

# Kerstin Volz

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4529220/publications.pdf>

Version: 2024-02-01

170  
papers

2,987  
citations

172386  
29  
h-index

214721  
47  
g-index

173  
all docs

173  
docs citations

173  
times ranked

3080  
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective Effects of the Host Matrix in Hydrogenated InGaAsN Alloys: Toward an Integrated Matrix/Defect Engineering Paradigm. <i>Advanced Functional Materials</i> , 2022, 32, 2108862.	7.8	0
2	Room-temperature laser operation of a (Ga,In)As/Ga(As,Bi)/(Ga,In)As W-type laser diode. <i>Electronics Letters</i> , 2022, 58, 70-72.	0.5	3
3	A Dry-Processed Al <sub>2</sub> O <sub>3</sub> /LiAlO <sub>2</sub> Coating for Stabilizing the Cathode/Electrolyte Interface in High-Ni NCM-Based All-Solid-State Batteries. <i>Advanced Materials Interfaces</i> , 2022, 9, 2101428.	1.9	24
4	Effect of growth interruption on Ga(N, As)/Ga(As, Sb)/Ga(N, As) type-II- $\lambda$ -quantum well heterostructures. <i>Journal of Crystal Growth</i> , 2022, 582, 126501.	0.7	0
5	Separation of interface and substrate carrier dynamics at a heterointerface based on coherent phonons. <i>Physical Review B</i> , 2022, 105, .	1.1	1
6	Tracing Low Amounts of Mg in the Doped Cathode Active Material LiNiO <sub>2</sub> . <i>Journal of the Electrochemical Society</i> , 2022, 169, 030540.	1.3	15
7	Advanced Analytical Characterization of Interface Degradation in Ni-Rich NCM Cathode Co-Sintered with LATP Solid Electrolyte. <i>ACS Applied Energy Materials</i> , 2022, 5, 4651-4663.	2.5	10
8	White Light Generating Molecular Materials: Correlation Between the Amorphous/Crystalline Structure and Nonlinear Optical Properties. <i>ChemPhotoChem</i> , 2022, 6, .	1.5	0
9	Terahertz radiation from propagating acoustic phonons based on deformation potential coupling. <i>Optics Express</i> , 2022, 30, 23544.	1.7	2
10	Front Cover: White Light Generating Molecular Materials: Correlation Between the Amorphous/Crystalline Structure and Nonlinear Optical Properties ( <i>ChemPhotoChem</i> 6/2022). <i>ChemPhotoChem</i> , 2022, 6, .	1.5	0
11	Monitoring the thermally induced transition from sp <sup>3</sup> -hybridized into sp <sup>2</sup> -hybridized carbons. <i>Carbon</i> , 2021, 172, 214-227.	5.4	41
12	Angle-resolved STEM using an iris aperture: Scattering contributions and sources of error for the quantitative analysis in Si. <i>Ultramicroscopy</i> , 2021, 221, 113175.	0.8	8
13	Quantitative Characterization of Nanometer-Scale Electric Fields via Momentum-Resolved STEM. <i>Nano Letters</i> , 2021, 21, 2018-2025.	4.5	20
14	Comparison of carrier-recombination in Ga(As,Bi)/Ga(N,As)-type-II quantum wells and W-type heterostructures. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	6
15	Synthesis and Postprocessing of Single-Crystalline LiNi <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> for Solid-State Lithium-Ion Batteries with High Capacity and Long Cycling Stability. <i>Chemistry of Materials</i> , 2021, 33, 2624-2634.	3.2	38
16	In-situ biasing and temperature influence on the electric fields across GaAs based p-n junction via 4D STEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 2238-2239.	0.2	0
17	A robust technique to image all elements in LiNiO <sub>2</sub> cathode active material by 4D-STEM. <i>Microscopy and Microanalysis</i> , 2021, 27, 1446-1449.	0.2	0
18	Decomposition behavior of III/V semiconductor precursor gases in a closed gas cell in-situ TEM holder observed by mass spectrometry. <i>Microscopy and Microanalysis</i> , 2021, 27, 2220-2222.	0.2	0

