

Yoshihiro Kangawa

List of Publications by Year in descending order

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147
papers

1,527
citations

361413

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395702

33
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148
all docs

148
docs citations

148
times ranked

1102
citing authors

#	ARTICLE	IF	CITATIONS
1	A new theoretical approach to adsorption-desorption behavior of Ga on GaAs surfaces. Surface Science, 2001, 493, 178-181.	1.9	130
2	Surface Stability and Growth Kinetics of Compound Semiconductors: An Ab Initio-Based Approach. Materials, 2013, 6, 3309-3360.	2.9	76
3	Theoretical approach to influence of As ₂ pressure on GaAs growth kinetics. Surface Science, 2002, 507-510, 285-289.	1.9	71
4	Thermodynamical analysis of oxygen incorporation from a quartz crucible during solidification of multicrystalline silicon for solar cell. Journal of Crystal Growth, 2008, 310, 4666-4671.	1.5	70
5	Hydride vapor phase epitaxy of AlN: thermodynamic analysis of aluminum source and its application to growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2498-2501.	0.8	68
6	Monte Carlo simulation for temperature dependence of Ga diffusion length on GaAs(0 0 1). Applied Surface Science, 2002, 190, 517-520.	6.1	59
7	Novel Solution Growth Method of Bulk AlN Using Al and Li ₃ N Solid Sources. Applied Physics Express, 2011, 4, 095501.	2.4	35
8	Thermal Conductivity of SiC Calculated by Molecular Dynamics. Japanese Journal of Applied Physics, 2008, 47, 8898.	1.5	33
9	Anomalous behavior of excess energy curves of In _x Ga _{1-x} N grown on GaN and InN. Journal of Crystal Growth, 2000, 220, 401-404.	1.5	31
10	Theoretical study of the composition pulling effect in InGaN metalorganic vapor-phase epitaxy growth. Japanese Journal of Applied Physics, 2017, 56, 078003.	1.5	31
11	Evolution of the free energy of the GaN(0001) surface based on first-principles phonon calculations. Physical Review B, 2019, 100, .	3.2	29
12	Thermodynamic analysis of (0001) and (0001) GaN metalorganic vapor phase epitaxy. Japanese Journal of Applied Physics, 2017, 56, 070304.	1.5	27
13	Thermodynamic analysis of AlGaIn HVPE growth. Journal of Crystal Growth, 2005, 281, 47-54.	1.5	26
14	Investigation of thermal conductivity of GaN by molecular dynamics. Journal of Crystal Growth, 2005, 284, 197-202.	1.5	25
15	Theoretical approach to initial growth kinetics of GaN on GaN(001). Journal of Crystal Growth, 2007, 300, 62-65.	1.5	23
16	Systematic theoretical investigations of adsorption behavior on the GaAs(0 0 1)-c(4 Å ² × 4) surfaces. Applied Surface Science, 2004, 237, 194-199.	6.1	22
17	InSb Mid-Infrared Photon Detector for Room-Temperature Operation. Japanese Journal of Applied Physics, 2013, 52, 092202.	1.5	22
18	Screw dislocation that converts p-type GaN to n-type: Microscopic study on Mg condensation and leakage current in p-n diodes. Applied Physics Letters, 2020, 117, 012105.	3.3	22

