Thomas F Kuech

List of Publications by Year
in descending order

159	2,935	159585 30	206112 48
papers	citations	h-index	g-index

163	163	163	3630
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Synthesis Gas Conversion Over Molybdenum-Based Catalysts Promoted by Transition Metals. ACS Catalysis, 2020, 10, 365-374.	11.2	21
3	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
4	Reduction of Interface Reactions in the Low-Temperature Solid-Phase Epitaxy of ScAlMgO4 on Al2O3(0001). Crystal Growth and Design, 2020, 20, 6001-6007.	3.0	2
5	Rates of levoglucosanol hydrogenolysis over BrÃ¸nsted and Lewis acid sites on platinum silica-alumina catalysts synthesized by atomic layer deposition. Journal of Catalysis, 2020, 389, 111-120.	6.2	8
6	Density Functional Theory Study of the Gas Phase and Surface Reaction Kinetics for the MOVPE Growth of GaAs_{1â€“y}Bi_y. Journal of Physical Chemistry A, 2020, 124, 1682-1697.	2.5	0
7	Metal-organic vapor phase epitaxy of the quaternary metastable alloy In1â€“xGaxAs1â^'yBiy and its kinetics of growth. Journal of Crystal Growth, 2020, 538, 125611.	1.5	0
8	High-Ge-Content SiGe Alloy Single Crystals Using the Nanomembrane Platform. ACS Applied Materials & Interfaces, 2020, 12, 20859-20866.	8.0	7
9	Radiation-induced segregation in a ceramic. Nature Materials, 2020, 19, 992-998.	27.5	47
10	Phase Selection and Structure of Low-Defect-Density Î³-Al₂O₃ Created by Epitaxial Crystallization of Amorphous Al₂O₃. ACS Applied Materials & Interfaces, 2020, 12, 57598-57608.	8.0	13
11	Simulation and analysis of IIIâ€“V heterostructure solar cells for a continuous HVPE process. Semiconductor Science and Technology, 2020, 35, 105011.	2.0	2
12	III-V Superlattices on InP/Si Metamorphic Buffer Layers for Î» â‰ˆ4.8â€‰Î¼m Quantum Cascade Lasers. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800493.	1.8	4
13	Solid-Phase Epitaxy of Perovskite High Dielectric PrAlO₃ 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
14	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
15	Seeded Lateral Solid-Phase Crystallization of the Perovskite Oxide SrTiO₃. Journal of Physical Chemistry C, 2019, 123, 7447-7456.	3.1	7
16	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
17	Modeling of transport and reaction in a novel hydride vapor phase epitaxy system. Journal of Crystal Growth, 2019, 513, 58-68.	1.5	2
18	Synthesis Gas Conversion over Rh/Mo Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2019, 9, 1810-1819.	11.2	33

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19	Characteristics of OMVPE grown GaAsBi QW lasers and impact of post-growth thermal annealing. Journal of Applied Physics, 2018, 123, .	2.5	13
20	Interfacial Mixing Analysis for Strained Layer Superlattices by Atom Probe Tomography. Crystals, 2018, 8, 437.	2.2	7
21	Synthesis Gas Conversion over Rh-Mn-W_xC/SiO₂ Catalysts Prepared by Atomic Layer Deposition. ACS Catalysis, 2018, 8, 10707-10720.	11.2	17
22	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
23	Single junction solar cell employing strain compensated GaAs0.965Bi0.035/GaAs0.75P0.25 multiple quantum wells grown by metal organic vapor phase epitaxy. Applied Physics Letters, 2018, 112, .	3.3	5
24	Transition state redox during dynamical processes in semiconductors and insulators. NPG Asia Materials, 2018, 10, 45-51.	7.9	3
25	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
26	Surface kinetics study of metal-organic vapor phase epitaxy of GaAs 1âˆ'y Bi y on offcut and mesa-patterned GaAs substrates. Journal of Crystal Growth, 2017, 464, 39-48.	1.5	4
27	Understanding and reducing deleterious defects in the metastable alloy GaAsBi. NPG Asia Materials, 2017, 9, e345-e345.	7.9	24
28	Atomic Layer Deposited MgO: A Lower Overpotential Coating for Li[Ni_{0.5}Mn_{0.3}Co_{0.2}]O₂ Cathode. ACS Applied Materials & Interfaces, 2017, 9, 11231-11239.	8.0	111
29	Annealing-induced precipitate formation behavior in MOVPE-grown GaAs_{1âˆ'x}Bi_xexplored by atom probe tomography and HAADF-STEM. Nanotechnology, 2017, 28, 215704.	2.6	14
30	Degradation of Hole Transport Materials via Exciton-Driven Cyclization. ACS Applied Materials & Interfaces, 2017, 9, 13369-13379.	8.0	14
31	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
32	Laser diodes employing GaAs_{1âˆ'x}Bi_x/GaAs_{1âˆ'y}P_yquantum well active regions. Semiconductor Science and Technology, 2017, 32, 075007.	2.0	11
33	In Situ Electrochemical Activation of Atomic Layer Deposition Coated MoS₂ Basal Planes for Efficient Hydrogen Evolution Reaction. Advanced Functional Materials, 2017, 27, 1701825.	14.9	87
34	Distinct Nucleation and Growth Kinetics of Amorphous SrTiO₃ on (001) SrTiO₃ and SiO₂/Si: A Step toward New Architectures. ACS Applied Materials & Interfaces, 2017, 9, 41034-41042.	8.0	17
35	Room temperature operation of InAs quantum dot lasers formed by diblock-copolymer lithography and selective area MOCVD growth. , 2017, , .		2
36	Impact of vicinal GaAs(001) substrates on Bi incorporation and photoluminescence in molecular beam epitaxy-grown GaAs1âˆ'xBix. Applied Physics Letters, 2016, 108, .	3.3	5