#	ARTICLE	IF	CITATIONS
19	Formation mechanism of dominant kinks in GaP nanowires grown in an in-situ (S)TEM gas cell holder investigated by SPED and SNBED. Microscopy and Microanalysis, 2021, 27, 2228-2230.	0.2	0
20	Quantitative characterization of nanometer-scale electric fields via momentum-resolved STEM. Microscopy and Microanalysis, 2021, 27, 2206-2207.	0.2	0
21	Characterization of III/V Semiconductors on Silicon by Analyzing 4D-STEM Data with Convolutional Neural Networks. Microscopy and Microanalysis, 2021, 27, 450-452.	0.2	0
22	Analyzing Nanometer-Thin Cathode Particle Coatings for Lithium-Ion Batteries – The Example of $\text{TiO}_2$ on NCM622. ACS Applied Energy Materials, 2021, 4, 7168-7181.	2.5	11
23	Quantification of low-Z elements by energy-filtered scanning transmission electron microscopy. Microscopy and Microanalysis, 2021, 27, 1528-1529.	0.2	0
24	Optimization of imaging conditions for composition determination by annular dark field STEM. Ultramicroscopy, 2021, 230, 113387.	0.8	2
25	Stabilizing the Cathode/Electrolyte Interface Using a Dry-Processed Lithium Titanate Coating for All-Solid-State Batteries. Chemistry of Materials, 2021, 33, 6713-6723.	3.2	21
26	Amorphous Molecular Materials for Directed Supercontinuum Generation. ChemPhotoChem, 2021, 5, 1033-1041.	1.5	11
27	Optimized atomic layer deposition of homogeneous, conductive $\text{Al}_2\text{O}_3$ coatings for high-nickel NCM containing ready-to-use electrodes. Physical Chemistry Chemical Physics, 2021, 23, 6725-6737.	1.3	20
28	Understanding the formation of antiphase boundaries in layered oxide cathode materials and their evolution upon electrochemical cycling. Matter, 2021, 4, 3953-3966.	5.0	20
29	Revealing the Significance of Catalytic and Alkyl Exchange Reactions during GaAs and GaP Growth by Metal Organic Vapor Phase Epitaxy. ACS Omega, 2021, 6, 28229-28241.	1.6	1
30	Reaction of $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ and $\text{LiNi}_{0.6}\text{Co}_{0.2}\text{Mn}_{0.2}\text{O}_2$ in Co-Sintered Composite Cathodes for Solid-State Batteries. ACS Applied Materials & Interfaces, 2021, 13, 47488-47498.	4.0	20
31	Amorphous Molecular Materials for Directed Supercontinuum Generation. ChemPhotoChem, 2021, 5, 1029.	1.5	2
32	Type-II $\text{GaAs}_{1-x}\text{Bi}_x/\text{GaN}_y\text{As}_{1-y}$ "W" quantum wells for strain-compensated GaAs-based telecom lasers. , 2021, , .		0
33	Anomalous Angle-Dependent Magnetotransport Properties of Single InAs Nanowires. Nano Letters, 2020, 20, 618-624.	4.5	7
34	Giant Bowing of the Bandgap and Spin-Orbit Splitting in $\text{Ga}_{1-x}\text{Bi}_x$ Dilute Bismide Alloys. , 2020, , .		0
35	Decomposition Behavior of III/V Semiconductor Precursor Gases in In-situ TEM MOVPE Investigations Observed by Mass Spectrometry. Microscopy and Microanalysis, 2020, 26, 2408-2409.	0.2	0
36	Quantitative Simulation of Four-dimensional STEM Datasets. Microscopy and Microanalysis, 2020, 26, 250-251.	0.2	0