#	ARTICLE	IF	CITATIONS
19	Investigation of the thermal conductivity of a fullerene peapod by molecular dynamics simulation. Journal of Crystal Growth, 2008, 310, 2301-2305.	1.5	21
20	Theoretical Investigation of the Effect of Growth Orientation on Indium Incorporation Efficiency during InGaN Thin Film Growth by Metal-Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JC02.	1.5	21
21	An empirical potential approach to wurtzite-zinc blende structural stability of semiconductors. Journal of Crystal Growth, 2002, 235, 149-153.	1.5	20
22	Thermodynamic analysis of InN and In _x Ga _{1-x} N MOVPE using various nitrogen sources. Journal of Crystal Growth, 2004, 272, 341-347.	1.5	20
23	Growth of GaN Directly on Si(111) Substrate by Controlling Atomic Configuration of Si Surface by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2006, 45, L478-L481.	1.5	20
24	First-principles calculation of $\theta > 0$ graphene-like growth of C on SiC(0001). Physical Review B, 2012, 86, .	1.5	19
25	Thermodynamical analysis of polytype stability during PVT growth of SiC using 2D nucleation theory. Journal of Crystal Growth, 2012, 352, 177-180.	1.5	19
26	DFT modeling of carbon incorporation in GaN(0001) and GaN(0001 \bar{A}) metalorganic vapor phase epitaxy. Applied Physics Letters, 2017, 111, .	3.3	19
27	Theoretical analyses of In incorporation and compositional instability in coherently grown InGaN thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2249-2251.	0.8	18
28	An empirical potential approach to structural stability of GaN _x As _{1-x} . Journal of Crystal Growth, 2003, 258, 277-282.	1.5	17
29	Thermodynamic considerations of the vapor phase reactions in III-nitride metal organic vapor phase epitaxy. Japanese Journal of Applied Physics, 2017, 56, 04CJ04.	1.5	17
30	Atomic Structures and Electronic Properties of Semiconductor Interfaces. , 2011, , 113-174.		15
31	Global analysis of GaN growth using a solution technique. Journal of Crystal Growth, 2008, 310, 1790-1793.	1.5	14
32	Thermodynamic foundations of applications of ab initio methods for determination of the adsorbate equilibria: hydrogen at the GaN(0001) surface. Physical Chemistry Chemical Physics, 2017, 19, 29676-29684.	2.8	14
33	Growth of thick AlN layer on sapphire (0001) substrate using hydride vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2062-2065.	0.8	13
34	Theoretical study of adatom stability on polar GaN surfaces during MBE and MOVPE. Applied Surface Science, 2020, 502, 144205.	6.1	13
35	Theoretical approach to structural stability of GaN: How to grow cubic GaN. Journal of Crystal Growth, 2009, 311, 3106-3109.	1.5	12
36	Advances in modeling semiconductor epitaxy: Contributions of growth orientation and surface reconstruction to InN metalorganic vapor phase epitaxy. Applied Physics Express, 2016, 9, 125601.	2.4	12

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37	Modeling the Non-Equilibrium Process of the Chemical Adsorption of Ammonia on GaN(0001) Reconstructed Surfaces Based on Steepest-Entropy-Ascent Quantum Thermodynamics. <i>Materials</i> , 2017, 10, 948.	2.9	12
38	Thermodynamic analysis of trimethylgallium decomposition during GaN metal organic vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 04FJ03.	1.5	12
39	Estimation of growth rate in unidirectionally solidified multicrystalline silicon by the growth-induced striation method. <i>Journal of Crystal Growth</i> , 2008, 310, 2697-2701.	1.5	11
40	MBE growth of a novel chalcopyrite-type ternary compound MnGeP ₂ . <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 2030-2035.	4.0	10
41	Progress in theoretical approach to InGaN and InN epitaxy: In incorporation efficiency and structural stability. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 100202.	1.5	10
42	Reaction Pathway of Surface-Catalyzed Ammonia Decomposition and Nitrogen Incorporation in Epitaxial Growth of Gallium Nitride. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24665-24671.	3.1	10
43	CH ₄ Adsorption Probability on GaN(0001) and (000 $\bar{1}$) during Metalorganic Vapor Phase Epitaxy and Its Relationship to Carbon Contamination in the Films. <i>Materials</i> , 2019, 12, 972.	2.9	10
44	Absolute surface energies of oxygen-adsorbed GaN surfaces. <i>Journal of Crystal Growth</i> , 2020, 549, 125868.	1.5	10
45	Kinetic-thermodynamic model for carbon incorporation during step-flow growth of GaN by metalorganic vapor phase epitaxy. <i>Physical Review Materials</i> , 2019, 3, .	2.4	10
46	Thermodynamic study on compositional instability of InGaN/GaN and InGaN/InN during MBE. <i>Applied Surface Science</i> , 2003, 216, 453-457.	6.1	9
47	Investigation of thermal conductivity of nitride mixed crystals and superlattices by molecular dynamics. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 1695-1699.	0.8	9
48	An investigation of thermal conductivity of nitride-semiconductor nanostructures by molecular dynamics simulation. <i>Journal of Crystal Growth</i> , 2007, 298, 251-253.	1.5	9
49	Method for Theoretical Prediction of Indium Composition in Coherently Grown InGaN Thin Films. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 088004.	1.5	9
50	Progress in Modeling Compound Semiconductor Epitaxy: Unintentional Doping in GaN MOVPE. <i>Crystal Growth and Design</i> , 2021, 21, 1878-1890.	3.0	9
51	Directional Solidification of Multicrystalline Silicon Using the Accelerated Crucible Rotation Technique. <i>Crystal Growth and Design</i> , 2008, 8, 2525-2527.	3.0	8
52	Molecular beam epitaxy growth of GaN under Ga-rich conditions investigated by molecular dynamics simulation. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FL08.	1.5	8
53	First-principles and thermodynamic analysis of trimethylgallium (TMG) decomposition during MOVPE growth of GaN. <i>Journal of Crystal Growth</i> , 2017, 468, 950-953.	1.5	8
54	Self-formed compositional superlattices triggered by cation orderings in m-plane Al _{1-x} In _x N on GaN. <i>Scientific Reports</i> , 2020, 10, 18570.	3.3	8

