Motoaki Iwaya

List of Publications by Citations

148 papers	2,887 citations	28 h-index	48 g-index
155 ext. papers	3,285 ext. citations	2.2 avg, IF	4.62 L-index

#	Paper	IF	Citations
148	Improved Efficiency of 255–280 nm AlGaN-Based Light-Emitting Diodes. *Applied Physics Express*, **2010**, 3, 061004	2.4	204
147	Reduction of Etch Pit Density in Organometallic Vapor Phase Epitaxy-Grown GaN on Sapphire by Insertion of a Low-Temperature-Deposited Buffer Layer between High-Temperature-Grown GaN. *Japanese Journal of Applied Physics*, **1998**, 37, L316-L318	1.4	170
146	Stress and Defect Control in GaN Using Low Temperature Interlayers. *Japanese Journal of Applied Physics*, **1998**, 37, L1540-L1542	1.4	132
145	350.9 nm UV Laser Diode Grown on Low-Dislocation-Density AlGaN. *Japanese Journal of Applied Physics*, **2004**, 43, L499-L500	1.4	125
144	Solar-Blind UV Photodetectors Based on GaN/AlGaN p-i-n Photodiodes. *Japanese Journal of Applied Physics*, **2000**, 39, L387-L389	1.4	97
143	Epitaxial lateral overgrowth of AlN on trench-patterned AlN layers. *Journal of Crystal Growth*, **2007**, 298, 257-260	1.6	89
142	Dislocations in AlN Epilayers Grown on Sapphire Substrate by High-Temperature Metal-Organic Vapor Phase Epitaxy. *Japanese Journal of Applied Physics*, **2007**, 46, 1458-1462	1.4	80
141	High-Temperature Metal-Organic Vapor Phase Epitaxial Growth of AlN on Sapphire by Multi Transition Growth Mode Method Varying V/III Ratio. *Japanese Journal of Applied Physics*, **2006**, 45, 8639-8643	1.4	79
140	Low-temperature-deposited AlGaN interlayer for improvement of AlGaN/GaN heterostructure. *Journal of Crystal Growth*, **2001**, 223, 83-91	1.6	75
139	Impact of high-temperature growth by metal-organic vapor phase epitaxy on microstructure of AlN on 6H-SiC substrates. *Journal of Crystal Growth*, **2008**, 310, 2308-2313	1.6	64
138	Room-temperature continuous-wave operation of GaN-based vertical-cavity surface-emitting lasers with n-type conducting AlInN/GaN distributed Bragg reflectors. *Applied Physics Express*, **2016**, 9, 102101	2.4	57
137	Annihilation mechanism of threading dislocations in AlN grown by growth form modification method using V/III ratio. *Journal of Crystal Growth*, **2007**, 300, 136-140	1.6	56
136	Novel UV devices on high-quality AlGaN using grooved underlying layer. *Journal of Crystal Growth*, **2009**, 311, 2860-2863	1.6	52
135	High-efficiency AlGaN-based UV light-emitting diode on laterally overgrown AlN. *Journal of Crystal Growth*, **2008**, 310, 2326-2329	1.6	50
134	Realization of crack-free and high-quality thick AlxGa1−xN for UV optoelectronics using low-temperature interlayer. *Applied Surface Science*, **2000**, 159-160, 405-413	6.7	50
133	Realization of Nitride-Based Solar Cell on Freestanding GaN Substrate. *Applied Physics Express*, **2010**, 3, 111001	2.4	48
132	Improvement of Light Extraction Efficiency for AlGaN-Based Deep Ultraviolet Light-Emitting Diodes. *Japanese Journal of Applied Physics*, **2011**, 50, 122101	1.4	44

131	GaInN-Based Tunnel Junctions in n□□ Light Emitting Diodes. *Japanese Journal of Applied Physics*, **2013**, 52, 08JH06	1.4	41
130	Low-Intensity Ultraviolet Photodetectors Based on AlGaN. *Japanese Journal of Applied Physics*, **1999**, 38, L487-L489	1.4	41
129	Influence of High Temperature in the Growth of Low Dislocation Content AlN Bridge Layers on Patterned 6H-SiC Substrates by Metalorganic Vapor Phase Epitaxy. *Japanese Journal of Applied Physics*, **2007**, 46, L307-L310	1.4	39
