S Yu Karpov

List of Publications by Year in descending order

163 papers	3,640 citations	136950 32 h-index	175258 52 g-index
168 all docs	168 docs citations	168 times ranked	2554 citing authors

#	Article	IF	Citations
1	A Universal Model for DXâ€Center Binding Energy in Cubic IIIâ€“V Compounds. Physica Status Solidi (B): Basic Research, 2021, 258, 2000596.	1.5	0
2	GaN buffer growth temperature and efficiency of InGaN/GaN quantum wells: The critical role of nitrogen vacancies at the GaN surface. Applied Physics Letters, 2021, 118, .	3.3	17
3	Gallium Nitride Doping with Carbon: A Thermodynamic Analysis. Physica Status Solidi (B): Basic Research, 2021, 258, 2100066.	1.5	5
4	Critical aspects of AlGaInP-based LED design and operation revealed by full electrical-thermal-optical simulations. Optics Express, 2021, 29, 35792.	3.4	5
5	Scaling and optimization of chip design for mini- and micro-LEDs. , 2021, , .		0
6	Radiative and Auger Recombination Constants and Internal Quantum Efficiency of (0001) AlGaN Deepâ€UV Lightâ€Emitting Diode Structures. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900878.	1.8	11
7	Impact of metalorganic vapor phase epitaxy growth conditions on compressive strain relaxation in polar III-nitride heterostructures. Japanese Journal of Applied Physics, 2019, 58, SC1017.	1.5	6
8	Time of carrier escape and recombination coefficients in InGaN quantum-well active regions of blue, cyan, and green light-emitting diodes. Semiconductor Science and Technology, 2019, 34, 015007.	2.0	6
9	Dyakonov Surface Electromagnetic Waves in III-Nitride Heterostructures. Physica Status Solidi (B): Basic Research, 2019, 256, 1800609.	1.5	2
10	Barrier height modification and mechanism of carrier transport in Ni/in situgrown Si₃N₄/n-GaN Schottky contacts. Semiconductor Science and Technology, 2018, 33, 025009.	2.0	6
11	From Largeâ€Size to Microâ€LEDs: Scaling Trends Revealed by Modeling. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700508.	1.8	103
12	Effect of Die Shape and Size on Performance of III-Nitride Micro-LEDs: A Modeling Study. Photonics, 2018, 5, 41.	2.0	35
13	Dependence of leakage current in Ni/Si₃N₄/n-GaN Schottky diodes on deposition conditions of silicon nitride. Semiconductor Science and Technology, 2018, 33, 115008.	2.0	6
14	Differential Charge Carrier Lifetime Investigated in a Blue InGaN LED at Operational Conditions. , 2018, , .		0
15	Effect of Carrier Localization on Recombination Processes and Efficiency of InGaN-Based LEDs Operating in the â€œGreen Gapâ€• Applied Sciences (Switzerland), 2018, 8, 818.	2.5	24
16	Temperature effects on optical properties and efficiency of red AlGaInP-based light emitting diodes under high current pulse pumping. Journal of Applied Physics, 2018, 124, .	2.5	11
17	Differential carrier lifetime in InGaN-based light-emitting diodes obtained by small-signal frequency-domain measurements. Journal of Applied Physics, 2017, 121, .	2.5	20
18	Mechanism of Carrier Transport in Hybrid GaN/AlN/Si Solar Cells. Journal of Electronic Materials, 2017, 46, 6078-6083.	2.2	0

