Yoshihiro Kangawa

List of Publications by Year
in descending order

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147 papers	1,527 citations	361413 20 h-index	395702 33 g-index
148 all docs	148 docs citations	148 times ranked	1102 citing authors

#	Article	IF	Citations
1	Exploration of a large-scale reconstructed structure on GaN(0001) surface by Bayesian optimization. Applied Physics Letters, 2022, 120, 021602.	3.3	7
2	Al coverage of AlN(0001) surface and Al vapor pressure â€“ Thermodynamic assessment based on ab initio calculations. Computational Materials Science, 2022, 203, 111159.	3.0	0
3	An atomistic insight into reactions and free-energy profiles of NH3 and Ga on GaN surfaces during the epitaxial growth. Applied Surface Science, 2022, 599, 153935.	6.1	1
4	Facet stability of GaN during tri-halide vapor phase epitaxy: an ab initio-based approach. CrystEngComm, 2021, 23, 1423-1428.	2.6	0
5	Progress in Modeling Compound Semiconductor Epitaxy: Unintentional Doping in GaN MOVPE. Crystal Growth and Design, 2021, 21, 1878-1890.	3.0	9
6	Theoretical study on the effect of H2 and NH3 on trimethylgallium decomposition process in GaN MOVPE. Japanese Journal of Applied Physics, 2021, 60, 045507.	1.5	4
7	Effects of Mg dopant in Al-composition-graded Al_xGa_{1â^'x}N (0.45Ââ‰Âx) on vertical electrical conductivity of ultrawide bandgap AlGaN pâ€“n junction. Applied Physics Express, 2021, 14, 096503.	2.4	8
8	Adsorption of nitrogen at AlN(000-1) surface â€“ Decisive role of structural and electronic factors. Surface Science, 2021, 713, 121891.	1.9	2
9	Firstâ€Principles Calculation of Bandgaps of Al 1â^' x In x N Alloys and Shortâ€Period Al 1â^' x In x N/Al 1â^' y In y N Superlattices. Physica Status Solidi (B): Basic Research, 2020, 257, 1900530.	1.5	3
10	Theoretical study of adatom stability on polar GaN surfaces during MBE and MOVPE. Applied Surface Science, 2020, 502, 144205.	6.1	13
11	Ab initio and thermodynamic picture of Al adsorption of AlN(0001) surface â€“ Role of bond creation and electron transition contributions. Applied Surface Science, 2020, 532, 147419.	6.1	4
12	Self-formed compositional superlattices triggered by cation orderings in m-plane Al1â^'xInxN on GaN. Scientific Reports, 2020, 10, 18570.	3.3	8
13	Absolute surface energies of oxygen-adsorbed GaN surfaces. Journal of Crystal Growth, 2020, 549, 125868.	1.5	10
14	Screw dislocation that converts p-type GaN to n-type: Microscopic study on Mg condensation and leakage current in pâ€“n diodes. Applied Physics Letters, 2020, 117, 012105.	3.3	22
15	Computational study of oxygen stability in vicinal m(10â^'10)-GaN growth by MOVPE. Applied Physics Express, 2020, 13, 055507.	2.4	4
16	Oxygen Incorporation Kinetics in Vicinal m(10â^'10) Gallium Nitride Growth by Metalâ€Organic Vapor Phase Epitaxy. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000142.	2.4	3
17	Thermodynamic analysis for nonpolar III-nitride surfaces under metalorganic vapor-phase epitaxy conditions. Japanese Journal of Applied Physics, 2020, 59, 028003.	1.5	2
18	Modeling carbon coverage on polar GaN surfaces during MOVPE. Japanese Journal of Applied Physics, 2020, 59, 048002.	1.5	3

