroscopy of two-dimensional electron gases in GaSb/InAs quantum wells. Semiconductor Science and Technology, 1996, 11, 1137-1145.   | 2.0 | 7         |
| 121 | X-ray analysis of spontaneous lateral modulation in (InAs) <sub>n</sub> (AlAs) <sub>m</sub> short-period superlattices. Applied Physics Letters, 2001, 78, 219-221.  | 3.3 | 7         |
| 122 | InAlAs photovoltaic cell design for high device efficiency. Progress in Photovoltaics: Research and Applications, 2017, 25, 706-713.   | 8.1 | 7         |
| 123 | Large-Area Material and Junction Damage in c-Si Solar Cells by Potential-Induced Degradation. Solar Rrl, 2019, 3, 1800303.   | 5.8 | 7         |
| 124 | Formation of InAs/GaAs quantum dots by dewetting during cooling. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1489. | 1.6 | 6         |
| 125 | Selective area growth of GaAs on Si patterned using nanoimprint lithography. , 2016, , .   |     | 6         |
| 126 | Enabling low-cost III-V/Si integration through nucleation of GaP on v-grooved Si substrates. , 2018, , .   |     | 6         |



| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 127 | The control and evaluation of blue shift in GaInAs/GaInAsP multiple quantum well structures for integrated lasers and Stark-effect modulators. Semiconductor Science and Technology, 1993, 8, 1156-1165.                                 | 2.0 | 5         |
| 128 | Interband and intersubband transitions in indium arsenide doping superlattices studied by absorption, nonlinear absorption and photoconductivity spectroscopies. Semiconductor Science and Technology, 1993, 8, S373-S379.               | 2.0 | 5         |
| 129 | Two-dimensional array of self-assembled AlInAs quantum wires. Applied Physics Letters, 2002, 81, 529-531.  | 3.3 | 5         |
| 130 | X-ray diffraction on laterally modulated $(\text{InAs})_n \cdot (\text{AlAs})_m$ short-period superlattices. Journal of Applied Physics, 2004, 96, 4833-4838.  | 2.5 | 5         |
| 131 | Coincident site lattice-matched InGaN on (111) spinel substrates. Applied Physics Letters, 2012, 100, 152106.  | 3.3 | 5         |
| 132 | Single crystal growth and phase stability of photovoltaic grade ZnSiP <sub>2</sub> by flux technique. , 2015, , .  |     | 5         |
| 133 | The evaluation and control of quantum wells and superlattices of III-V narrow gap semiconductors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 44, 260-265.                                 | 3.5 | 4         |
| 134 | Photoluminescence studies of lateral composition modulated short-period AlAs/InAs superlattices. Thin Solid Films, 1999, 357, 31-34.   | 1.8 | 4         |
| 135 | Optical properties of self-assembled lateral superlattices in AlInAs epitaxial layers and AlAs/InAs short-period superlattices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 88, 118-124.   | 3.5 | 4         |
| 136 | Modulated Structures and Atomic Ordering in InPySb <sub>1-y</sub> Layers Grown by Organometallic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2008, 47, 2209-2212.  | 1.5 | 4         |
| 137 | The influence of atomic ordering on strain relaxation during the growth of metamorphic solar cells. Journal of Physics: Conference Series, 2013, 471, 012006.  | 0.4 | 4         |
| 138 | Defect characterization in compositionally graded InGaAs layers on GaAs(001) grown by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1640-1643.  | 0.8 | 4         |
| 139 | Carrier-Transport Study of Gallium Arsenide Hillock Defects. Microscopy and Microanalysis, 2019, 25, 1160-1166.  | 0.4 | 4         |
| 140 | Application of templated vapor-liquid-solid growth to heteroepitaxy of InP on Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 013404.  | 2.1 | 4         |
| 141 | New quantum dot nanomaterials to boost solar energy harvesting. SPIE Newsroom, 0, , .  | 0.1 | 4         |
| 142 | High Mobility Cd <sub>3</sub> As <sub>2</sub> (112) on GaAs(001) Substrates Grown via Molecular Beam Epitaxy. ACS Applied Electronic Materials, 2022, 4, 729-734.  | 4.3 | 4         |