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19	Carrier transport and emission efficiency in InGaN quantum-dot based light-emitting diodes. Nanotechnology, 2017, 28, 275201.	2.6	13
20	Influence of electromechanical coupling on optical properties of InGaN quantum-dot based light-emitting diodes. Nanotechnology, 2017, 28, 015701.	2.6	14
21	Carrier localization in InGaN by composition fluctuations: implication to the â€œgreen gapâ€• Photonics Research, 2017, 5, A7.	7.0	47
22	Efficiency of True-Green Light Emitting Diodes: Non-Uniformity and Temperature Effects. Materials, 2017, 10, 1323.	2.9	15
23	Temperature-dependent recombination coefficients in InGaN light-emitting diodes: Hole localization, Auger processes, and the green gap. Applied Physics Letters, 2016, 109, .	3.3	79
24	Solar-blind Al x Ga1â€“x N (x › 0.45) pâ€“iâ€“n photodiodes with a polarization-p-doped emitter. Technical Physics Letters, 2016, 42, 635-638.	0.7	9
25	Superior color rendering with a phosphorâ€converted blueâ€cyan monolithic lightâ€emitting diode. Laser and Photonics Reviews, 2016, 10, 1031-1038.	8.7	14
26	effect of the parameters of AlN/GaN/AlGaN and AlN/GaN/InAlN heterostructures with a two-dimensional electron gas on their electrical properties and the characteristics of transistors on their basis. Semiconductors, 2016, 50, 1383-1389.	0.5	3
27	Determination of recombination coefficients in InGaN quantum-well light-emitting diodes by small-signal time-resolved photoluminescence. Japanese Journal of Applied Physics, 2016, 55, 05FJ01.	1.5	35
28	Impact of surface recombination on efficiency of IIIâ€nitride lightâ€emitting diodes. Physica Status Solidi - Rapid Research Letters, 2016, 10, 480-484.	2.4	93
29	AlGaInP red-emitting light emitting diode under extremely high pulsed pumping. Proceedings of SPIE, 2016, , .	0.8	6
30	Multiâ€color monolithic IIIâ€nitride lightâ€emitting diodes: Factors controlling emission spectra and efficiency. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 19-29.	1.8	11
31	Bendable III-N Visible Light-Emitting Diodes beyond Mechanical Flexibility: Theoretical Study on Quantum Efficiency Improvement and Color Tunability by External Strain. ACS Photonics, 2016, 3, 486-493.	6.6	21
32	Light-emitting diodes for solid-state lighting: searching room for improvements. Proceedings of SPIE, 2016, , .	0.8	19
33	Spectral dependence of light extraction efficiency of highâ€power IIIâ€nitride lightâ€emitting diodes. Physica Status Solidi - Rapid Research Letters, 2015, 9, 312-316.	2.4	7
34	Comparison of electrical, thermal, and optical characteristics of high-power LEDs operating in various spectral ranges: From UV to green. , 2015, , .		0
35	Effect of the design of the active region of monolithic multi-color LED heterostructures on their spectra and emission efficiency. Semiconductors, 2015, 49, 1516-1521.	0.5	3
36	Realistic model of LED structure with InGaN quantum-dots active region. , 2015, , .		0

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37	Optimal ways of colour mixing for highâ€quality whiteâ€light LED sources. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 914-919.	1.8	40
38	ABC-model for interpretation of internal quantum efficiency and its droop in III-nitride LEDs: a review. Optical and Quantum Electronics, 2015, 47, 1293-1303.	3.3	170
39	Novel evaluation procedure for internal and extraction efficiency of high-power blue LEDs. , 2014, , .		1
40	ABC-model for interpretation of internal quantum efficiency and its droop in III-nitride LEDs. , 2014, , .		6
41	Assessment of factors limiting conversion efficiency of single-junction III-nitride solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 640-643.	0.8	2
42	Temperature-Dependent Internal Quantum Efficiency of Blue High-Brightness Light-Emitting Diodes. IEEE Journal of Quantum Electronics, 2014, 50, 911-920.	1.9	91
43	Theoretical and experimental study of thermal management in high-power AlInGaN LEDs. , 2014, , .		3
44	Mechanism of stress relaxation in (0001) InGaN/GaN via formation of V-shaped dislocation half-loops. Applied Physics Letters, 2013, 103, .	3.3	47
45	Polarization doping for III-nitride optoelectronics. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1369-1376.	1.8	21
46	Experimental and theoretical study of electrical, thermal, and optical characteristics of InGaN/GaN highâ€power flipâ€chip LEDs. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 466-469.	1.8	28
47	Polarization phenomena in light emission from Câ€plane Al(In)GaN heterostructures. Physica Status Solidi (B): Basic Research, 2013, 250, 180-186.	1.5	7
48	Correlations between Epitaxy Recipe, Characteristics, and Performance of Nitride Light Emitting Diode Structures. Japanese Journal of Applied Physics, 2013, 52, 08JB15.	1.5	4
49	Metastable centers in AlGaN/AlN/GaN heterostructures. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	14
50	Simulation of light-emitting diodes for new physics understanding and device design. Proceedings of SPIE, 2012, , .	0.8	28
51	Efficiency droop suppression in InGaNâ€based blue LEDs: Experiment and numerical modelling. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 456-460.	1.8	48
52	Modeling of III-nitride light-emitting diodes: progress, problems, and perspectives. Proceedings of SPIE, 2011, , .	0.8	29
53	Strain effects on indium incorporation and optical transitions in greenâ€light InGaN heterostructures of different orientations. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2671-2675.	1.8	38
54	Role of nonradiative recombination centers and extended defects in nonpolar GaN on light emission efficiency. Applied Physics Letters, 2011, 98, .	3.3	32