#	ARTICLE	IF	CITATIONS
37	Influence of plasmon excitations on atomic-resolution quantitative 4D scanning transmission electron microscopy. Scientific Reports, 2020, 10, 17890.	1.6	21
38	<i>In Situ</i> Monitoring of Thermally Induced Effects in Nickel-Rich Layered Oxide Cathode Materials at the Atomic Level. ACS Applied Materials & Interfaces, 2020, 12, 57047-57054.	4.0	16
39	Measuring Interatomic Bonding and Charge Redistributions in Defects by Combining 4D-STEM and STEM Multislice Simulations. Microscopy and Microanalysis, 2020, 26, 452-454.	0.2	1
40	Self-Assembly of Nanovoids in Si Microcrystals Epitaxially Grown on Deeply Patterned Substrates. Crystal Growth and Design, 2020, 20, 2914-2920.	1.4	2
41	Ga(N,P) Growth on Si and Decomposition Studies of the Nâ€P Precursor Di- <i>tert</i> -butylaminophosphane (DTBAP). Organometallics, 2020, 39, 1772-1781.	1.1	3
42	Epitaxial Growth and Structural Characterization of Ceria Deposited by Atomic Layer Deposition on High-Surface Porous Ytria-Stabilized Zirconia Thin Films. Crystal Growth and Design, 2020, 20, 2194-2201.	1.4	11
43	Progress in Sputter Growth of $\text{In}^{2+}\text{Ga}_2\text{O}_3$ by Applying Pulsed-Mode Operation. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1901009.	0.8	4
44	Visualization of Light Elements using 4D STEM: The Layeredâ€Rock Salt Phase Transition in $\text{LiNiO}_2$ Cathode Material. Advanced Energy Materials, 2020, 10, 2001026.	10.2	43
45	Advances in Epitaxial GaInP/GaAs/Si Triple Junction Solar Cells. , 2020, , .		3
46	Formation Mechanism of the Dominant Kinks in GaP Nanowires Grown in an In-situ (S)TEM Gas Cell Holder. Microscopy and Microanalysis, 2020, 26, 1432-1433.	0.2	0
47	Decomposition Mechanisms of Di- <i>tert</i> -butylaminoarsane (DTBAA). Organometallics, 2019, 38, 3181-3186.	1.1	4
48	Segregation at interfaces in (GaIn)As/Ga(AsSb)/(GaIn)As- quantum well heterostructures explored by atomic resolution STEM. Journal of Crystal Growth, 2019, 524, 125180.	0.7	7
49	MOVPE Growth and Device Applications of Ternary and Quaternary Dilute Bismide Alloys on GaAs Substrates. Springer Series in Materials Science, 2019, , 37-58.	0.4	2
50	Ge/SiGe parabolic quantum wells. Journal Physics D: Applied Physics, 2019, 52, 415105.	1.3	8
51	Composition determination for quaternary IIIâ€V semiconductors by aberration-corrected STEM. Ultramicroscopy, 2019, 206, 112814.	0.8	2
52	Metalorganic vapor phase epitaxy growth and characterization of quaternary (Ga,In)(As,Bi) on GaAs substrates. Journal of Applied Physics, 2019, 126, 085707.	1.1	4
53	The Role of Intragranular Nanopores in Capacity Fade of Nickel-Rich Layered $\text{Li}(\text{Ni}_{1-x}\text{Co}_x\text{Mn}_y)\text{O}_2$ Cathode Materials. ACS Nano, 2019, 13, 10694-10704.	7.3	79
54	Bismuth surface segregation and disorder analysis of quaternary (Ga,In)(As,Bi)/InP alloys. Journal of Applied Physics, 2019, 126, 135705.	1.1	7

