StanisBaw Krukowski

List of Publications by Year
in descending order

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178 papers	2,642 citations	201385 27 h-index	288905 40 g-index
185 all docs	185 docs citations	185 times ranked	2120 citing authors

#	Article	IF	Citations
1	Thermal conductivity of GaN crystals in 4.2â€“300 K range. Solid State Communications, 2003, 128, 69-73.	0.9	152
2	Luminescence and reflectivity in the exciton region of homoepitaxial GaN layers grown on GaN substrates. Solid State Communications, 1996, 97, 919-922.	0.9	130
3	Thermal properties of indium nitride. Journal of Physics and Chemistry of Solids, 1998, 59, 289-295.	1.9	110
4	Rietveld refinement for indium nitride in the 105â€“295 K range. Powder Diffraction, 2003, 18, 114-121.	0.4	87
5	Mechanisms of crystallization of bulk GaN from the solution under high N2 pressure. Journal of Crystal Growth, 2002, 246, 177-186.	0.7	54
6	Electrostatic condition for the termination of the opposite face of the slab in density functional theory simulations of semiconductor surfaces. Journal of Applied Physics, 2009, 105, .	1.1	46
7	Ab initio studies of electronic properties of bare GaN(0001) surface. Journal of Applied Physics, 2009, 106, .	1.1	43
8	Surface reaction of nitrogen with liquid group III metals. Journal of Chemical Physics, 2001, 114, 6353-6363.	1.2	39
9	Indium incorporation into InGaN and InAlN layers grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2011, 318, 496-499.	0.7	39
10	Role of structure of C-terminated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>4</mml:mn><mml:mi>H</mml:mi></mml:mrow></mml:math>-SiC(<mml:math) Tj ETQq0 0 0 rg surface in growth of graphene layers: Transmission electron microscopy and density functional theo	1.1	38
11	Correlation between luminescence and compositional striations in InGaN layers grown on miscut GaN substrates. Applied Physics Letters, 2007, 91, .	1.5	37
12	Ab initio determination of atomic structure and energy of surface states of bare and hydrogen covered GaN (0001) surface â€” Existence of the Surface States Stark Effect (SSSE). Surface Science, 2011, 605, 695-713.	0.8	36
13	Lattice parameters, density and thermal expansion of InN microcrystals grown by the reaction of nitrogen plasma with liquid indium. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 1145-1154.	0.8	35
14	Annealing of GaN under high pressure of nitrogen. Journal of Physics Condensed Matter, 2002, 14, 11097-11110.	0.7	35
15	Thermal conductivity of GaN crystals grown by high pressure method. Physica Status Solidi (B): Basic Research, 2003, 240, 447-450.	0.7	35
16	Growth of InGaN and InGaN/InGaN quantum wells by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2008, 310, 3983-3986.	0.7	35
17	Fermi level influence on the adsorption at semiconductor surfacesâ€“ab initio simulations. Journal of Applied Physics, 2013, 114, .	1.1	35
18	Interaction of N2 molecule with liquid Ga surface â€“ quantum mechanical calculations (DFT). Journal of Crystal Growth, 1998, 189-190, 159-162.	0.7	33

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19	Directional crystallization of GaN on high-pressure solution grown substrates by growth from solution and HVPE. Journal of Crystal Growth, 2002, 246, 194-206.	0.7	32
20	Simulation of trap-assisted tunneling effect on characteristics of gallium nitride diodes. Journal of Applied Physics, 2012, 111, .	1.1	32
21	Principal physical properties of GaN/AlN multiquantum well systems determined by density functional theory calculations. Journal of Applied Physics, 2013, 113, .	1.1	32
22	Foundations of ab initio simulations of electric charges and fields at semiconductor surfaces within slab models. Journal of Applied Physics, 2013, 114, .	1.1	32