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55	Effect of localized states on internal quantum efficiency of IIIâ€nitride LEDs. Physica Status Solidi - Rapid Research Letters, 2010, 4, 320-322.	2.4	32
56	Laterally overgrown GaN/InGaN multiâ€quantum well heterostructures: Electrical and optical properties. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1383-1385.	1.8	2
57	Spontaneous polarization in IIIâ€nitride materials: crystallographic revision. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1841-1843.	0.8	14
58	Current crowding effect on light extraction efficiency of thinâ€film LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2124-2126.	0.8	28
59	Effect of ITO spreading layer on performance of blue light-emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2127-2129.	0.8	13
60	Indium incorporation and optical transitions in InGaN bulk materials and quantum wells with arbitrary polarity. Applied Physics Letters, 2010, 97, .	3.3	35
61	Mechanism of carrier injection in (Ni/Au)/p-AlxGa1â^'xN:Mg(0â‰¤x<0.1) Ohmic contacts. Applied Physics Letters, 2009, 95, 163502.	3.3	5
62	Properties of undoped GaN/InGaN multi-quantum-wells and GaN/InGaN p-n junctions prepared by epitaxial lateral overgrowth. Journal of Applied Physics, 2009, 105, .	2.5	12
63	Short period p-type AlN/AlGaN superlattices for deep UV light emitters. Materials Research Society Symposia Proceedings, 2009, 1202, 251.	0.1	4
64	Effects of electron and optical confinement on performance of UV laser diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 603-606.	0.8	6
65	Assessment of various LED structure designs for high-current operation. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S804-S806.	0.8	15
66	Is Auger recombination responsible for the efficiency rollover in IIIâ€nitride lightâ€emitting diodes?. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2066-2069.	0.8	84
67	Current spreading, heat transfer, and light extraction in multiâ€pixel LED array. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2070-2072.	0.8	5
68	Assessment of the pendeoâ€epitaxy effect on 2DEG mobility in IIIâ€nitride HEMT heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1980-1982.	0.8	2
69	Energy of mixing of Al x In y Ga1 â^' x â^' y N compounds. Technical Physics Letters, 2008, 34, 370-372.	0.7	2
70	Optical confinement in laser diodes based on nitrides of Group III elements. Part 1: Theory and optical properties of materials. Semiconductors, 2008, 42, 845-851.	0.5	5
71	Optical confinement in laser diodes based on nitrides of Group III elements. Part 2: Analysis of heterostructures on various substrates. Semiconductors, 2008, 42, 852-857.	0.5	7
72	Coupled modeling of current spreading, thermal effects and light extraction in III-nitride light-emitting diodes. Semiconductor Science and Technology, 2008, 23, 125023.	2.0	38

