

Thomas F Kuech

List of Publications by Year in descending order

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159
papers

2,935
citations

159585

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48
g-index

163
all docs

163
docs citations

163
times ranked

3630
citing authors

#	ARTICLE	IF	CITATIONS
1	High temperature adduct formation of trimethylgallium and ammonia. Applied Physics Letters, 1996, 69, 55-57.	3.3	149
2	p-GaN surface treatments for metal contacts. Applied Physics Letters, 2000, 76, 415-417.	3.3	148
3	Role of the Cu-ZrO ₂ Interfacial Sites for Conversion of Ethanol to Ethyl Acetate and Synthesis of Methanol from CO ₂ and H ₂ . ACS Catalysis, 2016, 6, 7040-7050.	11.2	136
4	Atomic Layer Deposited MgO: A Lower Overpotential Coating for Li[Ni _{0.5} Mn _{0.3} Co _{0.2}]O ₂ Cathode. ACS Applied Materials & Interfaces, 2017, 9, 11231-11239.	8.0	111
5	Enhanced stability of cobalt catalysts by atomic layer deposition for aqueous-phase reactions. Energy and Environmental Science, 2014, 7, 1657.	30.8	109
6	X-ray photoemission determination of the Schottky barrier height of metal contacts on GaN and GaN. Journal of Applied Physics, 2002, 92, 6671-6678.	2.5	103
7	In Situ Electrochemical Activation of Atomic Layer Deposition Coated MoS ₂ Basal Planes for Efficient Hydrogen Evolution Reaction. Advanced Functional Materials, 2017, 27, 1701825.	14.9	87
8	Valence band hybridization in N-rich GaN _{1-x} As _x alloys. Physical Review B, 2004, 70, .	3.2	86
9	Reaction of trimethylgallium in the atomic layer epitaxy of GaAs(100). Applied Physics Letters, 1989, 55, 1011-1013.	3.3	82
10	Light-emitting diodes as chemical sensors. Nature, 2001, 409, 476-476.	27.8	76
11	X-ray photoemission spectroscopic investigation of surface treatments, metal deposition, and electron accumulation on InN. Applied Physics Letters, 2003, 82, 3254-3256.	3.3	73
12	X-ray photoelectron spectroscopic study on sapphire nitridation for GaN growth by hydride vapor phase epitaxy: Nitridation mechanism. Journal of Applied Physics, 2003, 94, 5656-5664.	2.5	64
13	Atomic Layer Deposition of Al ₂ O ₃ on Ga ₂ O ₃ Alloy Coatings for Li[Ni _{0.5} Mn _{0.3} Co _{0.2}]O ₂ Cathode to Improve Rate Performance in Li-Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 10572-10580.	8.0	51
14	Ab initio study of the strain dependent thermodynamics of Bi doping in GaAs. Physical Review B, 2012, 86, .	3.2	50
15	n-GaN surface treatments for metal contacts studied via x-ray photoemission spectroscopy. Applied Physics Letters, 2002, 80, 204-206.	3.3	49
16	A comparative study of GaSb (100) surface passivation by aqueous and nonaqueous solutions. Applied Physics Letters, 2003, 83, 2587-2589.	3.3	48
17	Radiation-induced segregation in a ceramic. Nature Materials, 2020, 19, 992-998.	27.5	47
18	Epitaxial GaN _{1-y} As _y layers with high As content grown by metalorganic vapor phase epitaxy and their band gap energy. Applied Physics Letters, 2004, 84, 1489-1491.	3.3	44