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19	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
20	Computics Approach toward Clarification of Atomic Reactions during Epitaxial Growth of GaN. , 2020, , .		1
21	Evolution of the free energy of the GaN(0001) surface based on first-principles phonon calculations. Physical Review B, 2019, 100, .	3.2	29
22	Chemical vapor deposition condition dependence of reconstructed surfaces on 4H-SiC (0001), (000$ar{{f{1}}}$), and (1$ar{{f{1}}}$00) surfaces. Japanese Journal of Applied Physics, 2019, 58, 115501.	1.5	3
23	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
24	CH4 Adsorption Probability on GaN(0001) and (000â¯1) during Metalorganic Vapor Phase Epitaxy and Its Relationship to Carbon Contamination in the Films. Materials, 2019, 12, 972.	2.9	10
25	Electronic structure analysis of core structures of threading dislocations in GaN. , 2019, , .		1
26	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
27	Kinetic-thermodynamic model for carbon incorporation during step-flow growth of GaN by metalorganic vapor phase epitaxy. Physical Review Materials, 2019, 3, .	2.4	10
28	Atomic Arrangement and In Composition in InGaN Quantum Wells. Springer Series in Materials Science, 2018, , 109-124.	0.6	0
29	Thermodynamic analysis of trimethylgallium decomposition during GaN metal organic vapor phase epitaxy. Japanese Journal of Applied Physics, 2018, 57, 04FJ03.	1.5	12
30	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
31	Reaction Pathway of Surface-Catalyzed Ammonia Decomposition and Nitrogen Incorporation in Epitaxial Growth of Gallium Nitride. Journal of Physical Chemistry C, 2018, 122, 24665-24671.	3.1	10
32	Thermodynamic Approach to InN Epitaxy. Springer Series in Materials Science, 2018, , 95-108.	0.6	0
33	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
34	Firstâ€principles study of the surface phase diagrams of GaN(0001) and (000â¯1) under oxide vapor phase epitaxy growth conditions. Physica Status Solidi (B): Basic Research, 2017, 254, 1600706.	1.5	4
35	First-principles and thermodynamic analysis of trimethylgallium (TMG) decomposition during MOVPE growth of GaN. Journal of Crystal Growth, 2017, 468, 950-953.	1.5	8
36	DFT modeling of carbon incorporation in GaN(0001) and GaN(0001Â¯) metalorganic vapor phase epitaxy. Applied Physics Letters, 2017, 111, .	3.3	19

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37	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
38	Ab initio model for GaAs_{1â^'}_xN_xchemical beam epitaxy using GaAs(100) surface stability over As₂, H₂, and N₂. Japanese Journal of Applied Physics, 2017, 56, 060306.	1.5	1
39	(Invited) First Principles and Themodynamical Studies on Matel Organic Vaper Phase Epitaxy of GaN. ECS Transactions, 2017, 80, 295-301.	0.5	7
40	Thermodynamic considerations of the vapor phase reactions in IIIâ€“nitride metal organic vapor phase epitaxy. Japanese Journal of Applied Physics, 2017, 56, 04CJ04.	1.5	17
41	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
42	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
43	Thermodynamic analysis of (0001) and $(000ar{1})$ GaN metalorganic vapor phase epitaxy. Japanese Journal of Applied Physics, 2017, 56, 070304.	1.5	27
44	Modeling the Non-Equilibrium Process of the Chemical Adsorption of Ammonia on GaN(0001) Reconstructed Surfaces Based on Steepest-Entropy-Ascent Quantum Thermodynamics. Materials, 2017, 10, 948.	2.9	12
45	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
46	Strain energy analysis of screw dislocations in 4H-SiC by molecular dynamics. Japanese Journal of Applied Physics, 2016, 55, 031301.	1.5	3
47	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
48	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
49	Structural and optical properties of AlN grown by solid source solution growth method. Japanese Journal of Applied Physics, 2015, 54, 085501.	1.5	0
50	Ab initio study of GaAs(100) surface stability over As2, H2 and N2 as a model for vapor-phase epitaxy of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>GaAs</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^' <mathvariant="normal">N</mml:mi></mml:mrow><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>. Journal of Crystal Growth, 2015, 432, 6-14.	1.5	3
51	Ab initio-Based Approach to CrystalÂGrowth. , 2015, , 477-520.		1
52	Molecular beam epitaxy growth of GaN under Ga-rich conditions investigated by molecular dynamics simulation. Japanese Journal of Applied Physics, 2014, 53, 05FL08.	1.5	8
53	Molecular dynamics simulation of graphene growth by surface decomposition of 6H-SiC(0001) and $(000ar{1})$. Japanese Journal of Applied Physics, 2014, 53, 065601.	1.5	6
54	Progress in theoretical approach to InGaN and InN epitaxy: In incorporation efficiency and structural stability. Japanese Journal of Applied Physics, 2014, 53, 100202.	1.5	10