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73	Hybrid CdZnO/GaN quantum-well light emitting diodes. Journal of Applied Physics, 2008, 104, 093107.	2.5	45
74	BANDGAP ENGINEERING OF III-NITRIDE DEVICES ON LOW-DEFECT SUBSTRATES. , 2008, , 367-397.		5
75	Effect of free-carrier absorption on performance of 808 nm AlGaAs-based high-power laser diodes. Semiconductor Science and Technology, 2007, 22, 502-510.	2.0	27
76	Coupled Modeling of Current Spreading, Thermal Effects, and Light Extraction in Ill-Nitride Light-Emitting Diodes. , 2007, , .		1
77	Current spreading and thermal effects in blue LED dice. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 45-48.	0.8	41
78	Hybrid ZnO/III-nitride light-emitting diodes: modelling analysis of operation. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 241-245.	1.8	20
79	ZnO-Based Light Emitters. , 2006, , 525-554.		5
80	Current crowding effects on blue LED operation. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1645-1648.	0.8	19
81	A surface trap model and its application to analysis of III-nitride HEMT performance. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2356-2359.	0.8	7
82	Analytical model for the quantum-confined Stark effect including electric field screening by non-equilibrium carriers. Physica Status Solidi (B): Basic Research, 2006, 243, 1625-1629.	1.5	20
83	Simulation of visible and ultra-violet group-III nitride light emitting diodes. Journal of Computational Physics, 2006, 213, 214-238.	3.8	58
84	In situ visualization of SiC physical vapor transport crystal growth. Journal of Crystal Growth, 2005, 275, e1807-e1812.	1.5	23
85	Bandgap engineering of electronic and optoelectronic devices on native AlN and GaN substrates: A modelling insight. Journal of Crystal Growth, 2005, 281, 115-124.	1.5	30
86	Modelling study of MQW LED operation. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2928-2931.	0.8	44
87	Field-effect transistors based on AlGaN/GaN/AlGaN double-heterostructures grown by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2688-2691.	0.8	1
88	Heterojunctions between group-III nitride short-period superlattices. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2394-2398.	0.8	4
89	Simulation of hybrid ZnOâˆ•AlGaN single-heterostructure light-emitting diode. Applied Physics Letters, 2005, 87, 243502.	3.3	10
90	Molecular-Beam Epitaxy Doping of Gallium Nitride with Magnesium from Ammonia. Semiconductors, 2004, 38, 148.	0.5	0

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91	Carrier injection and light emission in visible and UV nitride LEDs by modeling. Physica Status Solidi (B): Basic Research, 2004, 241, 2668-2671.	1.5	16
92	Modeling of facet formation in SiC bulk crystal growth. Journal of Crystal Growth, 2004, 266, 313-319.	1.5	11
93	Surface chemistry and transport effects in GaN hydride vapor phase epitaxy. Journal of Crystal Growth, 2004, 270, 384-395.	1.5	37
94	Statistical model of ternary group-III nitrides. Physical Review B, 2004, 70, .	3.2	50
95	Advances in modeling of wide-bandgap bulk crystal growth. Crystal Research and Technology, 2003, 38, 237-249.	1.3	25
96	Advances in the modeling of MOVPE processes. Journal of Crystal Growth, 2003, 248, 1-7.	1.5	25
97	Role of oxygen in AlN sublimation growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1989-1992.	0.8	11
98	Indium-free violet LEDs grown by HVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2265-2269.	0.8	15
99	Indium Segregation in MOVPE Grown InGaN-Based Heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 311-314.	0.8	8
100	The use of magnesium to dope gallium nitride obtained by molecular-beam epitaxy from activated nitrogen. Semiconductors, 2003, 37, 838-842.	0.5	8
101	Advanced model for the simulation of BST-film growth with MOCVD. Synthetic Metals, 2003, 138, 145-151.	3.9	2
102	Experimental and Theoretical Analysis of Heat and Mass Transport in the System for AlN Bulk Crystal Growth. Materials Research Society Symposia Proceedings, 2002, 743, L3.33.1.	0.1	2
103	Modeling Analysis of Free-Spreading Sublimation Growth of SiC Crystals. Materials Research Society Symposia Proceedings, 2002, 742, 131.	0.1	3
104	Transport and Chemical Mechanisms in GaN Hydride Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 2002, 743, L3.40.1.	0.1	4
105	Segregation effects and bandgap engineering in InGaN quantum-well heterostructures. Materials Research Society Symposia Proceedings, 2002, 743, L6.5.1.	0.1	1
106	Dislocation effect on light emission efficiency in gallium nitride. Applied Physics Letters, 2002, 81, 4721-4723.	3.3	170
107	Numerical study of SiC CVD in a vertical cold-wall reactor. Computational Materials Science, 2002, 24, 520-534.	3.0	30
108	Comparison of silicon epitaxial growth on the 200- and 300-mm wafers from trichlorosilane in Centura reactors. Microelectronic Engineering, 2001, 56, 93-98.	2.4	3