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19	III-V compound semiconductors: Growth and structures. Progress in Crystal Growth and Characterization of Materials, 2016, 62, 352-370.	4.0	43
20	Growth far from equilibrium: Examples from III-V semiconductors. Applied Physics Reviews, 2016, 3, .	11.3	39
21	Role of interfacial compound formation associated with the use of ZnO buffers layers in the hydride vapor phase epitaxy of GaN. Applied Physics Letters, 2000, 76, 3454-3456.	3.3	38
22	Effect of Sb as a surfactant during the lateral epitaxial overgrowth of GaN by metalorganic vapor phase epitaxy. Applied Physics Letters, 2001, 79, 3059-3061.	3.3	36
23	The addition of Sb as a surfactant to GaN growth by metal organic vapor phase epitaxy. Journal of Applied Physics, 2002, 92, 2304-2309.	2.5	35
24	Atomic layer deposition of titanium phosphate on silica nanoparticles. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	34
25	Synthesis Gas Conversion over Rh/Mo Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2019, 9, 1810-1819.	11.2	33
26	Optimizing AlF ₃ atomic layer deposition using trimethylaluminum and TaF ₅ : Application to high voltage Li-ion battery cathodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	32
27	Chemical bonding and electronic properties of SeS ₂ -treated GaAs(100). Journal of Applied Physics, 1999, 85, 969-977.	2.5	31
28	Self-limiting growth when using trimethyl bismuth (TMBi) in the metal-organic vapor phase epitaxy (MOVPE) of GaAs _{1-x} Bi _y . Journal of Crystal Growth, 2014, 395, 38-45.	1.5	31
29	Narrow band gap (1.4 eV) InGaAsSbN solar cells grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2012, 100, .	3.3	30
30	Research Update: Recent progress on 2D materials beyond graphene: From ripples, defects, intercalation, and valley dynamics to straintronics and power dissipation. APL Materials, 2018, 6, .	5.1	30
31	High crystalline-quality III-V layer transfer onto Si substrate. Applied Physics Letters, 2008, 92, 092107.	3.3	25
32	Surface chemistry and surface electronic properties of ZnO single crystals and nanorods. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 328-335.	2.1	25
33	Understanding and reducing deleterious defects in the metastable alloy GaAsBi. NPG Asia Materials, 2017, 9, e345-e345.	7.9	24
34	Interface structures of InGaAs/InGaAsP/InGaP quantum well laser diodes grown by metalorganic chemical vapor deposition on GaAs substrates. Applied Physics Letters, 1996, 68, 2240-2242.	3.3	23
35	Low temperature growth of GaAs _{1-x} Bi _y epitaxial layers. Journal of Crystal Growth, 2013, 380, 23-27.	1.5	23
36	GaAs _{1-x} PyBiz, an alternative reduced band gap alloy system lattice-matched to GaAs. Applied Physics Letters, 2014, 105, .	3.3	23

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37	Synthesis Gas Conversion Over Molybdenum-Based Catalysts Promoted by Transition Metals. ACS Catalysis, 2020, 10, 365-374.	11.2	21
38	Surface Chemistry and Mechanism of Atomic Layer Growth of GaAs. Materials Research Society Symposia Proceedings, 1991, 222, 3.	0.1	20
39	Incorporation of optically active erbium into GaAs using the novel precursor tris(3,5-di-tert-butylpyrazolato)bis(4-tert-butylpyridine)erbium. Journal of Applied Physics, 1999, 85, 1825-1831.	2.5	20
40	Transfer of n-type GaSb onto GaAs substrate by hydrogen implantation and wafer bonding. Journal of Electronic Materials, 2000, 29, 916-920.	2.2	20
41	Tuning Acid-Base Properties Using Mg-Al Oxide Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2015, 7, 16573-16580.	8.0	20
42	Crystallization of amorphous complex oxides: New geometries and new compositions via solid phase epitaxy. Current Opinion in Solid State and Materials Science, 2018, 22, 229-242.	11.5	20
43	Model development of GaN MOVPE growth chemistry for reactor design. Journal of Electronic Materials, 2000, 29, 2-9.	2.2	19
44	Hemin-Functionalized InAs-Based High Sensitivity Room Temperature NO Gas Sensors. Journal of Physical Chemistry C, 2012, 116, 826-833.	3.1	19
45	Photoluminescence studies of erbium-doped GaAs under hydrostatic pressure. Journal of Applied Physics, 1997, 82, 368-374.	2.5	18
46	MOCVD-Grown Dilute Nitride Type II Quantum Wells. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 979-991.	2.9	18
47	Electrochemical effects of annealing on atomic layer deposited Al ₂ O ₃ coatings on LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ . Journal of Power Sources, 2017, 365, 61-67.	7.8	18
48	Distinct Nucleation and Growth Kinetics of Amorphous SrTiO ₃ on (001) SrTiO ₃ and SiO ₂ /Si: A Step toward New Architectures. ACS Applied Materials & Interfaces, 2017, 9, 41034-41042.	8.0	17
49	Synthesis Gas Conversion over Rh-Mn-W _x /C/SiO ₂ Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2018, 8, 10707-10720.	11.2	17
50	Impact of thermal annealing on bulk InGaAsSbN materials grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2014, 104, 051915.	3.3	15
51	The Effect of the Bi Precursors, (CH ₃) ₃ Bi and (C ₂ H ₅) ₃ Bi, on the Metal-Organic Vapor Phase Epitaxy of GaAs _{1-y} Bi _y Films. Chemical Vapor Deposition, 2015, 21, 166-175.	1.3	15
52	Hydrothermal synthesis of improved ZnO crystals for epitaxial growth of GaN thin films. Journal of Materials Science, 2008, 43, 2336-2341.	3.7	14
53	Defect reduction in epitaxial GaSb grown on nanopatterned GaAs substrates using full wafer block copolymer lithography. Applied Physics Letters, 2009, 95, .	3.3	14
54	Controlled growth of InGaAs/InGaAsP quantum dots on InP substrates employing diblock copolymer lithography. Applied Physics Letters, 2009, 95, 113111.	3.3	14