| 143 | Transmission electron microscopy and scanning transmission electron microscope analysis of the effects of thermal processing on the structural integrity of GaInAs/GaInAsP multilayers. Journal of Applied Physics, 1993, 73, 4297-4304. | 2.5 | 3         |
| 144 | Quantum transport in strained layer superlattices. Surface Science, 1994, 305, 337-342.  | 1.9 | 3         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 145 | Relationship between the lateral length and thickness of the platelets in naturally occurring strained layer superlattice structures. Journal of Applied Physics, 2000, 88, 5733-5736.                       | 2.5 | 3         |
| 146 | Growth of bulk and superlattice GaAsSb layers on InP. Journal of Materials Science Letters, 2001, 20, 363-366.   | 0.5 | 3         |
| 147 | Optical anisotropy of InGaAs $\tilde{\text{Ga}}(\text{As,P})$ quantum dots grown on GaAs (311)B substrates. Applied Physics Letters, 2007, 91, 223109.   | 3.3 | 3         |
| 148 | Oxidation and characterization of AlInP under light-soaked, damp heat conditions. , 2010, , .  |     | 3         |
| 149 | Atomic scale characterization of compound semiconductors using atom probe tomography. , 2011, , .  |     | 3         |
| 150 | Bulk defect generation during B-diffusion and oxidation of CZ wafers: Mechanism for degrading solar cell performance. , 2014, , .  |     | 3         |
| 151 | Wafer-Bonded AlGaAs//Si Dual-Junction Solar Cells. , 2017, , .   |     | 3         |
| 152 | Investigating PID Shunting in Polycrystalline Silicon Modules via Multi-Scale, Multi-Technique Characterization. , 2017, , .   |     | 3         |
| 153 | Photo- and electro-luminescence studies of uncooled arsenic-rich In(As,Sb) strained layer superlattice light-emitting diodes for the 4-12- $\frac{1}{4}$ m band. , 1995, , .                                 |     | 2         |
| 154 | Reciprocal-Space and Real-Space Analyses of Compositional Modulation in InAs/AlAs Short-Period Superlattices. Materials Research Society Symposia Proceedings, 1999, 583, 333.                               | 0.1 | 2         |
| 155 | Spontaneous lateral modulation in short-period superlattices investigated by grazing-incidence x-ray diffraction. Physical Review B, 2005, 72, .   | 3.2 | 2         |
| 156 | Single-crystalline aluminum grown on MgAl <sub>2</sub> O <sub>4</sub> spinel using molecular-beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C128. | 1.2 | 2         |
| 157 | Investigation of GaP/Si heteroepitaxy on MOCVD prepared Si(100) surfaces. , 2015, , .  |     | 2         |
| 158 | Amorphous sulfide heterostructure precursors prepared by radio frequency sputtering. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 051201.                       | 1.2 | 2         |
| 159 | Growth of GaAs on single-crystal layered-2D Bi <sub>2</sub> Se <sub>3</sub> . Journal of Crystal Growth, 2020, 534, 125457.  | 1.5 | 2         |
| 160 | Transmission Electron Microscopy and Transmission Electron Diffraction Studies of Atomic Ordering in Group III-V Compound Semiconductor Alloys. NATO ASI Series Series B: Physics, 1989, , 233-253.          | 0.2 | 2         |
| 161 | The Nature and Origin of Atomic Ordering in Group III-V Antimonide Semiconductor Alloys. , 2002, , 45-97.  |     | 2         |
| 162 | Modulated Contrast and Associated Diffracted Intensity of GaPySb <sub>1-y</sub> Layers Grown Using Organometallic Vapor Phase Epitaxy. Journal of the Korean Physical Society, 2008, 52, 471-475.            | 0.7 | 2         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Growth of bulk and superlattice GaAsSb layers on InP. Journal of Materials Science Letters, 2001, 20, 677-680.   | 0.5 | 1         |
| 164 | GaSb/InGaAs quantum dot-well solar cells. , 2013, , .  |     | 1         |
| 165 | Epitaxial growth of InGaAs on MgAl <sub>2</sub> O <sub>4</sub> spinel for one-sun photovoltaics. Journal of Crystal Growth, 2013, 363, 40-43.  | 1.5 | 1         |