23	Evidence of free carrier concentration gradient along the c-axis for undoped GaN single crystals. Journal of Crystal Growth, 2001, 230, 442-447.	0.7	31
24	On the nature of Surface States Stark Effect at clean GaN(0001) surface. Journal of Applied Physics, 2012, 112, .	1.1	31
25	A comparative DFT study of electronic properties of 2H-, 4H- and 6H-SiC(0001) and SiC(000 ar{1}) clean surfaces: significance of the surface Stark effect. New Journal of Physics, 2010, 12, 043024.	1.2	30
26	High-nitrogen-pressure growth of GaN single crystals: doping and physical properties. Journal of Physics Condensed Matter, 2001, 13, 8881-8890.	0.7	29
27	Niâ€“Au contacts to p-type GaN â€“ Structure and properties. Solid-State Electronics, 2010, 54, 701-709.	0.8	28
28	Correlation of optical and structural properties of GaN/AlN multi-quantum wellsâ€”Ab initio and experimental study. Journal of Applied Physics, 2016, 119, 015703.	1.1	27
29	Influence of hydrogen and TMIn on indium incorporation in MOVPE growth of InGaN layers. Journal of Crystal Growth, 2014, 402, 330-336.	0.7	26
30	Deposition of bulk GaN from solution in gallium under high N2 pressure on silicon carbide and sapphire substrates. Journal of Crystal Growth, 2004, 270, 409-419.	0.7	25
31	GaN Crystals: Growth and Doping Under Pressure. Materials Research Society Symposia Proceedings, 1997, 482, 115.	0.1	24
32	Density Functional Theory (DFT) Simulations and Polarization Analysis of the Electric Field in InN/GaN Multiple Quantum Wells (MQWs). Journal of Physical Chemistry C, 2010, 114, 14410-14416.	1.5	24
33	Recent Results in the Crystal Growth of GaN at High N₂ Pressure. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	23
34	Photoluminescence study on GaN homoepitaxial layers grown by molecular beam epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	23
35	Spreading of step-like density profiles in interacting lattice gas on a hexagonal lattice. Surface Science, 2000, 457, 357-364.	0.8	23
36	CFD and reaction computational analysis of the growth of GaN by HVPE method. Journal of Crystal Growth, 2006, 296, 31-42.	0.7	23

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37	Double step structure and meandering due to the many body interaction at GaN(0001) surface in N-rich conditions. Journal of Applied Physics, 2011, 109, .	1.1	23
38	Adsorption of ammonia at GaN(0001) surface in the mixed ammonia/hydrogen ambient - a summary of ab initio data. AIP Advances, 2014, 4, .	0.6	23
39	Ab initio and experimental studies of polarization and polarization related fields in nitrides and nitride structures. AIP Advances, 2017, 7, .	0.6	23
40	The Application of High Pressure in Physics and Technology of III-V Nitrides. Acta Physica Polonica A, 2001, 100, 57-109.	0.2	23
41	Collective diffusion on hexagonal lattices â€“ repulsive interactions. Surface Science, 1999, 441, 320-328.	0.8	22
42	Anomalous temperature characteristics of single wide quantum well InGaN laser diode. Applied Physics Letters, 2006, 88, 071121.	1.5	22
43	Molecular nitrogen-N2 properties: The intermolecular potential and the equation of state. Journal of Chemical Physics, 2007, 126, 194501.	1.2	22
44	Growth of GaN Single Crystals under High Nitrogen Pressures and their Characterization. Crystal Research and Technology, 1999, 34, 785-795.	0.6	21
45	High pressureâ€“high temperature seeded growth of GaN on 1 in sapphire/GaN templates: Analysis of convective transport. Journal of Crystal Growth, 2007, 307, 259-267.	0.7	21
46	Fermi level pinning and the charge transfer contribution to the energy of adsorption at semiconducting surfaces. Journal of Applied Physics, 2014, 115, 043529.	1.1	21
47	Growth of AlN, GaN and InN from the solution. International Journal of Materials and Product Technology, 2005, 22, 226.	0.1	19