#	ARTICLE	IF	CITATIONS
55	Three-dimensional structure of antiphase domains in GaP on Si(001). Journal of Physics Condensed Matter, 2019, 31, 144001.	0.7	7
56	Ab-initio calculation of band alignments for opto-electronic simulations. AIP Advances, 2019, 9, 055328.	0.6	1
57	Advanced Electron Microscopy for III/V on Silicon Integration. Advanced Materials Interfaces, 2019, 6, 1801951.	1.9	22
58	Giant bowing of the band gap and spin-orbit splitting energy in GaP <sub>1-x</sub> Bi <sub>x</sub> dilute bismide alloys. Scientific Reports, 2019, 9, 6835.	1.6	11
59	Simultaneous determination of local thickness and composition for ternary III-V semiconductors by aberration-corrected STEM. Ultramicroscopy, 2019, 201, 49-57.	0.8	6
60	Composition determination of semiconductor alloys towards atomic accuracy by HAADF-STEM. Ultramicroscopy, 2019, 200, 84-96.	0.8	15
61	Detailed Identification of the Progression of Antiphase Boundaries in GaP/Si(001). ECS Transactions, 2019, 93, 93-96.	0.3	0
62	Monolithic integration of lattice-matched Ga(NAsP)-based laser structures on CMOS-compatible Si (001) wafers for Si-photonics applications. Semiconductors and Semimetals, 2019, , 201-227.	0.4	2
63	Effect of the interface morphology on the lateral electron transport in (001) GaP/Si heterostructures. Journal of Applied Physics, 2019, 126, .	1.1	3
64	Coherent optical and acoustic phonons generated at lattice-matched GaP/Si(001) heterointerfaces. Journal of Physics Condensed Matter, 2019, 31, 094003.	0.7	8
65	Correlation of optical properties and interface morphology in type-II semiconductor heterostructures. Journal of Physics Condensed Matter, 2019, 31, 014001.	0.7	3
66	Single- and dual-variant atomic ordering in GaAsP compositionally graded buffers on GaP and Si substrates. Journal of Crystal Growth, 2019, 506, 61-70.	0.7	6
67	Ab initio calculations of the concentration dependent band gap reduction in dilute nitrides. Physical Review B, 2018, 97, .	1.1	9
68	Tailoring the diameter of electrospun layered perovskite nanofibers for photocatalytic water splitting. Journal of Materials Chemistry A, 2018, 6, 1971-1978.	5.2	17
69	Composition determination of multinary III/V semiconductors via STEM HAADF multislice simulations. Ultramicroscopy, 2018, 185, 15-20.	0.8	4
70	Influence of the atom source operating parameters on the structural and optical properties of In <sub>x</sub> Ga <sub>1-x</sub> N nanowires grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2018, 124, 165703.	1.1	3
71	Investigation of Fluorine and Nitrogen as Anionic Dopants in Nickel-Rich Cathode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 44452-44462.	4.0	63
72	Second-harmonic generation as a probe for structural and electronic properties of buried GaP/Si(001) interfaces. Journal of Physics Condensed Matter, 2018, 30, 484001.	0.7	5

#	ARTICLE	IF	CITATIONS
73	Direct Growth of III-V/Silicon Triple-Junction Solar Cells With 19.7% Efficiency. IEEE Journal of Photovoltaics, 2018, 8, 1590-1595.	1.5	48
74	Atomic-scale 3D reconstruction of antiphase boundaries in GaP on (001) silicon by STEM. Micron, 2018, 114, 32-41.	1.1	5
75	GaP-interlayer formation on epitaxial GaAs(100) surfaces in MOVPE ambient. Journal of Crystal Growth, 2017, 464, 2-7.	0.7	5
76	Local Bi ordering in MOVPE grown Ga(As,Bi) investigated by high resolution scanning transmission electron microscopy. Applied Materials Today, 2017, 6, 22-28.	2.3	21
77	(GaIn)(NAs) growth using di-tertiary-butyl-arsano-amine (DTBAA). Journal of Crystal Growth, 2017, 467, 132-136.	0.7	13
78	MOVPE Grown Gallium Phosphide-Silicon Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 502-507.	1.5	54
79	MOVPE growth of Ga(PBi) on GaP and GaP on Si with Bi fractions up to 8%. Journal of Crystal Growth, 2017, 463, 151-155.	0.7	10
80	Quantitative atomic resolution at interfaces: Subtraction of the background in STEM images with the example of (Ga,In)P/GaAs structures. Journal of Applied Physics, 2017, 121, .	1.1	9
81	GaAs <sub>1-x</sub> Bix/GaNyAs <sub>1-y</sub> type-II quantum wells: novel strain-balanced heterostructures for GaAs-based near- and mid-infrared photonics. Scientific Reports, 2017, 7, 46371.	1.6	23
82	Orientation relationships of Mn <sub>0.75</sub> Ga <sub>0.25</sub> As crystallites on and within GaAs determined by scanning nano beam electron diffraction. Crystal Research and Technology, 2017, 52, 1600261.	0.6	0
83	Influence of surface relaxation of strained layers on atomic resolution ADF imaging. Ultramicroscopy, 2017, 181, 8-16.	0.8	17
84	Microstructural study of codeposited pentacene:perfluoropentacene grown on KCl by TEM techniques. Journal of Crystal Growth, 2017, 471, 29-36.	0.7	3
85	STEMsalabim: A high-performance computing cluster friendly code for scanning transmission electron microscopy image simulations of thin specimens. Ultramicroscopy, 2017, 177, 91-96.	0.8	50
86	Atomic structure of W <sup>TM</sup> -type quantum well heterostructures investigated by aberration-corrected STEM. Journal of Microscopy, 2017, 268, 259-268.	0.8	8
87	Surface relaxation of strained Ga(P,As)/GaP heterostructures investigated by HAADF STEM. Journal of Microscopy, 2017, 268, 239-247.	0.8	11
88	Formation and Structural Diversity of Organo-Functionalized Tin-Silver Selenide Clusters. Chemistry - A European Journal, 2017, 23, 15607-15611.	1.7	13
89	Sub-picosecond acoustic pulses at buried GaP/Si interfaces. Applied Physics Letters, 2017, 111, .	1.5	12
90	<i>In Situ</i> Thermal Annealing Transmission Electron Microscopy (TEM) Investigation of III/V Semiconductor Heterostructures Using a Setup for Safe Usage of Toxic and Pyrophoric Gases. Microscopy and Microanalysis, 2017, 23, 751-757.	0.2	9