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37	Optimizing AlF3 atomic layer deposition using trimethylaluminum and TaF5: Application to high voltage Li-ion battery cathodes. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	32
38	Growth far from equilibrium: Examples from III-V semiconductors. Applied Physics Reviews, 2016, 3, .	11.3	39
39	Atomic Layer Deposition of Al₂O₃â€“Ga₂O₃ Alloy Coatings for Li[Ni_{0.5}Mn_{0.3}Co_{0.2}]O₂ Cathode to Improve Rate Performance in Li-Ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 10572-10580.	8.0	51
40	Role of the Cu-ZrO₂ Interfacial Sites for Conversion of Ethanol to Ethyl Acetate and Synthesis of Methanol from CO₂ and H₂. ACS Catalysis, 2016, 6, 7040-7050.	11.2	136
41	Impact of Sb Incorporation on MOVPE-Grown â€œBulkâ€•InGaAs(Sb)N Films for Solar Cell Application. IEEE Journal of Photovoltaics, 2016, 6, 1673-1677.	2.5	5
42	III-V compound semiconductors: Growth and structures. Progress in Crystal Growth and Characterization of Materials, 2016, 62, 352-370.	4.0	43
43	Atom probe tomography evidence for uniform incorporation of Bi across the growth front in GaAs1â^'Bi /GaAs superlattice. Journal of Crystal Growth, 2016, 446, 27-32.	1.5	5
44	Enhanced Incorporation of P into Tensile-Strained GaAs1-yPyLayers 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
45	Kinetic studies on molecular beam epitaxy growth of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>GaA</mml:mi><mml:msub><mml:mi mathvariant="normal">s</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math>. Physical Review B, 2015, 92, .	3.2	11
46	Strain-compensated GaAs_{1â^'y}P_y/GaAs_{1â^'z}Bi_z/GaAs_{1â^'y} wells for laser applications. Semiconductor Science and Technology, 2015, 30, 094011.	2.0	8
47	GaAs1â^'yBiy Raman signatures: illuminating relationships between the electrical and optical properties of GaAs1â^'yBiy and Bi incorporation. AIP Advances, 2015, 5, .	1.3	9
48	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
49	Tuning Acidâ€“Base Properties Using Mgâ€“Al Oxide Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2015, 7, 16573-16580.	8.0	20
50	The Effect of the Bi Precursors, (CH₃)₃Bi and (C₂H₅)₃Bi, on the Metalâ€Organic Vapor Phase Epitaxy of GaAs_{1â€‹y}Bi_y Films. Chemical Vapor Deposition, 2015, 21, 166-175.	1.3	15
51	Unexpected bismuth concentration profiles in metal-organic vapor phase epitaxy-grown Ga(As1â^'xBix)/GaAs superlattices revealed by Z-contrast scanning transmission electron microscopy imaging. APL Materials, 2015, 3, .	5.1	11
52	A model for arsenic anti-site incorporation in GaAs grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2014, 116, .	2.5	8
53	GaAs1â^'yâ^'zPyBiz, an alternative reduced band gap alloy system lattice-matched to GaAs. Applied Physics Letters, 2014, 105, .	3.3	23
54	Impact of thermal annealing on bulk InGaAsSbN materials grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2014, 104, 051915.	3.3	15