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55	Effects of Mg dopant in Al-composition-graded Al _x Ga _{1-x} N (0.45Åx) on vertical electrical conductivity of ultrawide bandgap AlGaN p-n junction. Applied Physics Express, 2021, 14, 096503.	2.4	8
56	Influence of Lattice Constraint from InN and GaN Substrate on Relationship between Solid Composition of In _x Ga _{1-x} N Film and Input Mole Ratio during Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2003, 42, L95-L98.	1.5	7
57	Distribution of Light Elements in Multicrystalline Silicon for Solar Cells Grown by Directional Solidification. Journal of the Electrochemical Society, 2009, 156, H711.	2.9	7
58	(Invited) First Principles and Thermodynamical Studies on Metal Organic Vapor Phase Epitaxy of GaN. ECS Transactions, 2017, 80, 295-301.	0.5	7
59	Thermodynamic analysis of semipolar GaN and AlN under metalorganic vapor phase epitaxy growth conditions. Japanese Journal of Applied Physics, 2019, 58, SC1014.	1.5	7
60	Exploration of a large-scale reconstructed structure on GaN(0001) surface by Bayesian optimization. Applied Physics Letters, 2022, 120, 021602.	3.3	7
61	Numerical calculation with empirical interatomic potential for formation mechanism of CuAu-I type ordered structure in InGaAs/(110)InP. Applied Surface Science, 2000, 159-160, 368-373.	6.1	6
62	Influence of hydrogen coverage on Si(111) substrate on the growth of GaN buffer layer. Journal of Crystal Growth, 2007, 300, 66-69.	1.5	6
63	Tight-Binding Approach to Initial Stage of the Graphitization Process on a Vicinal SiC Surface. Japanese Journal of Applied Physics, 2011, 50, 038003.	1.5	6
64	Molecular dynamics simulation of graphene growth by surface decomposition of 6H-SiC(0001) and Si(0001). Japanese Journal of Applied Physics, 2014, 53, 065601.	1.5	6
65	First-principle study of ammonia decomposition and nitrogen incorporation on the GaN surface in metal organic vapor phase epitaxy. Journal of Crystal Growth, 2019, 507, 421-424.	1.5	6
66	Effect of Ni-Cu substrates on phase selection of hexagonal and cubic boron nitride thin films. Applied Surface Science, 2003, 216, 72-77.	6.1	5
67	Study of Pulse Laser Assisted Metalorganic Vapor Phase Epitaxy of InGaN with Large Indium Mole Fraction. Japanese Journal of Applied Physics, 2004, 43, L1026-L1028.	1.5	5
68	Theoretical investigations of adatom behavior on non-planar surfaces with GaAs(111)A. Applied Surface Science, 2004, 237, 206-212.	6.1	5
69	Impact of crystallization manner of the buffer layer on the crystalline quality of GaN epitaxial layers on GaAs (111)A substrate. Journal of Crystal Growth, 2005, 275, e1149-e1154.	1.5	5
70	Growth and characterization of thick GaN layers with high Fe doping. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2058-2061.	0.8	5
71	Molecular dynamics simulation of thermal conductivity of GaN/AlN quantum dot superlattices. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2289-2292.	0.8	5
72	Molecular dynamics simulation of diffusion behavior of N atoms on the growth surface in GaN solution growth. Journal of Crystal Growth, 2012, 351, 32-36.	1.5	5