| 166 | Analytical (S)TEM Studies of Defects Associated with PID in Stressed Si PV Modules. , 2017, , .  |     | 1         |
| 167 | Single crystalline substrates for III- V growth via exfoliation of bulk single crystals. , 2017, , .   |     | 1         |
| 168 | Insights into the Dynamic Interfacial and Bulk Composition of Copper-Modified, Hydrogen-Alloyed, Palladium Nanocubes under Electrocatalytic Conditions. Journal of Physical Chemistry C, 2021, 125, 15487-15495. | 3.1 | 1         |
| 169 | Nucleation of high-quality GaP on Si through v-groove Si substrates. , 2020, , .   |     | 1         |
| 170 | Position-Sensitive Atom Probe and Stem Analysis of the Microchemistry of GaInAs/Inp Quantum Wells. Materials Research Society Symposia Proceedings, 1989, 148, 377.  | 0.1 | 0         |
| 171 | Electronic structure and optical polarization anisotropy of self-organized InAs/GaAs quantum dots. , 1999, , .   |     | 0         |
| 172 | Profiling Composition Variations in Composition-Modulated GaP/InP Short-Period Superlattices Using Resonance Raman Scattering. Materials Research Society Symposia Proceedings, 1999, 583, 361.                  | 0.1 | 0         |
| 173 | X-Ray Characterization of Nanostructured Semiconductor Short-Period Superlattices. Materials Research Society Symposia Proceedings, 2002, 749, 1.  | 0.1 | 0         |
| 174 | Characterization of MOCVD lateral epitaxial overgrown III-V semiconductor layers on GaAs substrates. , 0, , .  |     | 0         |
| 175 | Quadruple-period ordering in MBE GaAsSb alloys. Materials Research Society Symposia Proceedings, 2003, 794, 49.  | 0.1 | 0         |
| 176 | Effects of Substrate Orientation on the Spontaneous Ordering of GaAsSb Epilayers Grown by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2003, 794, 1.                                 | 0.1 | 0         |
| 177 | Transient absorption for characterization of intermediate band solar cells. , 2010, , .  |     | 0         |
| 178 | Effects of substrate orientation on aluminum grown on MgAl <sub>2</sub> O <sub>4</sub> spinel using molecular beam epitaxy. Journal of Crystal Growth, 2011, 314, 298-301.                                       | 1.5 | 0         |
| 179 | Transient Absorption for Characterization of Quantum Dot Intermediate Band Solar Cells. Materials Research Society Symposia Proceedings, 2011, 1289, 402.  | 0.1 | 0         |
| 180 | Electron microscopy study of individual grain boundaries in Cu <sub>2</sub> ZnSnSe <sub>4</sub> thin films. , 2013, , .  |     | 0         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Minority carrier lifetimes in 1.0-eV p-In <sub>0.27</sub> Ga <sub>0.73</sub> As layers grown on GaAs substrates. , 2014, , .  |     | 0         |
| 182 | Low-temperature surface preparation and epitaxial growth of ZnS and Cu <sub>2</sub> ZnSnS <sub>4</sub> on ZnS(1 1 0) and GaP(1 0 0). Journal of Crystal Growth, 2017, 478, 89-95. | 1.5 | 0         |
| 183 | Cover Image, Volume 25, Issue 9. Progress in Photovoltaics: Research and Applications, 2017, 25, i.   | 8.1 | 0         |
| 184 | ZnSiP <sub>2</sub> Thin Film Growth for Si-Based Tandem Photovoltaics. , 2017, , .  |     | 0         |
| 185 | Measurement of TiO <sub>2</sub> /p-Si Selective Contact Performance Using a Heterojunction Bipolar Transistor with a Selective Contact Emitter. , 2017, , .                       |     | 0         |
| 186 | Cover Image, Volume 26, Issue 6. Progress in Photovoltaics: Research and Applications, 2018, 26, i-i.   | 8.1 | 0         |
| 187 | Surface conversion of single-crystal Bi <sub>2</sub> Se <sub>3</sub> to $\hat{\Gamma}^2$ -In <sub>2</sub> Se <sub>3</sub> . Journal of Crystal Growth, 2021, 573, 126306.         | 1.5 | 0         |
| 188 | Structural and chemical studies of novel 1-eV band gap solar cell materials lattice-matched to GaAs. , 2018, , 229-232.   |     | 0         |
| 189 | Templated Vapor-Liquid-Solid Epitaxy of III-V Semiconductors on Silicon. , 2020, , .  |     | 0         |