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55	Lowâ€strain, quantumâ€cascadeâ€laser active regions grown on metamorphic buffer layers for emission in the 3.0â€“4.0 Ï¼m wavelength region. IET Optoelectronics, 2014, 8, 25-32.	3.3	7
56	Unexpected Bismuth Concentration Profiles in MOVPE GaAs1-xBix Films Revealed by HAADF STEM Imaging. Microscopy and Microanalysis, 2014, 20, 196-197.	0.4	0
57	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
58	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
59	Planarization and Processing of Metamorphic Buffer Layers Grown by Hydride Vapor-Phase Epitaxy. Journal of Electronic Materials, 2014, 43, 873-878.	2.2	2
60	Self-limiting growth when using trimethyl bismuth (TMBi) in the metal-organic vapor phase epitaxy (MOVPE) of GaAs1â^'yBiy. Journal of Crystal Growth, 2014, 395, 38-45.	1.5	31
61	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
62	Growth of GaAs1â^'xBix by molecular beam epitaxy: Trade-offs in optical and structural characteristics. Journal of Applied Physics, 2014, 116, 043524.	2.5	12
63	Enhanced stability of cobalt catalysts by atomic layer deposition for aqueous-phase reactions. Energy and Environmental Science, 2014, 7, 1657.	30.8	109
64	Mixed Semiconductor Alloys for Optical Devices. Annual Review of Chemical and Biomolecular Engineering, 2013, 4, 187-209.	6.8	11
65	Low temperature growth of GaAs1â^'yBiy epitaxial layers. Journal of Crystal Growth, 2013, 380, 23-27.	1.5	23
66	Heteroepitaxy of GaAs on (001) â‡' 6Â° Ge substrates at high growth rates by hydride vapor phase epitaxy. Journal of Applied Physics, 2013, 113, 174903.	2.5	8
67	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
68	RÃ¼cktitelbild: 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
69	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
70	Ab initiostudy of the strain dependent thermodynamics of Bi doping in GaAs. Physical Review B, 2012, 86, .	3.2	50
71	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
72	Narrow band gap (1â€‰eV) InGaAsSbN solar cells grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2012, 100, .	3.3	30

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73	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
74	Hemin-Functionalized InAs-Based High Sensitivity Room Temperature NO Gas Sensors. Journal of Physical Chemistry C, 2012, 116, 826-833.	3.1	19
75	Metamorphic solar cells employing chemical mechanical polishing and MOVPE regrowth. , 2011, , .		0
76	High electron mobility transistors on plastic flexible substrates. Applied Physics Letters, 2011, 98, .	3.3	6
77	Quantum dot active regions based on diblock copolymer nanopatterning and selective MOCVD growth. , 2011, , .		1
78	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
79	Characterization of immobilized DNA on sulfur-passivated InAs surfaces. Materials Research Society Symposia Proceedings, 2011, 1301, 259.	0.1	0
80	A custom wide-field spectral imager for breast cancer margin assessment. , 2011, , .		0
81	Patterned InGaAs/InGaAsP/InP quantum dot active lasers using diblock copolymer lithography and selective area MOCVD growth. , 2010, , .		1
82	Metal Organic Vapor Phase Growth of Complex Semiconductor Alloys. AIP Conference Proceedings, 2010, , .	0.4	2
83	Defect reduction in epitaxial GaSb grown on nanopatterned GaAs substrates using full wafer block copolymer lithography. Applied Physics Letters, 2009, 95, .	3.3	14
84	Electrical properties of GaN/poly(3-hexylthiophene) interfaces. Journal of Applied Physics, 2009, 106, .	2.5	9
85	Controlled growth of InGaAs/InGaAsP quantum dots on InP substrates employing diblock copolymer lithography. Applied Physics Letters, 2009, 95, 113111.	3.3	14
86	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
87	Passivation of Interfacial States for GaAs- and InGaAs/InP-Based Regrown Nanostructures. Journal of Electronic Materials, 2009, 38, 2023-2032.	2.2	4
88	Surface states passivation for and regrowth around nanoposts formed for the fabrication of InP-based intersubband quantum box lasers. , 2009, , .		0
89	High antimony content GaAs1â^'zNzâ€“GaAs1â^'ySby type-II â€œWâ€•structure for long wavelength emission. Journal of Applied Physics, 2009, 106, 063713.	2.5	3
90	GaAsSb-GaAsN -based type-II ‘W’ structures for mid-IR emission. , 2009, , .		0