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73	Thermodynamic analysis of the gas phase reaction of Mg-doped GaN growth by HVPE using MgO. Japanese Journal of Applied Physics, 2020, 59, 088001.	1.5	5
74	Theoretical investigations of adatom adsorptions on the As-stabilized GaAs(111)A surface. Surface Science, 2001, 493, 173-177.	1.9	4
75	Theoretical investigations of thermodynamic stability for Si _{1-x} Ge _x alloys. Journal of Crystal Growth, 2002, 237-239, 116-120.	1.5	4
76	Trade-off between thickness and temperature ramping rate of GaN buffer layer studied for high quality GaN growth on GaAs(111)A substrate. Journal of Crystal Growth, 2004, 268, 1-7.	1.5	4
77	Growth of MnGe ₂ Thin Films by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L265-L267.	1.5	4
78	Monte Carlo simulation of atomic arrangement in InGaN thin film grown by MOVPE. Journal of Crystal Growth, 2009, 311, 463-465.	1.5	4
79	Numerical Analysis of the Dislocation Density in Multicrystalline Silicon for Solar Cells by the Vertical Bridgman Process. International Journal of Photoenergy, 2013, 2013, 1-8.	2.5	4
80	Thermodynamic Analysis of Coherently Grown GaAsN/Ge: Effects of Different Gaseous Sources. Japanese Journal of Applied Physics, 2013, 52, 045601.	1.5	4
81	Theoretical approach to surface reconstruction of InN(0001) during raised-pressure metalorganic vapor-phase epitaxy. Japanese Journal of Applied Physics, 2016, 55, 05FM01.	1.5	4
82	First-principles study of the surface phase diagrams of GaN(0001) and (000 $\bar{1}$) under oxide vapor phase epitaxy growth conditions. Physica Status Solidi (B): Basic Research, 2017, 254, 1600706.	1.5	4
83	Improved thermodynamic analysis of gas reactions for compound semiconductor growth by vapor-phase epitaxy. Japanese Journal of Applied Physics, 2017, 56, 038002.	1.5	4
84	Ab initio and thermodynamic picture of Al adsorption of AlN(0001) surface – Role of bond creation and electron transition contributions. Applied Surface Science, 2020, 532, 147419.	6.1	4
85	Computational study of oxygen stability in vicinal m(10 $\bar{1}$ 0)-GaN growth by MOVPE. Applied Physics Express, 2020, 13, 055507.	2.4	4
86	Theoretical study on the effect of H ₂ and NH ₃ on trimethylgallium decomposition process in GaN MOVPE. Japanese Journal of Applied Physics, 2021, 60, 045507.	1.5	4
87	Empirical interatomic potential calculations for relative stability of Ga adatom on GaAs(100) and (111)A surfaces. Journal of Crystal Growth, 2002, 237-239, 223-226.	1.5	3
88	Influence of lattice constraint from InN and GaN substrate on relationship between input mole ratio and solid composition of InGaN during MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2575-2579.	0.8	3
89	Theoretical Investigation of Arsenic Desorption from GaAs(001) Surfaces under an Atmosphere of Hydrogen. Japanese Journal of Applied Physics, 2003, 42, 2578-2581.	1.5	3
90	High Temperature Ramping Rate for GaAs(111)A Substrate Covered with a Thin GaN Buffer Layer for Thick GaN Growth at 1000 ^\circ C. Japanese Journal of Applied Physics, 2003, 42, L526-L528.	1.5	3