#	ARTICLE	IF	CITATIONS
91	On The Effects of Column Occupancy and Static Atomic Disorder on the Analysis of Chemical Ordering in Ga(P(1-x)Bi <sub>x</sub> ) Compounds. Microscopy and Microanalysis, 2017, 23, 1474-1475.	0.2	1
92	Three dimensional reconstruction of InGa <sub>N</sub> nanodisks in Ga <sub>N</sub> nanowires: Improvement of the nanowire sample preparation to avoid missing wedge effects. Journal of Crystal Growth, 2017, 475, 202-207.	0.7	3
93	MOVPE growth of (GaIn)As/Ga(AsSb)/(GaIn)As type-II heterostructures on GaAs substrate for near infrared laser applications. Journal of Crystal Growth, 2017, 464, 201-205.	0.7	10
94	Codeposited pentacene:perfluoropentacene grown on SiO <sub>2</sub> : A microstructural study by transmission electron microscopy. Journal of Crystal Growth, 2017, 458, 87-95.	0.7	4
95	Strain-balanced type-II superlattices on GaAs: Novel heterostructures for photonics and photovoltaics. , 2017, , .		1
96	Local sample thickness determination via scanning transmission electron microscopy defocus series. Journal of Microscopy, 2016, 262, 171-177.	0.8	14
97	Thermomigration and Soret effect in Na <sub>2</sub> CoO <sub>2</sub> as thermoelectric material: Preparation and characterization of sodium cobaltate thin films. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1284-1295.	0.8	8
98	Coherent phonon spectroscopy characterization of electronic bands at buried semiconductor heterointerfaces. Applied Physics Letters, 2016, 108, 051607.	1.5	23
99	Preparation and Loading Process of Single Crystalline Samples into a Gas Environmental Cell Holder for In Situ Atomic Resolution Scanning Transmission Electron Microscopic Observation. Microscopy and Microanalysis, 2016, 22, 515-519.	0.2	10
100	Correlation of the nanostructure with optoelectronic properties during rapid thermal annealing of Ga(NA <sub>2</sub> P) quantum wells grown on Si(001) substrates. Journal of Applied Physics, 2016, 119, 025705.	1.1	6
101	Efficient nitrogen incorporation in GaAs using novel metal organic As <sup>III</sup> N precursor di-tertiary-butyl-arsano-amine (DTBAA). Journal of Crystal Growth, 2016, 439, 19-27.	0.7	17
102	FIB Plan View Preparation and Electron Tomography of Ga-Containing Droplets Induced by Melt-Back Etching in Si. Microscopy and Microanalysis, 2016, 22, 131-139.	0.2	3
103	Pyramidal Structure Formation at the Interface between III/V Semiconductors and Silicon. Chemistry of Materials, 2016, 28, 3265-3275.	3.2	37
104	Novel nitrogen/gallium precursor [Ga(bdma)H <sub>2</sub> ] for MOVPE. Journal of Crystal Growth, 2016, 454, 173-179.	0.7	3
105	Surface Chemistry of tert-Butylphosphine (TBP) on Si(001) in the Nucleation Phase of Thin Film Growth. Chemistry - A European Journal, 2016, 22, 14920-14928.	1.7	10
106	Materials characterisation by angle-resolved scanning transmission electron microscopy. Scientific Reports, 2016, 6, 37146.	1.6	33
107	Microstructural Analysis of Perfluoropentacene Films on Graphene and Graphite: Interface-Mediated Alignment and Island Formation. Crystal Growth and Design, 2016, 16, 6941-6950.	1.4	6
108	Optical gain in GaAsBi/GaAs quantum well diode lasers. Scientific Reports, 2016, 6, 28863.	1.6	61