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55	Annealing-induced precipitate formation behavior in MOVPE-grown GaAs _{1-x} Bi _x explored by atom probe tomography and HAADF-STEM. Nanotechnology, 2017, 28, 215704.	2.6	14
56	Degradation of Hole Transport Materials via Exciton-Driven Cyclization. ACS Applied Materials & Interfaces, 2017, 9, 13369-13379.	8.0	14
57	Carbon And Hydrogen Induced Yellow Luminescence In Gallium Nitride Grown By Halide Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 1997, 482, 732.	0.1	13
58	Growth behavior of GaSb by metal-organic vapor-phase epitaxy. Journal of Crystal Growth, 2006, 296, 117-128.	1.5	13
59	1.25-eV GaAsSbN/Ge Double-Junction Solar Cell Grown by Metalorganic Vapor Phase Epitaxy for High Efficiency Multijunction Solar Cell Application. IEEE Journal of Photovoltaics, 2014, 4, 981-985.	2.5	13
60	Characteristics of OMVPE grown GaAsBi QW lasers and impact of post-growth thermal annealing. Journal of Applied Physics, 2018, 123, .	2.5	13
61	Solid-Phase Epitaxy of Perovskite High Dielectric PrAlO ₃ Films Grown by Atomic Layer Deposition for Use in Two-Dimensional Electronics and Memory Devices. ACS Applied Nano Materials, 2019, 2, 7449-7458.	5.0	13
62	Phase Selection and Structure of Low-Defect-Density Al_2O_3 Created by Epitaxial Crystallization of Amorphous Al_2O_3 . ACS Applied Materials & Interfaces, 2020, 12, 57598-57608.	8.0	13
63	LEDs: New Lamps for Old and a Paradigm for Ongoing Curriculum Modernization. Journal of Chemical Education, 2001, 78, 1033.	2.3	12
64	Integration of thin layers of single-crystalline InP with flexible substrates. Applied Physics Letters, 2008, 92, 212109.	3.3	12
65	Growth of GaAs _{1-x} Bix by molecular beam epitaxy: Trade-offs in optical and structural characteristics. Journal of Applied Physics, 2014, 116, 043524.	2.5	12
66	GaAsSbN/GaAsSb/InP Type-II $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Quantum Wells for Mid-IR Emission. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1065-1073.	2.9	11
67	Mixed Semiconductor Alloys for Optical Devices. Annual Review of Chemical and Biomolecular Engineering, 2013, 4, 187-209.	6.8	11
68	First-principles studies on molecular beam epitaxy growth of $\text{GaAs}_{1-x}\text{Bi}_x$. Physical Review B, 2015, 92, .	3.2	11
69	Unexpected bismuth concentration profiles in metal-organic vapor phase epitaxy-grown Ga(As _{1-x} Bix)/GaAs superlattices revealed by Z-contrast scanning transmission electron microscopy imaging. APL Materials, 2015, 3, .	5.1	11
70	Laser diodes employing GaAs _{1-x} Bi _x /GaAs _{1-x} Py _y quantum well active regions. Semiconductor Science and Technology, 2017, 32, 075007.	2.0	11
71	A near-field scanning optical microscopy study of the uniformity of GaAs surface passivation. Applied Physics Letters, 1996, 69, 662-664.	3.3	10
72	High Schottky barrier height of the Al/n-GaAs diodes achieved by sputter deposition. Applied Physics Letters, 1994, 64, 1413-1415.	3.3	9