48	Gallium nitride growth on sapphire/GaN templates at high pressure and high temperatures. Journal of Crystal Growth, 2005, 274, 55-64.	0.7	19
49	Ab initio investigation of adsorption of atomic and molecular hydrogen at GaN(0001) surface. Journal of Crystal Growth, 2012, 358, 64-74.	0.7	19
50	Ab initio determination of electron affinity of polar nitride surfaces, clean and under Cs coverage. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	19
51	DFT modeling of carbon incorporation in GaN(0001) and GaN(000$\bar{1}$) metalorganic vapor phase epitaxy. Applied Physics Letters, 2017, 111, .	1.5	19
52	Convection in an asymmetrically heated cylinder. International Journal of Heat and Mass Transfer, 1992, 35, 2119-2130.	2.5	18
53	Thermodynamic and kinetic approach in density functional theory studies of microscopic structure of GaN(0001) surface in ammonia-rich conditions. Journal of Chemical Physics, 2008, 129, 234705.	1.2	18
54	Synthesis and Crystal Growth of AIIIBVSemiconducting Compounds Under High Pressure of Nitrogen. Physica Scripta, 1991, T39, 242-249.	1.2	16

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55	Emergence of regular meandered step structure in simulated growth of GaN(0001) surface. Journal of Crystal Growth, 2012, 343, 138-144.	0.7	16
56	Structural and electronic properties of AlN(0001) surface under partial N coverage as determined by ab initio approach. Journal of Applied Physics, 2015, 118, .	1.1	16
57	Review: GaN growth by ammonia based methods â€“ density functional theory study. Crystal Research and Technology, 2009, 44, 1038-1046.	0.6	15
58	Linear piezoelectricity material constants for ammonothermal gallium nitride measured by bulk acoustic waves. Semiconductor Science and Technology, 2015, 30, 035008.	1.0	15
59	Adsorption of Hydrogen at the GaN(0001Ì…) Surface: An Ab Initio Study. Journal of Physical Chemistry C, 2015, 119, 11563-11569.	1.5	15
60	Strain-compensated AlGaNâ•GaNâ•InGaN cladding layers in homoepitaxial nitride devices. Applied Physics Letters, 2007, 91, .	1.5	14
61	Hydrogen intercalation of single and multiple layer graphene synthesized on Si-terminated SiC(0001) surface. Journal of Applied Physics, 2014, 116, .	1.1	14
62	High pressure and time resolved studies of optical properties of n-type doped GaN/AlN multi-quantum wells: Experimental and theoretical analysis. Journal of Applied Physics, 2016, 120, .	1.1	14
63	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.	1.3	14
64	Electron spin resonance of erbium in gallium nitride. Solid State Communications, 2000, 114, 39-42.	0.9	13
65	Blue lasers on high pressure grown GaN single crystal substrates. Europhysics News, 2004, 35, 69-63.	0.1	13
66	DFT modelling of the edge dislocation in 4H-SiC. Journal of Materials Science, 2019, 54, 10737-10745.	1.7	13
67	Modelling the growth of nitrides in ammoniaâ€rich environment. Crystal Research and Technology, 2007, 42, 1281-1290.	0.6	12
68	Crystal growth of GaN on (0001) face by HVPE-atomistic scale simulation. Journal of Crystal Growth, 2007, 303, 37-43.	0.7	12
69	Influence of substrate misorientation on properties of InGaN layers grown on freestanding GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1485-1487.	0.8	12
70	Fabrication and properties of GaN-based lasers. Journal of Crystal Growth, 2008, 310, 3979-3982.	0.7	12
71	Density Functional Theory Determination of Structural and Electronic Properties of Struvite. Journal of Physical Chemistry A, 2010, 114, 7800-7808.	1.1	12
72	Electronic properties on GaN(0001) surface â€“ ab initio investigation. Vacuum, 2014, 99, 166-174.	1.6	12

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73	Thermodynamics of GaN(s)-NH 3 (v)+N 2 (v)+H 2 (v) system â€“ Electronic aspects of the processes at GaN(0001) surface. Surface Science, 2017, 662, 12-33.	0.8	12