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91	MnGeP ₂ Thin Films Grown by Molecular Beam Epitaxy. Journal of Superconductivity and Novel Magnetism, 2005, 18, 79-82.	0.5	3
92	Thermodynamic stability of In _{1-x} Al _y Ga _x Al _y N on GaN and InN. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1700-1703.	0.8	3
93	Possibility of AlN Solution Growth Using Al and Li ₃ N. Japanese Journal of Applied Physics, 2007, 46, 5785-5787.	1.5	3
94	Numerical investigation of crystal growth process of bulk Si and nitrides – a review. Crystal Research and Technology, 2007, 42, 1185-1189.	1.3	3
95	Ab initio-based approach on initial growth kinetics of GaN on GaN (001). Journal of Crystal Growth, 2007, 301-302, 75-78.	1.5	3
96	Influence of compositional changes of source materials on AlN synthesis using Li-Al-N solvent. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S336-S339.	0.8	3
97	Real-time observation system development for high-temperature liquid/solid interfaces and its application to solid-source solution growth of AlN. Applied Physics Express, 2015, 8, 065601.	2.4	3
98	Ab initio study of GaAs(100) surface stability over As ₂ , H ₂ and N ₂ as a model for vapor-phase epitaxy of GaAs. Journal of Crystal Growth, 2015, 432, 6-14.	1.5	3
99	Strain energy analysis of screw dislocations in 4H-SiC by molecular dynamics. Japanese Journal of Applied Physics, 2016, 55, 031301.	1.5	3
100	Chemical vapor deposition condition dependence of reconstructed surfaces on 4H-SiC (0001), (000 $\bar{1}$), and (100) surfaces. Japanese Journal of Applied Physics, 2019, 58, 115501.	1.5	3
101	First-Principles Calculation of Bandgaps of Al _{1-x} In _x N Alloys and Short-Period Al _{1-x} In _x N/Al _{1-y} In _y N Superlattices. Physica Status Solidi (B): Basic Research, 2020, 257, 1900530.	1.5	3
102	Oxygen Incorporation Kinetics in Vicinal (10 $\bar{1}$ 0) Gallium Nitride Growth by Metal-Organic Vapor Phase Epitaxy. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000142.	2.4	3
103	Modeling carbon coverage on polar GaN surfaces during MOVPE. Japanese Journal of Applied Physics, 2020, 59, 048002.	1.5	3
104	Microstructure of Bulk AlN Grown by A New Solution Growth Method. Japanese Journal of Applied Physics, 2011, 50, 120202.	1.5	3
105	Pulse laser assisted MOVPE for InGaN with high indium content. Physica Status Solidi A, 2004, 201, 2846-2849.	1.7	2
106	Possibility of AlN growth using Li-Al-N solvent. Journal of Crystal Growth, 2010, 312, 2569-2573.	1.5	2
107	Calculation of phase diagrams of the Li ₃ N-Al system for AlN growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1581-1584.	0.8	2
108	Thermodynamic analysis of vapor-phase epitaxial growth of GaAsN on Ge. Journal of Crystal Growth, 2012, 343, 105-109.	1.5	2

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109	First-principles study of polar, nonpolar, and semipolar GaN surfaces during oxide vapor phase epitaxy growth. Japanese Journal of Applied Physics, 2018, 57, 115504.	1.5	2
110	Adsorption of nitrogen at AlN(000-1) surface – Decisive role of structural and electronic factors. Surface Science, 2021, 713, 121891.	1.9	2
111	Thermodynamic analysis for nonpolar III-nitride surfaces under metalorganic vapor-phase epitaxy conditions. Japanese Journal of Applied Physics, 2020, 59, 028003.	1.5	2
112	Formation Mechanism of Antiphase Boundary Structure in Molecular Beam Epitaxy Grown InGaAs/(110)InP. Japanese Journal of Applied Physics, 1999, 38, 40-41.	1.5	1
113	Formation mechanism of Al-segregated region in InAlAs/(110)InP. Journal of Crystal Growth, 2001, 229, 164-168.	1.5	1
114	Systematic theoretical investigations of miscibility in Si _{1-x} Ge _x thin films. Applied Surface Science, 2003, 216, 458-462.	6.1	1
115	Influence of laser power on crystalline quality of InGaN with high indium content grown by pulse laser-assisted MOVPE. Journal of Crystal Growth, 2004, 272, 444-448.	1.5	1
116	GaN growth process using GaP(111)A and (111)B surfaces as an initial substrate. Journal of Crystal Growth, 2005, 275, e1631-e1636.	1.5	1
117	Analysis of compositional instability of InGaN by Monte Carlo simulation. Journal of Crystal Growth, 2007, 298, 190-192.	1.5	1
118	Numerical study of the relationship between growth condition and atomic arrangement of InGaN. Physica Status Solidi (B): Basic Research, 2007, 244, 1784-1788.	1.5	1
119	Synthesis of AlN from Li ₃ N and Al: Application to vapor phase epitaxy. Journal of Crystal Growth, 2008, 310, 2827-2831.	1.5	1
120	AlN synthesis on AlN/SiC template using Li-Al-N solvent. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1292-1294.	1.8	1
121	N Substitution in GaAs(001) Surface under an Atmosphere of Hydrogen. Japanese Journal of Applied Physics, 2012, 51, 10ND17.	1.5	1
122	Investigation of GaN Solution Growth Processes on Ga- and N-Faces by Molecular Dynamics Simulation. Japanese Journal of Applied Physics, 2012, 51, 01AF06.	1.5	1
123	Ab initio-Based Approach to Crystal Growth. , 2015, , 477-520.		1
124	Ab initio model for GaAs(100) surface stability over As ₂ , H ₂ , and N ₂ chemical beam epitaxy using GaAs(100) surface stability over As ₂ , H ₂ , and N ₂ . Japanese Journal of Applied Physics, 2017, 56, 060306.	1.5	1
125	Electronic structure analysis of core structures of threading dislocations in GaN. , 2019, , .		1
126	Ab initio-based Approach to Structural Stability of GaAs Surfaces. Hyomen Kagaku, 2003, 24, 642-647.	0.0	1