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73	Microstructural study of Pt contact on p-type GaN. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 87.	1.6	9
74	Electrical properties of GaN/poly(3-hexylthiophene) interfaces. Journal of Applied Physics, 2009, 106, .	2.5	9
75	Tungsten hexacarbonyl and hydrogen peroxide as precursors for the growth of tungsten oxide thin films on titania nanoparticles. AIChE Journal, 2014, 60, 1278-1286.	3.6	9
76	GaAs _{1-x} Bi _y Raman signatures: illuminating relationships between the electrical and optical properties of GaAs _{1-x} Bi _y and Bi incorporation. AIP Advances, 2015, 5, .	1.3	9
77	PdAl Schottky contact to In _{0.52} Al _{0.48} As grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 67, 3587-3589.	3.3	8
78	Photoreflectance Study of the Long-Term Stability of Various Surface Chemical Treatments on (001) n-GaAs. Journal of the Electrochemical Society, 1997, 144, 732-736.	2.9	8
79	Kinetics of strain relaxation in semiconductor films grown on borosilicate glass-bonded substrates. Journal of Electronic Materials, 2001, 30, 802-806.	2.2	8
80	Atomic-Scale Investigation of Highly Stable Pt Clusters Synthesized on a Graphene Support for Catalytic Applications. Journal of Physical Chemistry C, 2012, 116, 26066-26071.	3.1	8
81	Heteroepitaxy of GaAs on (001) $\pm 6^\circ$ Ge substrates at high growth rates by hydride vapor phase epitaxy. Journal of Applied Physics, 2013, 113, 174903.	2.5	8
82	A model for arsenic anti-site incorporation in GaAs grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2014, 116, .	2.5	8
83	Strain-compensated GaAs _{1-x} P _y /GaAs _{1-x} Bi _z /GaAs _{1-x} wells for laser applications. Semiconductor Science and Technology, 2015, 30, 094011.	2.1	8
84	Rates of levoglucosanol hydrogenolysis over Brønsted and Lewis acid sites on platinum silica-alumina catalysts synthesized by atomic layer deposition. Journal of Catalysis, 2020, 389, 111-120.	6.2	8
85	Surface Chemistry of CVD Reactions Studied by Molecular Beam/Surface Scattering. Materials Research Society Symposia Proceedings, 1990, 204, 37.	0.1	7
86	Schottky enhancement of reacted NiAl/n-GaAs contacts. Applied Physics Letters, 1994, 64, 3485-3487.	3.3	7
87	Enhancement of Schottky barrier height to n-GaAs using NiAl, NiAl/Al/Ni, and Ni/Al/Ni layer structures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1994, 12, 1915-1919.	2.1	7
88	Low-strain, quantum-cascade-laser active regions grown on metamorphic buffer layers for emission in the 3.0-4.0 μ m wavelength region. IET Optoelectronics, 2014, 8, 25-32.	3.3	7
89	Interfacial Mixing Analysis for Strained Layer Superlattices by Atom Probe Tomography. Crystals, 2018, 8, 437.	2.2	7
90	Seeded Lateral Solid-Phase Crystallization of the Perovskite Oxide SrTiO ₃ . Journal of Physical Chemistry C, 2019, 123, 7447-7456.	3.1	7