128	Flat (11bar20) GaN Thin Film on Precisely Offset-Controlled (1bar102) Sapphire Substrate. *Japanese Journal of Applied Physics*, **2005**, 44, 7418-7420	1.4	37
127	High-Efficiency Nitride-Based Light-Emitting Diodes with Moth-Eye Structure. *Japanese Journal of Applied Physics*, **2005**, 44, 7414-7417	1.4	36
126	Control of p-Type Conduction in a-Plane GaN Grown on Sapphire r-Plane Substrate. *Japanese Journal of Applied Physics*, **2005**, 44, L1516-L1518	1.4	34
125	High-performance UV emitter grown on high-crystalline-quality AlGaN underlying layer. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 1199-1204	1.6	33
124	Control of crystallinity of GaN grown on sapphire substrate by metalorganic vapor phase epitaxy using in situ X-ray diffraction monitoring method. *Journal of Crystal Growth*, **2014**, 401, 367-371	1.6	30
123	One-sidewall-seeded epitaxial lateral overgrowth of a-plane GaN by metalorganic vapor-phase epitaxy. *Journal of Crystal Growth*, **2009**, 311, 2887-2890	1.6	29
122	Microscopic Investigation of Al0.43Ga0.57N on Sapphire. *Japanese Journal of Applied Physics*, **1999**, 38, L1515-L1518	1.4	29
121	High-performance solar-blind Al0.6Ga0.4N/Al0.5Ga0.5N MSM type photodetector. *Applied Physics Letters*, **2017**, 111, 191103	3.4	28
120	Low-Leakage-Current Enhancement-Mode AlGaN/GaN Heterostructure Field-Effect Transistor Using p-Type Gate Contact. *Japanese Journal of Applied Physics*, **2006**, 45, L319-L321	1.4	28
119	Fracture of AlxGa1-xN/GaN Heterostructure -- Compositional and Impurity Dependence --. *Japanese Journal of Applied Physics*, **2001**, 40, L195-L197	1.4	28
118	Growth of High-Quality AlN and AlGaN Films on Sputtered AlN/Sapphire Templates via High-Temperature Annealing. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1700506	1.3	26
117	Development of AlN/diamond heterojunction field effect transistors. *Diamond and Related Materials*, **2012**, 24, 206-209	3.5	26
116	Control of Threshold Voltage of Enhancement-Mode AlxGa1-xN/GaN Junction Heterostructure Field-Effect Transistors Using p-GaN Gate Contact. *Japanese Journal of Applied Physics*, **2007**, 46, 115-118	1.4	26
115	Laser diode of 350.9nm wavelength grown on sapphire substrate by MOVPE. *Journal of Crystal Growth*, **2004**, 272, 270-273	1.6	26
114	High-Power UV-Light-Emitting Diode on Sapphire. *Japanese Journal of Applied Physics*, **2003**, 42, 400-403	1.4	25

113	Compensation effect of Mg-doped a- and c-plane GaN films grown by metalorganic vapor phase epitaxy. *Journal of Crystal Growth*, **2010**, 312, 3131-3135	1.6	24
112	Thermodynamic Aspects of Growth of AlGaN by High-Temperature Metal Organic Vapor Phase Epitaxy. *Japanese Journal of Applied Physics*, **2006**, 45, 2502-2504	1.4	24
111	GaInN-based tunnel junctions with graded layers. *Applied Physics Express*, **2016**, 9, 081005	2.4	24
110	GaInN-based tunnel junctions with high InN mole fractions grown by MOVPE. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 1127-1131	1.3	23
109	High-quality AlN film grown on a nanosized concave–convex surface sapphire substrate by metalorganic vapor phase epitaxy. *Applied Physics Letters*, **2017**, 111, 162102	3.4	22
108	White light-emitting diode based on fluorescent SiC. *Thin Solid Films*, **2012**, 522, 23-25	2.2	21
107	Ultraviolet-B band lasers fabricated on highly relaxed thick Al0.55Ga0.45N films grown on various types of AlN wafers. *Japanese Journal of Applied Physics*, **2019**, 58, SC1052	1.4	20