#	ARTICLE	IF	CITATIONS
109	A highly efficient directional molecular white-light emitter driven by a continuous-wave laser diode. Science, 2016, 352, 1301-1304.	6.0	120
110	Influence of spatial and temporal coherences on atomic resolution high angle annular dark field imaging. Ultramicroscopy, 2016, 169, 1-10.	0.8	20
111	Direct investigation of (sub-) surface preparation artifacts in GaAs based materials by FIB sectioning. Ultramicroscopy, 2016, 163, 19-30.	0.8	11
112	Interface morphology and composition of Ga(NAsP) quantum well structures for monolithically integrated LASERs on silicon substrates. Journal Physics D: Applied Physics, 2016, 49, 075108.	1.3	18
113	Impedance spectroscopic study of the charge transfer resistance at the interface between a LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> high-voltage cathode film and a LiNbO <sub>3</sub> coating film. Solid State Ionics, 2016, 287, 8-12.	1.3	35
114	MOVPE growth studies of Ga(NAsP)/(BGa)(AsP) multi quantum well heterostructures (MQWH) for the monolithic integration of laser structures on (001) Si-substrates. Journal of Crystal Growth, 2016, 438, 63-69.	0.7	19
115	Quantification of Bi distribution in MOVPE-grown Ga(AsBi) via HAADF STEM. Journal of Crystal Growth, 2016, 433, 89-96.	0.7	11
116	In situ Observation of Annealing Effects in Ga(NAsP) Multi Quantum Well Structures. Microscopy and Microanalysis, 2015, 21, 957-958.	0.2	0
117	Atomically ordered (Mn,Ga)As crystallites on and within GaAs. Crystal Research and Technology, 2015, 50, 967-973.	0.6	1
118	Quantitative Determination of Chemical Composition of Multinary III/V Semiconductors With Sublattice Resolution Using Aberration Corrected HAADF-STEM. Microscopy and Microanalysis, 2015, 21, 2081-2082.	0.2	0
119	Determination of type-I band offsets in GaBi <sub>x</sub> As <sub>1-x</sub> quantum wells using polarisation-resolved photovoltage spectroscopy and 12-band k.p calculations. Semiconductor Science and Technology, 2015, 30, 094009.	1.0	29
120	Charge Transfer across the Interface between LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> High-Voltage Cathode Films and Solid Electrolyte Films. Journal of the Electrochemical Society, 2015, 162, A754-A759.	1.3	20
121	Metastable cubic zinc-blende III/V semiconductors: Growth and structural characteristics. Progress in Crystal Growth and Characterization of Materials, 2015, 61, 46-62.	1.8	16
122	Growth of III/Vs on Silicon. , 2015, , 1249-1300.		8
123	Interface engineering and characterization at the atomic-scale of pure and mixed ion layer gas reaction buffer layers in chalcopyrite thin-film solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 705-716.	4.4	20
124	Bipolar Electric-Field Enhanced Trapping and Detrapping of Mobile Donors in BiFeO <sub>3</sub> Memristors. ACS Applied Materials & Interfaces, 2014, 6, 19758-19765.	4.0	84
125	Comparison of Direct Growth and Wafer Bonding for the Fabrication of GaInP/GaAs Dual-Junction Solar Cells on Silicon. IEEE Journal of Photovoltaics, 2014, 4, 620-625.	1.5	98
126	LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Thin-Film Cathodes on Gold-Coated Stainless Steel Substrates: Formation of Interlayers and Electrochemical Properties. Electrochimica Acta, 2014, 133, 146-152.	2.6	16