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91	High-Ge-Content SiGe Alloy Single Crystals Using the Nanomembrane Platform. ACS Applied Materials & Interfaces, 2020, 12, 20859-20866.	8.0	7
92	Annealing of dilute-nitride GaAsSbN ^x InP strained multiple quantum wells. Applied Physics Letters, 2007, 91, .	3.3	6
93	High electron mobility transistors on plastic flexible substrates. Applied Physics Letters, 2011, 98, .	3.3	6
94	Thermodynamic stability analysis of Bi-containing III-V quaternary alloys and the effect of epitaxial strain. Journal of Physics and Chemistry of Solids, 2020, 138, 109245.	4.0	6
95	Making the Nanoworld Comprehensible: Instructional Materials for Schools and Outreach. Journal of Nanoparticle Research, 1999, 1, 147-150.	1.9	5
96	Oxygen-related deep levels in Al _{0.5} In _{0.5} P grown by MOVPE. Journal of Electronic Materials, 2000, 29, 426-429.	2.2	5
97	Study of Non-Aqueous Passivation on GaSb (100) Surfaces. Materials Research Society Symposia Proceedings, 2003, 763, 231.	0.1	5
98	Fabrication of large-area, high-density Ni nanopillar arrays on GaAs substrates using diblock copolymer lithography and electrodeposition. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 031801.	1.2	5
99	Impact of vicinal GaAs(001) substrates on Bi incorporation and photoluminescence in molecular beam epitaxy-grown GaAs _{1-x} Bi _x . Applied Physics Letters, 2016, 108, .	3.3	5
100	Impact of Sb Incorporation on MOVPE-Grown ϵ -Bulk ϵ -InGaAs(Sb)N Films for Solar Cell Application. IEEE Journal of Photovoltaics, 2016, 6, 1673-1677.	2.5	5
101	Atom probe tomography evidence for uniform incorporation of Bi across the growth front in GaAs _{1-x} Bi _x /GaAs superlattice. Journal of Crystal Growth, 2016, 446, 27-32.	1.5	5
102	Single junction solar cell employing strain compensated GaAs _{0.965} Bi _{0.035} /GaAs _{0.75} P _{0.25} multiple quantum wells grown by metal organic vapor phase epitaxy. Applied Physics Letters, 2018, 112, .	3.3	5
103	Schottky barrier enhancement using reacted Ni ₂ Al ₃ /Ni/n ϵ -GaAs, Ni/Al/Ni/n ϵ -GaAs, and NiAl/Al/Ni/n ϵ -GaAs contacts. Journal of Applied Physics, 1995, 77, 4777-4782.	2.5	4
104	Photoluminescence Studies of Cadmium Selenide Crystals in Contact with Group III Trialkyl Derivatives. Journal of the Electrochemical Society, 1998, 145, 2475-2479.	2.9	4
105	Passivation of Interfacial States for GaAs- and InGaAs/InP-Based Regrown Nanostructures. Journal of Electronic Materials, 2009, 38, 2023-2032.	2.2	4
106	Surface kinetics study of metal-organic vapor phase epitaxy of GaAs $1-x$ Bi y on offcut and mesa-patterned GaAs substrates. Journal of Crystal Growth, 2017, 464, 39-48.	1.5	4
107	III-V Superlattices on InP/Si Metamorphic Buffer Layers for $\lambda = 4.8 \mu\text{m}$ Quantum Cascade Lasers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800493.	1.8	4
108	Impact of thermal annealing on internal device parameters of GaAs _{0.965} Bi _{0.035} /GaAs _{0.75} P _{0.25} quantum well lasers. IET Optoelectronics, 2019, 13, 12-16.	3.3	4