74	Surface morphology of as grown and annealed bulk GaN crystals. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	11
75	Fractal to compact transition during growth of 2D Kossel crystal in vapor diffusion field. Journal of Crystal Growth, 1996, 160, 167-176.	0.7	11
76	Twin spin model of surface phase transitions in O/W(110). Physical Review B, 2001, 65, .	1.1	11
77	Equation of state of nitrogen (N2) at high pressures and high temperatures: Molecular dynamics simulation. Journal of Chemical Physics, 2006, 124, 134501.	1.2	11
78	Crystal growth of GaN on (0001) face by HVPE: Ab initio simulations. Journal of Crystal Growth, 2008, 310, 900-905.	0.7	11
79	General aspects of the vapor growth of semiconductor crystals â€“ A study based on DFT simulations of the NH3/NH2 covered GaN(0001) surface in hydrogen ambient. Journal of Crystal Growth, 2014, 390, 71-79.	0.7	11
80	Thermodynamics and high-Pressure growth of (Al, Ga, In)N single crystals. Diamond and Related Materials, 1997, 6, 1515-1523.	1.8	10
81	Synthesis of oxygen-free aluminium nitride ceramics. Journal of Materials Science, 1998, 33, 3321-3324.	1.7	10
82	Growth of GaN on patterned GaN/sapphire substrates by high pressure solution method. Journal of Crystal Growth, 2005, 281, 11-16.	0.7	10
83	Surface patterns due to step flow anisotropy formed in crystal growth process. Journal of Non-Crystalline Solids, 2010, 356, 1935-1939.	1.5	10
84	Density functional theory (DFT) study of Zn, O2 and O adsorption on polar ZnO(0001) and ZnO (0001) surfaces. Journal of Crystal Growth, 2013, 374, 53-59.	0.7	10
85	Structures Built by Steps Motion during Sublimation from Annealed GaN(0001) Surface. Crystal Growth and Design, 2013, 13, 1006-1013.	1.4	10
86	Crystallization of free standing bulk GaN by HVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1453-1456.	0.8	9
87	Theoretical study of current overflow in GaN based light emitters with superlattice cladding layers. Journal of Applied Physics, 2006, 100, 016103.	1.1	9
88	Ab initio study of the properties of GaN(0001) surface at MOVPE and HVPE growth conditions. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 826-829.	0.8	9
89	Adsorption of N2 and H2 at AlN(0001) Surface: Ab Initio Assessment of the Initial Stage of Ammonia Catalytic Synthesis. Journal of Physical Chemistry C, 2018, 122, 20301-20311.	1.5	9
90	Experimental and theoretical analysis of influence of barrier composition on optical properties of GaN/AlGaN multi-quantum wells: Temperature- and pressure-dependent photoluminescence studies. Journal of Alloys and Compounds, 2018, 769, 1064-1071.	2.8	9

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91	Defect-related photoluminescence and photoluminescence excitation as a method to study the excitonic bandgap of AlN epitaxial layers: Experimental and ab initio analysis. Applied Physics Letters, 2020, 117, .	1.5	9
92	Stability of indium nitride at N2 pressure up to 20 kbar. AIP Conference Proceedings, 1994, , .	0.3	8
93	Thermal conductivity of bulk GaN single crystals. Physica B: Condensed Matter, 2003, 329-333, 1531-1532.	1.3	8
94	Collective diffusion of O/W(110) at high coverages: Monte Carlo simulations. Surface Science, 2004, 566-568, 210-215.	0.8	8
95	Platelets and needles: Two habits of pressure-grown GaN crystals. Journal of Crystal Growth, 2007, 305, 414-420.	0.7	8
96	Influence of pressure on the properties of GaN/AlN multi-quantum wells â€“ Ab initio study. Journal of Physics and Chemistry of Solids, 2016, 93, 100-117.	1.9	8
97	Electronic charge transfer contribution in adsorption of silicon at the SiC(0001) surfaceâ€”A density functional theory (DFT) study. Applied Surface Science, 2017, 393, 168-179.	3.1	8
98	Chemical inactivity of GaN(0001) surface â€“ The role of oxygen adsorption â€“ Ab initio picture. Materials Science in Semiconductor Processing, 2019, 91, 252-259.	1.9	8