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109	Gallium droplet formation during MOVPE and thermal annealing of GaN. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 82, 22-24.	3.5	13
110	Quasi-thermodynamic model of SiGe epitaxial growth. Journal of Crystal Growth, 2001, 225, 268-273.	1.5	9
111	Virtual reactor as a new tool for modeling and optimization of SiC bulk crystal growth. Journal of Crystal Growth, 2001, 225, 307-311.	1.5	35
112	On low temperature kinetic effects in metalâ€“organic vapor phase epitaxy of IIIâ€“V compounds. Journal of Crystal Growth, 2001, 230, 232-238.	1.5	36
113	Comprehensive Reactor-Scale Modeling of III-V Ternary Compound Growth by Movpe. Materials Research Society Symposia Proceedings, 2000, 616, 153.	0.1	0
114	Computational Experiment on CVD of SiC: Growth Rate, C/Si Ratio, Parasitic Phase Formation. Materials Research Society Symposia Proceedings, 2000, 616, 165.	0.1	0
115	Modeling of PVT Growth of Bulk SiC Crystals: General Trends and 2â€•to 4â€•Reactor Scaling. Materials Research Society Symposia Proceedings, 2000, 616, 227.	0.1	4
116	Inverse-Computation Design of a SiC Bulk Crystal Growth System. Materials Research Society Symposia Proceedings, 2000, 640, 1.	0.1	1
117	Growth of silicon carbide by sublimation sandwich method in the atmosphere of inert gas. Journal of Crystal Growth, 2000, 208, 431-441.	1.5	30
118	Effect of gas-phase nucleation on chemical vapor deposition of silicon carbide. Journal of Crystal Growth, 2000, 211, 343-346.	1.5	17
119	Analysis of sublimation growth of bulk SiC crystals in tantalum container. Journal of Crystal Growth, 2000, 211, 347-351.	1.5	51
120	On mechanisms of sublimation growth of AlN bulk crystals. Journal of Crystal Growth, 2000, 211, 68-72.	1.5	76
121	Global numerical simulation of heat and mass transfer for SiC bulk crystal growth by PVT. Journal of Crystal Growth, 2000, 211, 333-338.	1.5	62
122	Indium segregation kinetics in InGaAs ternary compounds. Thin Solid Films, 2000, 380, 71-74.	1.8	23
123	Advanced model of metal-organic chemical vapor Deposition of BaxSr1-xTiO3 oxides. Integrated Ferroelectrics, 2000, 30, 271-280.	0.7	2
124	A Quantitative Model of Surface Segregation in III-V Ternary Compounds. Materials Research Society Symposia Proceedings, 2000, 618, 185.	0.1	5
125	Surface Segregation and Composition Fluctuations in ammonia MBE and MOVPE of InGaN. Materials Research Society Symposia Proceedings, 2000, 639, 3181.	0.1	7
126	Surface kinetics of GaN evaporation and growth by molecular-beam epitaxy. Surface Science, 2000, 450, 191-203.	1.9	34