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91	Selective growth and chracterization of InGaAs Quantum Dots on patterned InP substrates utilizaing a diblock copolymer template. , 2009, , .		0
92	Hydrothermal synthesis of improved ZnO crystals for epitaxial growth of GaN thin films. Journal of Materials Science, 2008, 43, 2336-2341.	3.7	14
93	MOCVD-Grown Dilute Nitride Type II Quantum Wells. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 979-991.	2.9	18
94	Integration of thin layers of single-crystalline InP with flexible substrates. Applied Physics Letters, 2008, 92, 212109.	3.3	12
95	High crystalline-quality III-V layer transfer onto Si substrate. Applied Physics Letters, 2008, 92, 092107.	3.3	25
96	GaAsSbNâ€“GaAsSbâ€“InP Type-II â€œWâ€•Quantum Wells for Mid-IR Emission. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1065-1073.	2.9	11
97	N-rich and dilute-nitride GaN<inf>x</inf>(AsSb)<inf>1-x</inf> on InP substrates. , 2007, , .		0
98	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
99	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
100	Annealing of dilute-nitride GaAsSbNâ•InP strained multiple quantum wells. Applied Physics Letters, 2007, 91, .	3.3	6
101	InAs growth on submicron (100) SOI islands for InAs-Si composite channel MOSFETs. , 2007, , .		0
102	Growth behavior of GaSb by metalâ€“organic vapor-phase epitaxy. Journal of Crystal Growth, 2006, 296, 117-128.	1.5	13
103	InGaAsN/GaAsSb/GaAs(P) Type-II ‘W’ quantum well lasers. , 2006, , .		0
104	GaAsSbN/GaAsSb/InP type-II Quantum Wells for Mid-IR Emission. , 2006, , .		3
105	Selective Nucleation and Growth of Large Grain Polycrystalline GaAs. Materials Research Society Symposia Proceedings, 2005, 870, 151.	0.1	1
106	Epitaxial GaN1â”yAsy 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
107	Valence band hybridization inN-richGaN1â”xAsxalloys. Physical Review B, 2004, 70, .	3.2	86
108	N-rich GaNAs with High As Content Grown by Metalorganic Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 2003, 798, 271.	0.1	0

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109	A comparative study of GaSb (100) surface passivation by aqueous and nonaqueous solutions. Applied Physics Letters, 2003, 83, 2587-2589.	3.3	48
110	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
111	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
112	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
113	Study of Non-Aqueous Passivation on GaSb (100) Surfaces. Materials Research Society Symposia Proceedings, 2003, 763, 231.	0.1	5
114	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
115	n-GaN surface treatments for metal contacts studied via x-ray photoemission spectroscopy. Applied Physics Letters, 2002, 80, 204-206.	3.3	49
116	Lateral Epitaxial Overgrowth of InAs on (100) GaAs Substrates. Materials Research Society Symposia Proceedings, 2002, 744, 1.	0.1	1
117	X-ray photoemission determination of the Schottky barrier height of metal contacts tonâ€“GaN andpâ€“GaN. Journal of Applied Physics, 2002, 92, 6671-6678.	2.5	103
118	LEDs: New Lamps for Old and a Paradigm for Ongoing Curriculum Modernization. Journal of Chemical Education, 2001, 78, 1033.	2.3	12
119	Mechanism for the Reduction of Threading Dislocation Densities in Si0.82Ge0.18 Films on Silicon on Insulator Substrates. Materials Research Society Symposia Proceedings, 2001, 673, 1.	0.1	1
120	Plasma Induced Chemical Changes at Silica Surfaces During Pre-Bonding Treatments. Materials Research Society Symposia Proceedings, 2001, 681, 1.	0.1	1
121	X-ray Photoemission Determination of the Surface Fermi Level Motion 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
122	Kinetics of strain relaxation in semiconductor films grown on borosilicate glass-bonded substrates. Journal of Electronic Materials, 2001, 30, 802-806.	2.2	8
123	Light-emitting diodes as chemical sensors. Nature, 2001, 409, 476-476.	27.8	76
124	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
125	The Chemistry of GaN Growth. Materials Research Society Symposia Proceedings, 2000, 639, 111.	0.1	2
126	Model development of GaN MOVPE growth chemistry for reactor design. Journal of Electronic Materials, 2000, 29, 2-9.	2.2	19