#	ARTICLE	IF	CITATIONS
127	Microstructural Characterization of Organic Heterostructures by (Transmission) Electron Microscopy. Crystal Growth and Design, 2014, 14, 3010-3014.	1.4	3
128	Investigation of the microstructure of metallic droplets on Ga(AsBi)/GaAs. Journal of Crystal Growth, 2014, 408, 71-77.	0.7	33
129	Structural characteristics of gallium metal deposited on Si (001) by MOCVD. Journal of Crystal Growth, 2014, 405, 102-109.	0.7	30
130	Annealing effects on the composition and disorder of Ga(N,As,P) quantum wells on silicon substrates for laser application. Journal of Crystal Growth, 2014, 402, 169-174.	0.7	9
131	Simultaneous Quantification of Indium and Nitrogen Concentration in InGaAs Using HAADF-STEM. Microscopy and Microanalysis, 2014, 20, 1740-1752.	0.2	20
132	Migration-enhanced epitaxy of thin GaAsBi layers. Lithuanian Journal of Physics, 2014, 54, 125-129.	0.1	8
133	Carrier-phonon Dynamics at Buried Interface of GaP/Si(001). , 2014, , .		0
134	Quantitative chemical evaluation of dilute GaAs using ADF STEM: Avoiding surface strain induced artifacts. Ultramicroscopy, 2013, 129, 1-9.	0.8	29
135	In(SAR) <sub>3</sub> As a Building Block for 3D and Helical Coordination Polymers. Crystal Growth and Design, 2013, 13, 1252-1259.	1.4	14
136	Band structure properties of (BGa)P semiconductors for lattice matched integration on (001) silicon. , 2013, , .		3
137	Monolithic integration of high electron mobility InAs-based heterostructure on exact (001) Silicon using a GaSb/GaP accommodation layer. Applied Physics Letters, 2012, 101, 142111.	1.5	29
138	Monolithic integration of III/V devices on Si(001). , 2012, , .		0
139	Growth study of nonpolar Zn <sub>1-x</sub> Mg <sub>x</sub> O epitaxial films on a-plane bulk ZnO by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2012, 101, 122106.	1.5	4
140	Scanning transmission electron microscopy strain measurement from millisecond frames of a direct electron charge coupled device. Applied Physics Letters, 2012, 101, 212110.	1.5	63
141	Strain Measurement in Semiconductor Heterostructures by Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 995-1009.	0.2	62
142	Quantitative HAADF-studies of GaP/Si-interfaces. Microscopy and Microanalysis, 2012, 18, 352-353.	0.2	0
143	Temperature and pump power dependent photoluminescence characterization of MBE grown GaAsBi on GaAs. Journal of Materials Science: Materials in Electronics, 2012, 23, 1799-1804.	1.1	24
144	Ultra-long palladium nanoworms by polymer grafts. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	2