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127	Evolution of thermoelastic strain and dislocation density during sublimation growth of silicon carbide. Diamond and Related Materials, 2000, 9, 446-451.	3.9	26
128	Modeling of gas phase nucleation during silicon carbide chemical vapor deposition. Diamond and Related Materials, 2000, 9, 472-475.	3.9	12
129	Novel approach to simulation of group-III nitrides growth by MOVPE. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 1.	1.0	66
130	Indium droplet formation during molecular beam epitaxy of InGaN. Journal of Crystal Growth, 1999, 206, 147-149.	1.5	19
131	On the Possible Origins of Low Indium Incorporation during MOVPE of InGaN. Physica Status Solidi A, 1999, 176, 253-256.	1.7	18
132	Indium Incorporation and Droplet Formation during InGaN Molecular Beam Epitaxy. Physica Status Solidi A, 1999, 176, 297-300.	1.7	11
133	Growth Kinetics of GaN in Ammonia Atmosphere. Physica Status Solidi A, 1999, 176, 333-336.	1.7	3
134	Sublimation Growth of AlN in Vacuum and in a Gas Atmosphere. Physica Status Solidi A, 1999, 176, 435-438.	1.7	29
135	Modeling Study of Hydride Vapor Phase Epitaxy of GaN. Physica Status Solidi A, 1999, 176, 439-442.	1.7	10
136	GaN evaporation in molecular-beam epitaxy environment. Applied Physics Letters, 1999, 74, 1854-1856.	3.3	103
137	Modeling of InGaN MOVPE in AIX 200 Reactor and AIX 2000 HT Planetary Reactor. MRS Internet Journal of Nitride Semiconductor Research, 1999, 4, 1.	1.0	57
138	Analysis of gallium nitride growth by gas-source molecular beam epitaxy. Journal of Crystal Growth, 1998, 187, 397-401.	1.5	8
139	Thermodynamic properties of group-III nitrides and related species. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	46
140	Suppression of phase separation in InGaN due to elastic strain. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	160
141	Current status of GaN crystal growth by sublimation sandwich technique. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	24
142	Sublimation Sandwich Growth of Free Standing GaN Crystals. Materials Research Society Symposia Proceedings, 1997, 482, 127.	0.1	5
143	Model of the adsorption/desorption kinetics on a growing IIIâ€“V compound surface. Surface Science, 1997, 393, 108-125.	1.9	25
144	The role of gaseous species in group-III nitride growth. MRS Internet Journal of Nitride Semiconductor Research, 1997, 2, 1.	1.0	27

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145	Kinetic model of GaAs(100) growth from molecular beams. Technical Physics Letters, 1997, 23, 38-40.	0.7	4
146	Influence of multilevel crystallization on the intensity oscillations of diffracted highenergy electrons during growth of aluminum arsenide by molecular beam epitaxy. Technical Physics Letters, 1997, 23, 307-308.	0.7	0
147	Analysis of vaporization kinetics of group-III nitrides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 43, 167-171.	3.5	22
148	Simulation of Sublimation Growth of SiC Single Crystals. Physica Status Solidi (B): Basic Research, 1997, 202, 201-220.	1.5	49
149	Analysis of silicon carbide growth by sublimation sandwich method. Journal of Crystal Growth, 1997, 173, 408-416.	1.5	21
150	Mechanisms of optical confinement in phase-locked laser arrays. Semiconductor Science and Technology, 1996, 11, 372-379.	2.0	4
151	Conditions of excess liquid phase formation during molecular beam epitaxy of IIIâ€“V ternary compounds. Journal of Crystal Growth, 1996, 162, 15-24.	1.5	6
152	Thermal etching of binary and ternary IIIâ€“V compounds under vacuum conditions. Journal of Crystal Growth, 1996, 166, 167-171.	1.5	6
153	Analytical model of silicon carbide growth under free-molecular transport conditions. Journal of Crystal Growth, 1996, 169, 491-495.	1.5	15
154	Theoretical Model for Analysis and Optimization of Group III-Nitrides Growth by Molecular Beam Epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	27
155	Time-resolved reflection high energy electron diffraction study of dynamical surface processes during molecular beam epitaxy of GaAs and AlAs. Journal of Crystal Growth, 1995, 146, 344-348.	1.5	3
156	Use of molecular beam epitaxy for high-power AlGaAs laser production. Journal of Crystal Growth, 1995, 150, 1350-1353.	1.5	3
157	Analysis of V-group molecules sticking to IIIâ€“V compound surfaces. Surface Science, 1995, 344, 11-22.	1.9	18
158	A degradation rate study of MBE-grown high-power AlGaAs laser diodes. Semiconductor Science and Technology, 1994, 9, 345-348.	2.0	4
159	Nucleation and growth kinetics of GaAs during molecular beam epitaxy. Surface Science, 1994, 314, 79-88.	1.9	15
160	Instability of IIIâ€“V compound surfaces due to liquid phase formation. Journal of Crystal Growth, 1993, 129, 563-570.	1.5	13
161	Monolithically-integrated hybrid heterostructure diode laser with dielectric-film waveguide DBR. IEEE Journal of Quantum Electronics, 1987, 23, 869-881.	1.9	8
162	Visible Light-Emitting Diodes. , 0, , 303-325.		15

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163	Study of Al Incorporation in Chemical Vapor Deposition of p-Doped SiC. Materials Science Forum, 0, 821-823, 145-148.	0.3	3