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55	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
56	First principles approach to C aggregation process during 0th graphene growth on SiC(0001). , 2013, , .		0
57	Surface Stability and Growth Kinetics of Compound Semiconductors: An Ab Initio-Based Approach. Materials, 2013, 6, 3309-3360.	2.9	76
58	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
59	Theoretical Investigation of the Effect of Growth Orientation on Indium Incorporation Efficiency during InGaN Thin Film Growth by Metalâ€“Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JC02.	1.5	21
60	Thermodynamic Analysis of Coherently Grown GaAsN/Ge: Effects of Different Gaseous Sources. Japanese Journal of Applied Physics, 2013, 52, 045601.	1.5	4
61	InSb Mid-Infrared Photon Detector for Room-Temperature Operation. Japanese Journal of Applied Physics, 2013, 52, 092202.	1.5	22
62	First-principles calculation of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mn>0</mml:mn><mml:mtext>th</mml:mtext></mml:msup></mml:mrow></mml:math graphene-like growth of C on SiC(0001). Physical Review B, 2012, 86, .	3.2	19
63	N Substitution in GaAs(001) Surface under an Atmosphere of Hydrogen. Japanese Journal of Applied Physics, 2012, 51, 10ND17.	1.5	1
64	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
65	Thermodynamic analysis of vapor-phase epitaxial growth of GaAsN on Ge. Journal of Crystal Growth, 2012, 343, 105-109.	1.5	2
66	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
67	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
68	Atomic Structures and Electronic Properties of Semiconductor Interfaces. , 2011, , 113-174.		15
69	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
70	Calculation of phase diagrams of the Li3N-Al system for AlN growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1581-1584.	0.8	2
71	Thermodynamic analysis for the prediction of N composition in coherently grown GaAsN for a multi-junction solar cell. , 2011, , .		0
72	Novel Solution Growth Method of Bulk AlN Using Al and Li$_{3}$N Solid Sources. Applied Physics Express, 2011, 4, 095501.	2.4	35

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73	Microstructure of Bulk AlN Grown by A New Solution Growth Method. Japanese Journal of Applied Physics, 2011, 50, 120202.	1.5	0
74	Microstructure of Bulk AlN Grown by A New Solution Growth Method. Japanese Journal of Applied Physics, 2011, 50, 120202.	1.5	3
75	Possibility of AlN growth using Liâ€“Alâ€“N solvent. Journal of Crystal Growth, 2010, 312, 2569-2573.	1.5	2
76	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
77	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
78	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
79	Method for Theoretical Prediction of Indium Composition in Coherently Grown InGaN Thin Films. Japanese Journal of Applied Physics, 2009, 48, 088004.	1.5	9
80	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
81	Possibility of AlN vapor phase epitaxy using Li₃N as a nitrogen source. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S340.	0.8	0
82	Monte Carlo simulation of atomic arrangement in InGaN thin film grown by MOVPE. Journal of Crystal Growth, 2009, 311, 463-465.	1.5	4
83	Theoretical approach to structural stability of GaN: How to grow cubic GaN. Journal of Crystal Growth, 2009, 311, 3106-3109.	1.5	12
84	Global analysis of GaN growth using a solution technique. Journal of Crystal Growth, 2008, 310, 1790-1793.	1.5	14
85	Investigation of the thermal conductivity of a fullerene peapod by molecular dynamics simulation. Journal of Crystal Growth, 2008, 310, 2301-2305.	1.5	21
86	Estimation of growth rate in unidirectionally solidified multicrystalline silicon by the growth-induced striation method. Journal of Crystal Growth, 2008, 310, 2697-2701.	1.5	11
87	Synthesis of AlN from Li3N and Al: Application to vapor phase epitaxy. Journal of Crystal Growth, 2008, 310, 2827-2831.	1.5	1
88	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
89	Directional Solidification of Multicrystalline Silicon Using the Accelerated Crucible Rotation Technique. Crystal Growth and Design, 2008, 8, 2525-2527.	3.0	8
90	Thermal Conductivity of SiC Calculated by Molecular Dynamics. Japanese Journal of Applied Physics, 2008, 47, 8898.	1.5	33

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91	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
92	Possibility of AlN Solution Growth Using Al and Li3N. Japanese Journal of Applied Physics, 2007, 46, 5785-5787.	1.5	3
93	Numerical investigation of crystal growth process of bulk Si and nitrides â€“ a review. Crystal Research and Technology, 2007, 42, 1185-1189.	1.3	3
94	Analysis of compositional instability of InGaN by Monte Carlo simulation. Journal of Crystal Growth, 2007, 298, 190-192.	1.5	1
95	An investigation of thermal conductivity of nitride-semiconductor nanostructures by molecular dynamics simulation. Journal of Crystal Growth, 2007, 298, 251-253.	1.5	9
96	Theoretical approach to initial growth kinetics of GaN on GaN(001). Journal of Crystal Growth, 2007, 300, 62-65.	1.5	23
97	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
98	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
99	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
100	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
101	Thermodynamic stability of In1â€“x â€“yGax Aly N on GaN and InN. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1700-1703.	0.8	3
102	Investigation of thermal conductivity of nitride mixed crystals and superlattices by molecular dynamics. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1695-1699.	0.8	9
103	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
104	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
105	MBE growth of a novel chalcopyrite-type ternary compound MnGeP2. Journal of Physics and Chemistry of Solids, 2005, 66, 2030-2035.	4.0	10
106	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
107	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
108	Thermodynamic analysis of AlGaN HVPE growth. Journal of Crystal Growth, 2005, 281, 47-54.	1.5	26