106	Light confinement and high current density in UVB laser diode structure using Al composition-graded p-AlGaN cladding layer. *Applied Physics Letters*, **2019**, 114, 191103	3.4	20
105	Extremely Low-Resistivity and High-Carrier-Concentration Si-Doped Al0.05Ga0.95N. *Applied Physics Express*, **2013**, 6, 121002	2.4	20
104	Anisotropically Biaxial Strain ina-Plane AlGaN on GaN Grown onr-Plane Sapphire. *Japanese Journal of Applied Physics*, **2006**, 45, 2509-2513	1.4	19
103	High On/Off Ratio in Enhancement-Mode AlxGa1-xN/GaN Junction Heterostructure Field-Effect Transistors with P-Type GaN Gate Contact. *Japanese Journal of Applied Physics*, **2006**, 45, L1048-L1050	1.4	19
102	Strain Relaxation Mechanisms in AlGaN Epitaxy on AlN Templates. *Applied Physics Express*, **2010**, 3, 111003	2.4	18
101	Epitaxial lateral overgrowth of AlxGa1−xN (x>0.2) on sapphire and its application to UV-B-light-emitting devices. *Journal of Crystal Growth*, **2007**, 298, 265-267	1.6	18
100	Analysis of strain relaxation process in GaInN/GaN heterostructure by in situ X-ray diffraction monitoring during metalorganic vapor-phase epitaxial growth. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 211-214	2.5	17
99	Determination of internal quantum efficiency in GaInN-based light-emitting diode under electrical injection: carrier recombination dynamics analysis. *Applied Physics Express*, **2019**, 12, 032006	2.4	16
98	Photoresponse and Defect Levels of AlGaN/GaN Heterobipolar Phototransistor Grown on Low-Temperature AlN Interlayer. *Japanese Journal of Applied Physics*, **2001**, 40, L498-L501	1.4	16
97	Effect of AlGaN undershell on the cathodoluminescence properties of coaxial GaInN/GaN multiple-quantum-shells nanowires. *Nanoscale*, **2019**, 11, 18746-18757	7.7	16
96	The dependence of AlN molar fraction of AlGaN in wet etching by using tetramethylammonium hydroxide aqueous solution. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC30	1.4	14

95	Realization of low-dislocation-density, smooth surface, and thick GaInN films on m-plane GaN templates. *Journal of Crystal Growth*, **2008**, 310, 3308-3312	1.6	14
94	Injection efficiency in AlGaN-based UV laser diodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 2384-2386		13
93	Relationship between misfit-dislocation formation and initial threading-dislocation density in GaInN/GaN heterostructures. *Japanese Journal of Applied Physics*, **2015**, 54, 115501	1.4	12
92	Realization of High-Crystalline-Quality Thick m-Plane GaInN Film on 6H-SiC Substrate by Epitaxial Lateral Overgrowth. *Japanese Journal of Applied Physics*, **2007**, 46, L948-L950	1.4	12
91	Growth and Characterization of Core-Shell Structures Consisting of GaN Nanowire Core and GaInN/GaN Multi-Quantum Shell. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 015007	2	12
90	450 nm GaInN ridge stripe laser diodes with AlInN/AlGaN multiple cladding layers. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC28	1.4	11
89	Relaxation and recovery processes of AlxGa1⊠N grown on AlN underlying layer. *Journal of Crystal Growth*, **2009**, 311, 2850-2852	1.6	11
88	Fabrication of Nonpolar a-Plane Nitride-Based Solar Cell on r-Plane Sapphire Substrate. *Applied Physics Express*, **2011**, 4, 101001	2.4	11
87	High hole concentration in Mg-doped a-plane Ga1⊠InxN (0. *Applied Physics Letters*, **2008**, 93, 182108	3.4	11