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109	Structure of AlN on Si (111) Deposited with Metal Organic Vapor Phase Epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 322-326.	1.0	3
110	GaAsSbN/GaAsSb/InP type-II Quantum Wells for Mid-IR Emission. , 2006, , .		3
111	High antimony content GaAs _{1-x} Nz _x GaAs _{1-y} Sby type-II structure for long wavelength emission. Journal of Applied Physics, 2009, 106, 063713.	2.5	3
112	13.2% efficiency double-hetero structure single-junction InGaAsN solar cells grown by MOVPE. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 021205.	2.1	3
113	Enhanced Incorporation of P into Tensile-Strained GaAs _{1-y} PyLayers Grown by Metal-Organic Vapor Phase Epitaxy at Very Low Temperatures. ECS Journal of Solid State Science and Technology, 2016, 5, P183-P189.	1.8	3
114	Transition state redox during dynamical processes in semiconductors and insulators. NPG Asia Materials, 2018, 10, 45-51.	7.9	3
115	Highly tin doped GaAs at low growth temperatures using tetraethyl tin by metal organic vapor phase epitaxy. Journal of Crystal Growth, 2019, 507, 255-259.	1.5	3
116	Instrument for in situ hard x-ray nanobeam characterization during epitaxial crystallization and materials transformations. Review of Scientific Instruments, 2021, 92, 023908.	1.3	3
117	Controlled Surface Fermi-level on the SeS ₂ -passivated n-GaAs (100). Materials Research Society Symposia Proceedings, 1998, 510, 653.	0.1	2
118	The Chemistry of GaN Growth. Materials Research Society Symposia Proceedings, 2000, 639, 111.	0.1	2
119	Metal Organic Vapor Phase Growth of Complex Semiconductor Alloys. AIP Conference Proceedings, 2010, , .	0.4	2
120	Carrier Dynamics and Defects in Bulk 1eV InGaAsNSb Materials and InGaAs Layers with MBL Grown by MOVPE for Multi-junction Solar Cells. Materials Research Society Symposia Proceedings, 2013, 1493, 245-251.	0.1	2
121	Planarization and Processing of Metamorphic Buffer Layers Grown by Hydride Vapor-Phase Epitaxy. Journal of Electronic Materials, 2014, 43, 873-878.	2.2	2
122	Room temperature operation of InAs quantum dot lasers formed by diblock-copolymer lithography and selective area MOCVD growth. , 2017, , .		2
123	Modeling of transport and reaction in a novel hydride vapor phase epitaxy system. Journal of Crystal Growth, 2019, 513, 58-68.	1.5	2
124	Reduction of Interface Reactions in the Low-Temperature Solid-Phase Epitaxy of ScAlMgO ₄ on Al ₂ O ₃ (0001). Crystal Growth and Design, 2020, 20, 6001-6007.	3.0	2
125	Simulation and analysis of III-V heterostructure solar cells for a continuous HVPE process. Semiconductor Science and Technology, 2020, 35, 105011.	2.0	2
126	An Investigation of the Al/n-GaAs Diodes with High Schottky Barrier Heights. Materials Research Society Symposia Proceedings, 1993, 318, 147.	0.1	1