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127	Oxygen-related deep levels in Al0.5In0.5P grown by MOVPE. Journal of Electronic Materials, 2000, 29, 426-429.	2.2	5
128	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
129	Dislocation Arrangement in a Thick LEO GaN Film on Sapphire. MRS Internet Journal of Nitride Semiconductor Research, 2000, 5, 97-103.	1.0	0
130	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
131	p-GaN surface treatments for metal contacts. Applied Physics Letters, 2000, 76, 415-417.	3.3	148
132	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
133	Chemical bonding and electronic properties of SeS2-treated GaAs(100). Journal of Applied Physics, 1999, 85, 969-977.	2.5	31
134	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
135	Making the Nanoworld Comprehensible: Instructional Materials for Schools and Outreach. Journal of Nanoparticle Research, 1999, 1, 147-150.	1.9	5
136	Comparative Study of GaN Growth Process by MOVPE. Materials Research Society Symposia Proceedings, 1999, 572, 463.	0.1	0
137	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
138	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
139	Controlled Surface Fermi-level on the SeS₂-passivated n-GaAs (100). Materials Research Society Symposia Proceedings, 1998, 510, 653.	0.1	2
140	Structure of Ain on Si (111) Deposited with Metal Organic Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 1998, 537, 1.	0.1	0
141	Chemical Bonding on GaAs (001) Surfaces Passivated Using SeS2. Materials Research Society Symposia Proceedings, 1997, 484, 589.	0.1	1
142	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
143	Oxygen-Related Defects in In0.5(AlxGa1â^'x)0.5P Grown by MOVPE. Materials Research Society Symposia Proceedings, 1997, 484, 611.	0.1	1
144	Photoluminescence studies of erbium-doped GaAs under hydrostatic pressure. Journal of Applied Physics, 1997, 82, 368-374.	2.5	18

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145	Photoreflectance Study of the Longâ€Term Stability of Various Surface Chemical Treatments on (001) nâ€GaAs. Journal of the Electrochemical Society, 1997, 144, 732-736.	2.9	8
146	High temperature adduct formation of trimethylgallium and ammonia. Applied Physics Letters, 1996, 69, 55-57.	3.3	149
147	Study of Traps in GaN by Thermally-Stimulated Current. Materials Research Society Symposia Proceedings, 1996, 449, 633.	0.1	1
148	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
149	A nearâ€field scanning optical microscopy study of the uniformity of GaAs surface passivation. Applied Physics Letters, 1996, 69, 662-664.	3.3	10
150	Schottky barrier enhancement using reacted Ni2Al3/Ni/nâ€GaAs, Ni/Al/Ni/nâ€GaAs, and NiAl/Al/Ni/nâ€GaAs contacts. Journal of Applied Physics, 1995, 77, 4777-4782.	2.5	4
151	PdAl Schottky contact to In0.52Al0.48As grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 67, 3587-3589.	3.3	8
152	Schottky enhancement of reacted NiAl/nâ€GaAs contacts. Applied Physics Letters, 1994, 64, 3485-3487.	3.3	7
153	High Schottky barrier height of the Al/nâ€GaAs diodes achieved by sputter deposition. Applied Physics Letters, 1994, 64, 1413-1415.	3.3	9
154	Enhancement of Schottky barrier height to nâ€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
155	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
156	An Investigation of the Al/n-GaAs Diodes with High Schottky Barrier Heights. Materials Research Society Symposia Proceedings, 1993, 318, 147.	0.1	1
157	Surface Chemistry and Mechanism of Atomic Layer Growth of GaAs. Materials Research Society Symposia Proceedings, 1991, 222, 3.	0.1	20
158	Surface Chemistry of CVD Reactions Studied by Molecular Beam/Surface Scattering. Materials Research Society Symposia Proceedings, 1990, 204, 37.	0.1	7
159	Reaction of trimethylgallium in the atomic layer epitaxy of GaAsâ€‰(100). Applied Physics Letters, 1989, 55, 1011-1013.	3.3	82