86	Improved Uniform Current Injection into Core-Shell-Type GaInN Nanowire Light-Emitting Diodes by Optimizing Growth Condition and Indium-Tin-Oxide Deposition. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900715	1.6	11
85	AlGaN-based UV-B laser diode with a high optical confinement factor. *Applied Physics Letters*, **2021**, 118, 163504	3.4	11
84	Characterization and optimization of sputtered AlN buffer layer on r-plane sapphire substrate to improve the crystalline quality of nonpolar a-plane GaN. *Journal of Crystal Growth*, **2017**, 480, 90-95	1.6	10
83	High Crystallinity and Highly Relaxed Al0.60Ga0.40N Films Using Growth Mode Control Fabricated on a Sputtered AlN Template with High-Temperature Annealing. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900868	1.6	10
82	Controlled synthesis of nonpolar GaInN/GaN multiple-quantum-shells on GaN nanowires by metal-organic chemical vapour deposition. *Applied Surface Science*, **2020**, 509, 145271	6.7	10
81	Characterization of nonpolar a -plane GaN epi-layers grown on high-density patterned r -plane sapphire substrates. *Journal of Crystal Growth*, **2018**, 484, 50-55	1.6	10
80	Reduction in threshold current density of 355 nm UV laser diodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 1564-1568		10
79	X-ray diffraction reciprocal lattice space mapping of a-plane AlGaN on GaN. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 1524-1528	1.3	10
78	High-quality Al0.12Ga0.88N film with low dislocation density grown on facet-controlled Al0.12Ga0.88N by MOVPE. *Journal of Crystal Growth*, **2004**, 272, 377-380	1.6	10

77	Enhanced Device Performance of GaInN-Based Green Light-Emitting Diode with Sputtered AlN Buffer Layer. *Applied Sciences (Switzerland)*, **2019**, 9, 788	2.6	10
76	GaN-based vertical-cavity surface-emitting lasers using n-type conductive AlInN/GaN bottom distributed Bragg reflectors with graded interfaces. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC01	1.4	9
75	Hybrid simulation of light extraction efficiency in multi-quantum-shell (MQS) NW (nanowire) LED with a current diffusion layer. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC17	1.4	9
74	Properties of nitride-based photovoltaic cells under concentrated light illumination. *Physica Status Solidi - Rapid Research Letters*, **2012**, 6, 145-147	2.5	9
73	Relaxation of misfit-induced stress in nitride-based heterostructures. *Journal of Crystal Growth*, **2002**, 237-239, 947-950	1.6	9
72	. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-11	2	8
71	Sapphire substrate off-angle and off-direction dependences on characteristics of AlGaN-based deep ultraviolet light-emitting diodes. *Japanese Journal of Applied Physics*, **2019**, 58, SC1025	1.4	8
70	Realization of extreme light extraction efficiency for moth-eye LEDs on SiC substrate using high-reflection electrode. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2180-2182		8
69	Control of stress and crystalline quality in GaInN films used for green emitters. *Journal of Crystal Growth*, **2008**, 310, 4920-4922	1.6	8
68	In-plane GaN/AlGaN heterostructure fabricated by selective mass transport planar technology. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 93, 139-142	3.1	8
67	Development of Monolithically Grown Coaxial GaInN/GaN Multiple Quantum Shell Nanowires by MOCVD. *Nanomaterials*, **2020**, 10,	5.4	8
66	Effects of Mg and Si doping in the guide layers of AlGaN-based ultraviolet-B band lasers. *Journal of Crystal Growth*, **2020**, 535, 125537	1.6	7