99	Phase diagram determination of II-VI semiconductors. Thermochimica Acta, 1994, 245, 207-217.	1.2	7
100	Annealing of gallium nitride under high-N2 pressure. Physica B: Condensed Matter, 1999, 265, 295-299.	1.3	7
101	Microscopic theory of some thermodynamic properties of the solidâ€“vapor transition. Journal of Chemical Physics, 2002, 117, 5866-5875.	1.2	7
102	High-pressure direct synthesis of aluminium nitride. Journal of Physics Condensed Matter, 2002, 14, 11237-11242.	0.7	7
103	Crystallization of GaN by HVPE on pressure grown seeds. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1654-1657.	0.8	7
104	Transformation of complex spherical harmonics under rotations. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 15071-15082.	0.7	7
105	Structural defects in epitaxial graphene layers synthesized on C-terminated 4H-SiC (0001Â¯) surfaceâ€”Transmission electron microscopy and density functional theory studies. Journal of Applied Physics, 2014, 115, 054310.	1.1	7
106	Adsorption of ammonia on hydrogen covered GaN(0001) surface â€“ Density Functional Theory study. Journal of Crystal Growth, 2014, 401, 514-517.	0.7	7
107	Experimental and first-principles studies of high-pressure effects on the structural, electronic, and optical properties of semiconductors and lanthanide doped solids. Japanese Journal of Applied Physics, 2017, 56, 05FA02.	0.8	7
108	Phase Transformations and p-T Diagram of Some HgX Compounds (X=S, Se, Te). Japanese Journal of Applied Physics, 1993, 32, 26.	0.8	6

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109	Evolution of equilibrium forms of a two-dimensional Kossel crystal in a vapor diffusion field: A Monte Carlo simulation. Physical Review B, 1994, 49, 12464-12474.	1.1	6
110	Collective diffusion in a twin-spin model ofO/W(110). Physical Review B, 2003, 67, .	1.1	6
111	Role of chlorine in the dynamics of GaN(0001) surface during HVPE GaN growthâ€"Ab initio study. Journal of Crystal Growth, 2008, 310, 1391-1397.	0.7	6
112	Numerical evaluation of overlap integrals between atomic orbitals. Computational and Theoretical Chemistry, 2008, 848, 34-39.	1.5	6
113	DFT study of ammonia desorption from the GaN(0001) surface covered with a NH3/NH2 mixture. Journal of Crystal Growth, 2014, 403, 105-109.	0.7	6
114	Critical Evaluation of Various Spontaneous Polarization Models and Induced Electric Fields in III-Nitride Multi-Quantum Wells. Materials, 2021, 14, 4935.	1.3	6
115	Ab initiostudy of Ga-GaN system: Transition from adsorbed metal atoms to a metalâ€"semiconductor junction. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 061101.	0.9	5
116	Instantaneous decay rate analysis of time resolved photoluminescence (TRPL): Application to nitrides and nitride structures. Journal of Alloys and Compounds, 2020, 823, 153791.	2.8	5
117	GaN Single Crystal Habits and Their Relation to GaN Growth Under High Pressure of Nitrogen. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	5
118	InN Thermodynamics and Crystal Growth at High Pressure of N2. Japanese Journal of Applied Physics, 1993, 32, 343.	0.8	5
119	Diffusion in the distortion field of a dislocation line. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 175, 349-352.	0.9	4
120	The influence of indium on the growth of GaN from solution under high pressure. Journal of Crystal Growth, 2010, 312, 2593-2598.	0.7	4
121	Adsorption of gallium on GaN(0001) surface in ammonia-rich conditions: A new effect associated with the Fermi level position. Journal of Crystal Growth, 2014, 401, 78-81.	0.7	4
122	Influence of hydrogen pre-growth flow on indium incorporation into InGaN layers. Journal of Crystal Growth, 2017, 464, 123-126.	0.7	4
123	Dissipation of the excess energy of the adsorbate-thermalization via electron transfer. Physical Chemistry Chemical Physics, 2017, 19, 9149-9155.	1.3	4