#	ARTICLE	IF	CITATIONS
145	Grain Boundaries in a Lithium Aluminum Titanium Phosphate-Type Fast Lithium Ion Conducting Glass Ceramic: Microstructure and Nonlinear Ion Transport Properties. Journal of Physical Chemistry C, 2012, 116, 22675-22678.	1.5	50
146	Synthesis and Characterization of Colloidal Fluorescent Silver Nanoclusters. Langmuir, 2012, 28, 8915-8919.	1.6	54
147	Determination of the chemical composition of GaNAs using STEM HAADF imaging and STEM strain state analysis. Ultramicroscopy, 2012, 117, 15-23.	0.8	79
148	Parameters for temperature dependence of mean-square displacements for B-, Bi- and Tl-containing binary III-V compounds. Acta Crystallographica Section A: Foundations and Advances, 2012, 68, 319-323.	0.3	3
149	Time-resolved photoluminescence and optical gain of Ga(NAsP) heterostructures pseudomorphically grown on silicon (001) substrate. , 2011, , .		0
150	Carrier dynamics in (ZnMg)O alloy materials. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1149-1152.	0.8	1
151	Correlation between hetero-interface properties and photoluminescence efficiency of Ga(NAsP)/(BGa)P multi-quantum well structures on (0 0 1) Si substrate. Journal of Crystal Growth, 2011, 315, 28-31.	0.7	15
152	Indirect in situ characterization of Si(100) substrates at the initial stage of III-V heteroepitaxy. Journal of Crystal Growth, 2011, 315, 16-21.	0.7	25
153	GaP-nucleation on exact Si (001) substrates for III/V device integration. Journal of Crystal Growth, 2011, 315, 37-47.	0.7	305
154	Application of transmission electron microscopy for microstructural characterization of perfluoropentacene thin films. Journal of Applied Physics, 2011, 110, . <i>Atomic scale annealing effects on In</i>	1.1	14
155	$\ln \left( \frac{x}{1-x} \right) \approx \frac{1}{x} \ln x$ Atomic scale annealing effects on In	1.1	11
156	Influence of crystal polarity on crystal defects in GaP grown on exact Si (001). Journal of Applied Physics, 2011, 109, .	1.1	41
157	Band structure properties of novel BxGa1-xP alloys for silicon integration. Journal of Applied Physics, 2011, 110, .	1.1	22
158	Effect of bonding and static atomic displacements on composition quantification in $\ln \left( \frac{x}{1-x} \right) \approx \frac{1}{x} \ln x$ Physical Review B, 2010, 81, .	1.1	19
159	Physical properties of Ga(NAsP)/GaP QW lasers grown by MOVPE. , 2010, , .		1
160	Lasing properties of monolithically integrated Ga(NAsP)/(BGa)P QW lasers on a silicon substrate grown by MOVPE. , 2010, , .		0
161	MOVPE growth of dilute nitride III/V semiconductors using all liquid metalorganic precursors. Journal of Crystal Growth, 2009, 311, 2418-2426.	0.7	32
162	<i>In situ</i> verification of single-domain III-V on Si(100) growth via metal-organic vapor phase epitaxy. Applied Physics Letters, 2008, 93, .	1.5	55

#	ARTICLE	IF	CITATIONS
163	Detection of nanometer-sized strain fields in (GaIn)(NAs) alloys by specific dark field transmission electron microscopic imaging. Journal of Applied Physics, 2005, 97, 014306.	1.1	32
164	MOVPE growth experiments of the novel (GaIn)(NP)/GaP material system. Journal of Crystal Growth, 2004, 272, 753-759.	0.7	10
165	Specific structural and compositional properties of (GaIn)(NAs) and their influence on optoelectronic device performance. Journal of Crystal Growth, 2004, 272, 739-747.	0.7	37
166	The role of Sb in the MBE growth of (GaIn)(NAsSb). Journal of Crystal Growth, 2003, 251, 360-366.	0.7	69
167	Methods of Electron Crystallography as Tools for Materials Analysis. Solid State Phenomena, 0, 186, 1-6.	0.3	1
168	Dilute Bismuth Containing W-Type Heterostructures for Long-Wavelength Emission on GaAs Substrates. Crystal Growth and Design, 0, , .	1.4	1
169	White-light generating molecular materials: correlation between the amorphous/crystalline structure and nonlinear optical properties. ChemPhotoChem, 0, , .	1.5	3
170	Adamantanes as White-Light Emitters: Controlling the Arrangement and Functionality by External Coulomb Forces. Journal of Physical Chemistry C, 0, , .	1.5	2