65	In situ X-ray diffraction monitoring of GaInN/GaN superlattice during organometalic vapor phase epitaxy growth. *Journal of Crystal Growth*, **2014**, 393, 108-113	1.6	7
64	Annealing of the sputtered AlN buffer layer on r-plane sapphire and its effect on a-plane GaN crystalline quality. *Physica Status Solidi (B): Basic Research*, **2017**, 254, 1600723	1.3	7
63	Structural and optical impacts of AlGaN undershells on coaxial GaInN/GaN multiple-quantum-shells nanowires. *Nanophotonics*, **2019**, 9, 101-111	6.3	7
62	n-type GaN surface etched green light-emitting diode to reduce non-radiative recombination centers. *Applied Physics Letters*, **2021**, 118, 021102	3.4	7
61	High quality Al0.99Ga0.01N layers on sapphire substrates grown at 1150 °C by metalorganic vapor phase epitaxy. *Japanese Journal of Applied Physics*, **2017**, 56, 015504	1.4	6
60	In situ X-ray diffraction monitoring during metalorganic vapor phase epitaxy growth of low-temperature-GaN buffer layer. *Journal of Crystal Growth*, **2012**, 361, 1-4	1.6	6

59	Dislocation density dependence of stimulated emission characteristics in AlGaN/Al multiquantum wells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 1537-1540		6
58	Color-tunable emission in coaxial GaInN/GaN multiple quantum shells grown on three-dimensional nanostructures. *Applied Surface Science*, **2021**, 539, 148279	6.7	6
57	Tuning the Resonant Frequency of a Surface Plasmon by Double-Metallic Ag/Au Nanoparticles for High-Efficiency Green Light-Emitting Diodes. *Applied Sciences (Switzerland)*, **2019**, 9, 305	2.6	5
56	Characterizations of GaN nanowires and GaInN/GaN multi-quantum shells grown by MOVPE. *Japanese Journal of Applied Physics*, **2020**, 59, SGGE05	1.4	5
55	Analysis of Spontaneous Subpeak Emission from the Guide Layers of the Ultraviolet-B Laser Diode Structure Containing Composition-Graded p-AlGaN Cladding Layers. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900864	1.6	5
54	Improvement of emission efficiency with a sputtered AlN buffer layer in GaInN-based green light-emitting diodes. *Japanese Journal of Applied Physics*, **2019**, 58, SC1040	1.4	5
53	GaInN-based solar cells using GaInN/GaInN superlattices. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 2463-2465		5
52	Study on the Seeded Growth of AlN Bulk Crystals by Sublimation. *Japanese Journal of Applied Physics*, **2004**, 43, 7448-7453	1.4	5
51	Impact of H2-Preannealing of the Sapphire Substrate on the Crystallinity of Low-Temperature-Deposited AlN Buffer Layer. *Japanese Journal of Applied Physics*, **2005**, 44, 3913-3917	1.4	5
50	Fabrication and Characterization of Multiquantum Shell Light-Emitting Diodes with Tunnel Junction. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900774	1.6	5
49	Efficiency Enhancement Mechanism of an Underlying Layer in GaInN-Based Green Light-Emitting Diodes. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900713	1.6	5
48	Thermodynamic analysis of GaInN-based light-emitting diodes operated by quasi-resonant optical excitation. *Journal of Applied Physics*, **2020**, 128, 123103	2.5	5
47	Correlation between Optical and Structural Characteristics in Coaxial GaInN/GaN Multiple Quantum Shell Nanowires with AlGaN Spacers. *ACS Applied Materials & Interfaces*, **2020**, 12, 51082-51091	9.5	5
46	Low-threshold-current (~85 mA) of AlGaN-based UV-B laser diode with refractive-index waveguide structure. *Applied Physics Express*, **2021**, 14, 094009	2.4	5