124	Catalytic Synthesis of Nitric Monoxide at the AlN(0001) Surface: Ab Initio Analysis. Journal of Physical Chemistry C, 2019, 123, 10893-10906.	1.5	4
125	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.	3.1	4
126	Wurtzite quantum well structures under high pressure. Journal of Applied Physics, 2020, 128, .	1.1	4

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127	Nitrogen Dissolution in Liquid Ga and Fe: Comprehensive Ab Initio Analysis, Relevance for Crystallization of GaN. Materials, 2021, 14, 1306.	1.3	4
128	On the composite discontinuous Galerkin method for simulations of electric properties of semiconductor devices. Electronic Transactions on Numerical Analysis, 0, 51, 75-98.	0.0	4
129	DTA determination of the high-pressure-high-temperature phase diagram of CdSe. Semiconductor Science and Technology, 1992, 7, 994-998.	1.0	3
130	Surface diffusion contribution to dendrite sidebranching during growth of 2D Kossel crystal from the vapor. Journal of Crystal Growth, 1999, 203, 269-285.	0.7	3
131	Growth of GaN on patterned GaN/sapphire substrates with various metallic masks by high pressure solution method. , 2006, , .		3
132	The role of the intermolecular potential in determination of equilibrium and dynamic properties of molecular nitrogen (N₂) properties: MD simulations. Journal of Physics: Conference Series, 2008, 121, 012011.	0.3	3
133	Numerical analysis of growth kinetics of bulk III-V crystals grown by liquid phase electroepitaxy. Crystal Research and Technology, 2010, 45, 1290-1294.	0.6	3
134	Time dependent simulations of the growth of IIIâ€“V crystals by the liquid phase electroepitaxy. Journal of Crystal Growth, 2011, 318, 351-355.	0.7	3
135	Density functional study of GaN(0001)/AlN(0001) high electron mobility transistor structures. Journal of Crystal Growth, 2014, 401, 30-32.	0.7	3
136	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.	0.7	3
137	Detection of Si doping in the AlN/GaN MQW using Super X â€“ EDS measurements. Micron, 2020, 134, 102864.	1.1	3
138	The homoepitaxial challenge: GaN crystals grown at high pressure for laser diodes and laser diode arrays. , 2013, , 18-77.		3
139	Combustion synthesis of AlN at high pressure of nitrogen and argon mixtures. AIP Conference Proceedings, 1994, , .	0.3	2
140	Collective Diffusion of O Atoms on the W(110) Surface. Defect and Diffusion Forum, 2001, 194-199, 309-316.	0.4	2
141	Mass flow and reaction analysis of the growth of GaN by HVPE. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 131-134.	0.8	2
142	Molecular dynamic simulations of viscosity of argon at high pressures. High Pressure Research, 2008, 28, 469-476.	0.4	2
143	Experimental and theoretical investigation of graphene layers on SiC(0001Â¯) in different stacking arrangements. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 03D117.	0.6	2
144	DFT modeling of AlN/GaN multi-quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 323-326.	0.8	2

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145	Doping effects in InN/GaN short-period quantum well structuresâ€"Theoretical studies based on density functional methods. Journal of Crystal Growth, 2014, 401, 652-656.	0.7	2
146	Influence of a parallel electric field on the dispersion relation of graphene â€“ A new route to Dirac logics. Journal of Crystal Growth, 2014, 401, 869-873.	0.7	2
147	Electric field dynamics in nitride structures containing quaternary alloy (Al, In, Ga)N. Journal of Applied Physics, 2016, 120, 015702.	1.1	2
148	Intrasurface electron transition contribution to energy of adsorption of silicon at the SiC(0001) surface â€“ A density functional theory (DFT) study. Journal of Crystal Growth, 2017, 468, 870-873.	0.7	2