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109	Investigation of thermal conductivity of GaN by molecular dynamics. Journal of Crystal Growth, 2005, 284, 197-202.	1.5	25
110	MnGeP2 Thin Films Grown by Molecular Beam Epitaxy. Journal of Superconductivity and Novel Magnetism, 2005, 18, 79-82.	0.5	3
111	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
112	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
113	Growth of MnGeP2Thin Films by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L265-L267.	1.5	4
114	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
115	Pulse laser assisted MOVPE for InGaN with high indium content. Physica Status Solidi A, 2004, 201, 2846-2849.	1.7	2
116	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
117	Thermodynamic analysis of InN and InxGa1â^'xN MOVPE using various nitrogen sources. Journal of Crystal Growth, 2004, 272, 341-347.	1.5	20
118	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
119	Systematic theoretical investigations of adsorption behavior on the GaAs(0 0 1)-c(4 Ã— 4) surfaces. Applied Surface Science, 2004, 237, 194-199.	6.1	22
120	Theoretical investigations of adatom behavior on non-planar surfaces with GaAs(n1 1)A. Applied Surface Science, 2004, 237, 206-212.	6.1	5
121	An empirical potential approach to structural stability of GaNxAs1â^'x. Journal of Crystal Growth, 2003, 258, 277-282.	1.5	17
122	Thermodynamic study on compositional instability of InGaN/GaN and InGaN/InN during MBE. Applied Surface Science, 2003, 216, 453-457.	6.1	9
123	Systematic theoretical investigations of miscibility in Si1â^'xâ^'yGexCy thin films. Applied Surface Science, 2003, 216, 458-462.	6.1	1
124	Effect of Niâ€“Cu substrates on phase selection of hexagonal and cubic boron nitride thin films. Applied Surface Science, 2003, 216, 72-77.	6.1	5
125	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
126	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

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127	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
128	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
129	Influence of Lattice Constraint from InN and GaN Substrate on Relationship between Solid Composition of InxGa1-xN Film and Input Mole Ratio during Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2003, 42, L95-L98.	1.5	7
130	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
131	High Temperature Ramping Rate for GaAs (111)A Substrate Covered with a Thin GaN Buffer Layer for Thick GaN Growth at 1000Â°C. Japanese Journal of Applied Physics, 2003, 42, L526-L528.	1.5	3
132	Ab initio-based Approach to Structural Stability of GaAs Surfaces. Hyomen Kagaku, 2003, 24, 642-647.	0.0	1
133	Theoretical approach to influence of As2 pressure on GaAs growth kinetics. Surface Science, 2002, 507-510, 285-289.	1.9	71
134	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
135	Theoretical investigations of thermodynamic stability for Si1âˆ’xâˆ’yGexCy. Journal of Crystal Growth, 2002, 237-239, 116-120.	1.5	4
136	An empirical potential approach to wurtziteâ€“zinc blende structural stability of semiconductors. Journal of Crystal Growth, 2002, 235, 149-153.	1.5	20
137	Empirical interatomic potential calculations for relative stability of Ga adatom on GaAs(100) and (n11)A surfaces. Journal of Crystal Growth, 2002, 237-239, 223-226.	1.5	3
138	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
139	Theoretical investigations of adatom adsorptions on the As-stabilized GaAs(111)A surface. Surface Science, 2001, 493, 173-177.	1.9	4
140	A new theoretical approach to adsorptionâ€“desorption behavior of Ga on GaAs surfaces. Surface Science, 2001, 493, 178-181.	1.9	130
141	Formation mechanism of Al-segregated region in InAlAs/(110)InP. Journal of Crystal Growth, 2001, 229, 164-168.	1.5	1
142	Anomalous behavior of excess energy curves of InxGa1âˆ’xN grown on GaN and InN. Journal of Crystal Growth, 2000, 220, 401-404.	1.5	31
143	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
144	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

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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	A new empirical interatomic potential for compound semiconductors and its application to thermodynamic stabilities. , 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