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127	Computics Approach toward Clarification of Atomic Reactions during Epitaxial Growth of GaN. , 2020, , ,		1
128	An atomistic insight into reactions and free-energy profiles of NH ₃ and Ga on GaN surfaces during the epitaxial growth. Applied Surface Science, 2022, 599, 153935.	6.1	1
129	A new empirical interatomic potential for compound semiconductors and its application to thermodynamic stabilities. , 0, ,		0
130	Superlattice stacking structure in InGaN thin film pseudomorphic to GaN (0001) substrate: semigrand canonical Monte Carlo simulation. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2486-2489.	0.8	0
131	Improvements in crystalline quality of thick GaN layers on GaAs (111)A by periodic insertion of low-temperature GaN buffer layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2141-2144.	0.8	0
132	Enhancement of the diffusion of oxygen and boron in silicon crystals under irradiation of infrared laser light. Journal of Applied Physics, 2006, 99, 073103.	2.5	0
133	Possibility of AlN vapor phase epitaxy using Li ₃ N as a nitrogen source. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S340.	0.8	0
134	Thermodynamic analysis for the prediction of N composition in coherently grown GaAsN for a multi-junction solar cell. , 2011, , ,		0
135	Microstructure of Bulk AlN Grown by A New Solution Growth Method. Japanese Journal of Applied Physics, 2011, 50, 120202.	1.5	0
136	First principles approach to C aggregation process during 0th graphene growth on SiC(0001). , 2013, , ,		0
137	Structural and optical properties of AlN grown by solid source solution growth method. Japanese Journal of Applied Physics, 2015, 54, 085501.	1.5	0
138	Chemical beam epitaxy of GaAs 1-x N x using MMHy and DMHy precursors, modeled by ab initio study of GaAs(100) surfaces stability over As 2 , H 2 and N 2. Journal of Crystal Growth, 2017, 468, 557-561.	1.5	0
139	Atomic Arrangement and In Composition in InGaN Quantum Wells. Springer Series in Materials Science, 2018, , 109-124.	0.6	0
140	Thermodynamic Approach to InN Epitaxy. Springer Series in Materials Science, 2018, , 95-108.	0.6	0
141	Facet stability of GaN during tri-halide vapor phase epitaxy: an ab initio-based approach. CrystEngComm, 2021, 23, 1423-1428.	2.6	0
142	Teaching the mechanism of the epitaxial growth using the quantum mechanical approach. Acta Crystallographica Section A: Foundations and Advances, 2002, 58, c199-c199.	0.3	0
143	Crucible rotation dependence of oxygen concentration during solidification of multicrystalline Si. Acta Crystallographica Section A: Foundations and Advances, 2008, 64, C489-C489.	0.3	0
144	Role of the Surface Nâ€“H Molecular Layer in High Quality In-RICH InGaN Growth by MOVPE. Journal of Chemical Engineering of Japan, 2014, 47, 615-619.	0.6	0

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145	Theoretical Investigation for the Formation Mechanism of CuAu-I Type Ordered Structure in InGaAs/(110)InP Alloy Semiconductor Using an Empirical Interatomic Potential. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1999, 63, 741-746.	0.4	0
146	Al coverage of AlN(0001) surface and Al vapor pressure “ Thermodynamic assessment based on ab initio calculations. Computational Materials Science, 2022, 203, 111159.	3.0	0
147	DFT modeling of unintentional oxygen incorporation enhanced by magnesium in GaN(0001) and AlN(0001) growth surfaces during metalorganic vapor phase epitaxy. Physica Status Solidi (B): Basic Research, 0, , .	1.5	0