149	Adsorption of nitrogen at AlN(000-1) surface â€“ Decisive role of structural and electronic factors. Surface Science, 2021, 713, 121891.	0.8	2
150	Modification of the Newtonâ€™s Method for the Simulations of Gallium Nitride Semiconductor Devices. Lecture Notes in Computer Science, 2014, , 551-560.	1.0	2
151	Derivation of von WeizsÃcker Equation Based Î¿n Green-Gauss Theorem. Acta Physica Polonica A, 2009, 115, 653-655.	0.2	2
152	GaN Single Crystals Grown by High Pressure Solution Method.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 760-762.	0.1	2
153	Structural and emission improvement of cyan-emitting InGaN quantum wells by introducing a large substrate misorientation angle. Optical Materials Express, 2022, 12, 119.	1.6	2
154	Stress tensor correlation functions and elastic moduli for an interface-a continuous model approach. Journal of Physics C: Solid State Physics, 1984, 17, 5879-5885.	1.5	1
155	Chemical surface diffusion analysis by the time evolution of density profiles. The Monte Carlo simulations. Vacuum, 2001, 63, 127-133.	1.6	1
156	Diffusion and desorption processes in ordered (2Ã—2) lattice gas phase. Surface Science, 2002, 507-510, 150-154.	0.8	1
157	Growth of bulk GaN on GaN/sapphire templates by a high N2 pressure method. Physica Status Solidi (B): Basic Research, 2004, 241, 2685-2688.	0.7	1
158	A Monte Carlo study of the dependence of the habits of Kossel crystal on dynamic parameters during two-dimensional growth. Crystal Research and Technology, 2005, 40, 340-346.	0.6	1
159	Growth of GaN on patterned thick HVPE free standing GaN substrates by high pressure solution method. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1487-1490.	0.8	1
160	Domain growth in the interacting adsorbate: Nonsymmetric particle jump model. Physical Review B, 2007, 75, .	1.1	1
161	Platelets and needles: two habits of pressure grown GaN crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2236-2239.	0.8	1
162	Liquid phase epitaxy of GaN on MOCVD GaN/sapphire and HVPE freeâ€standing substrates under high nitrogen pressure. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1539-1542.	0.8	1

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163	Unlimited Growth of IIIâ€“V Bulk Crystals by Liquid-Phase Electroepitaxy. Crystal Growth and Design, 2011, 11, 4684-4689.	1.4	1
164	Determination of Shear Viscosity of Molecular Nitrogen (N2): Molecular Dynamic Hard Rotor Methodology and the Results. Journal of Physical Chemistry B, 2011, 115, 4359-4368.	1.2	1
165	Discretization of the Drift-Diffusion Equations with the Composite Discontinuous Galerkin Method. Lecture Notes in Computer Science, 2016, , 391-400.	1.0	1
166	Temperature distribution in the chamber used for crystal growth of GaN under high pressure of nitrogen. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	1
167	GaP-GaN Pseudobinary System. Crystal Growth of GaN from the Solution in the Liquid GaP. Japanese Journal of Applied Physics, 1993, 32, 346.	0.8	1
168	Optimization of InGaN Laser Diodes Based on Numerical Simulations. Acta Physica Polonica A, 2016, 129, A-33-A-35.	0.2	1
169	The Role of the Built-In Electric Field in Recombination Processes of GaN/AlGaN Quantum Wells: Temperature- and Pressure-Dependent Study of Polar and Non-Polar Structures. Materials, 2022, 15, 2756.	1.3	1
170	High pressure, high temperature them determination of triple point in CdSe. High Pressure Research, 1992, 10, 420-423.	0.4	0
171	Thermodynamics and Growth of GaN Single Crystals Under Pressure. Materials Research Society Symposia Proceedings, 1997, 499, 349.	0.1	0
172	High-Pressure Crystallization of GaN. , 2006, , 1-43.		0
173	Growth of 2D nucleiâ€“A Monte Carlo study of existence of various habits. Journal of Crystal Growth, 2007, 303, 23-29.	0.7	0
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