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127	Study of Traps in GaN by Thermally-Stimulated Current. Materials Research Society Symposia Proceedings, 1996, 449, 633.	0.1	1
128	Chemical Bonding on GaAs (001) Surfaces Passivated Using SeS ₂ . Materials Research Society Symposia Proceedings, 1997, 484, 589.	0.1	1
129	Oxygen-Related Defects in In _{0.5} (Al _x Ga _{1-x}) _{0.5} P Grown by MOVPE. Materials Research Society Symposia Proceedings, 1997, 484, 611.	0.1	1
130	Mechanism for the Reduction of Threading Dislocation Densities in Si _{0.82} Ge _{0.18} Films on Silicon on Insulator Substrates. Materials Research Society Symposia Proceedings, 2001, 673, 1.	0.1	1
131	Plasma Induced Chemical Changes at Silica Surfaces During Pre-Bonding Treatments. Materials Research Society Symposia Proceedings, 2001, 681, 1.	0.1	1
132	X-ray Photoemission Determination of the Surface Fermi Level Position and Pinning on n- and p-GaN during the Formation of Au, Ni, and Ti Metal Contacts. Materials Research Society Symposia Proceedings, 2001, 693, 13.	0.1	1
133	Lateral Epitaxial Overgrowth of InAs on (100) GaAs Substrates. Materials Research Society Symposia Proceedings, 2002, 744, 1.	0.1	1
134	Selective Nucleation and Growth of Large Grain Polycrystalline GaAs. Materials Research Society Symposia Proceedings, 2005, 870, 151.	0.1	1
135	Patterned InGaAs/InGaAsP/InP quantum dot active lasers using diblock copolymer lithography and selective area MOCVD growth. , 2010, , .		1
136	Quantum dot active regions based on diblock copolymer nanopatterning and selective MOCVD growth. , 2011, , .		1
137	Atomic Layer Deposition for Improved Stability of Catalysts for the Conversion of Biomass to Chemicals and Fuels. Materials Research Society Symposia Proceedings, 2011, 1366, 1.	0.1	1
138	Stabilization of Copper Catalysts for Liquid-Phase Reactions by Atomic Layer Deposition (Angew. Chem. 51/2013). Angewandte Chemie, 2013, 125, 14068-14068.	2.0	1
139	Carrier Dynamics in MOVPE-Grown Bulk InGaAsNSb Materials and Epitaxial Lift-Off GaAs Double Heterostructures for Multi-junction Solar Cells. Materials Research Society Symposia Proceedings, 2014, 1635, 55-62.	0.1	1
140	A Proposed Regrowth Mechanism for the Enhancement of Schottky Barrier Height to N-GAAS. Materials Research Society Symposia Proceedings, 1994, 337, 313.	0.1	0
141	Structure of Al _n on Si (111) Deposited with Metal Organic Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 1998, 537, 1.	0.1	0
142	Comparative Study of GaN Growth Process by MOVPE. Materials Research Society Symposia Proceedings, 1999, 572, 463.	0.1	0
143	Low-Pressure Chemical Vapor Deposition of Borosilicate Glasses and their Application to Wafer Bonding. Materials Research Society Symposia Proceedings, 1999, 587, O4.7.1.	0.1	0
144	Dislocation Arrangement in a Thick LEO GaN Film on Sapphire. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 97-103.	1.0	0

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145	N-rich GaNAs with High As Content Grown by Metalorganic Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 2003, 798, 271.	0.1	0
146	InGaAsN/GaAsSb/GaAs(P) Type-II W’ quantum well lasers. , 2006, , .		0
147	N-rich and dilute-nitride GaN<inf>x</inf>(AsSb)<inf>1-x</inf> on InP substrates. , 2007, , .		0
148	Characteristics of Strained GaAsSb(N)/InP Quantum Wells Grown by Metalorganic Chemical Vapor Deposition on InP Substrates. Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	0
149	Selective GaAs Quantum Dot Array Growth using Dielectric and AlGaAs Masks Pattern-Transferred from Diblock Copolymer. Materials Research Society Symposia Proceedings, 2007, 1014, 1.	0.1	0
150	InAs growth on submicron (100) SOI islands for InAs-Si composite channel MOSFETs. , 2007, , .		0
151	Surface states passivation for and regrowth around nanoposts formed for the fabrication of InP-based intersubband quantum box lasers. , 2009, , .		0
152	GaAsSb-GaAsN -based type-II W’ structures for mid-IR emission. , 2009, , .		0
153	Selective growth and chracterization of InGaAs Quantum Dots on patterned InP substrates utilizing a diblock copolymer template. , 2009, , .		0
154	Metamorphic solar cells employing chemical mechanical polishing and MOVPE regrowth. , 2011, , .		0
155	Characterization of immobilized DNA on sulfur-passivated InAs surfaces. Materials Research Society Symposia Proceedings, 2011, 1301, 259.	0.1	0
156	A custom wide-field spectral imager for breast cancer margin assessment. , 2011, , .		0
157	Unexpected Bismuth Concentration Profiles in MOVPE GaAs _{1-x} Bi _x Films Revealed by HAADF STEM Imaging. Microscopy and Microanalysis, 2014, 20, 196-197.	0.4	0
158	Density Functional Theory Study of the Gas Phase and Surface Reaction Kinetics for the MOVPE Growth of GaAs _{1-y} Bi _y . Journal of Physical Chemistry A, 2020, 124, 1682-1697.	2.5	0
159	Metal-organic vapor phase epitaxy of the quaternary metastable alloy In _{1-x} Ga _x As _{1-y} Bi _y and its kinetics of growth. Journal of Crystal Growth, 2020, 538, 125611.	1.5	0