45	GaN-based vertical cavity surface emitting lasers with lateral optical confinements and conducting distributed Bragg reflectors. *Japanese Journal of Applied Physics*, **2020**, 59, SGGE08	1.4	4
44	Homoepitaxial growth of AlN layers on freestanding AlN substrate by metalorganic vapor phase epitaxy. *Journal of Crystal Growth*, **2014**, 390, 46-50	1.6	4
43	Performance of GaN-Based Semiconductor Laser with Spectral Broadening due to Compositional Inhomogeneity in GaInN Active Layer. *Japanese Journal of Applied Physics*, **2000**, 39, 390-392	1.4	4
42	Room-temperature continuous-wave operations of GaN-based vertical-cavity surface-emitting lasers with buried GaInN tunnel junctions. *Applied Physics Express*, **2020**, 13, 111003	2.4	4

41	Photoluminescence Characterization of Fluorescent Sic with High Boron and Nitrogen Concentrations. *Materials Science Forum*, **2020**, 1004, 265-271	0.4	4
40	Analysis of carrier injection efficiency of AlGaN UV-B laser diodes based on the relationship between threshold current density and cavity length. *Japanese Journal of Applied Physics*, **2021**, 60, 074002	1.4	4
39	MOVPE growth of n-GaN cap layer on GaInN/GaN multi-quantum shell LEDs. *Journal of Crystal Growth*, **2020**, 539, 125571	1.6	4
38	Effects of Mg dopant in Al-composition-graded Al x Ga1 N (0.45 x) on vertical electrical conductivity of ultrawide bandgap AlGaN p junction. *Applied Physics Express*, **2021**, 14, 096503	2.4	4
37	Reduction of dislocation density in Al0.6Ga0.4N film grown on sapphire substrates using annealed sputtered AlN templates and its effect on UV-B laser diodes. *Journal of Crystal Growth*, **2021**, 575, 126325	1.6	4
36	Electrical properties of relaxed p-GaN/p-AlGaN superlattices and their application in ultraviolet-B light-emitting devices. *Japanese Journal of Applied Physics*, **2019**, 58, SC1016	1.4	3
35	Nitride-based hetero-field-effect-transistor-type photosensors with extremely high photosensitivity. *Physica Status Solidi - Rapid Research Letters*, **2013**, 7, 215-217	2.5	3
34	Activation energy of Mg in a -plane Ga1 Inx N (0 Physica Status Solidi (B): Basic Research, **2009**, 246, 1188-1190	1.3	3
33	Growth of thick GaInN on grooved (101 1) GaN/(101 2) 4H-SiC. *Journal of Crystal Growth*, **2009**, 311, 2926-2928	1.6	3
32	Recent development of UV-B laser diodes. *Japanese Journal of Applied Physics*,	1.4	3
31	Crystal Growth and Characterization of n-GaN in a Multiple Quantum Shell Nanowire-Based Light Emitter with a Tunnel Junction. *ACS Applied Materials & Interfaces*, **2021**, 13, 37883-37892	9.5	3
30	Improvement of 650-nm red-emitting GaIn0.17N/GaIn0.38N multiple quantum wells on ScAlMgO4 (0001) substrate by suppressing impurity diffusion/penetration. *Applied Physics Letters*, **2022**, 120, 142102	3.4	3
29	Optimization of indium tin oxide layer thickness for surface-plasmon-enhanced green light-emitting diodes. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC27	1.4	2
28	InGaN growth with various InN mole fractions on m-plane ZnO substrate by metalorganic vapor phase epitaxy. *Journal of Crystal Growth*, **2009**, 311, 2929-2932	1.6	2
27	AlN and AlGaN by MOVPE for UV Light Emitting Devices. *Materials Science Forum*, **2008**, 590, 175-210	0.4	2
26	High-quality AlInN/GaN distributed Bragg reflectors grown by metalorganic vapor phase epitaxy. *Applied Physics Express*, **2020**, 13, 125504	2.4	2
25	Room temperature pulsed operation of nitride nanowire-based multi-quantum shell laser diodes by MOVPE. *Applied Physics Express*, **2021**, 14, 074004	2.4	2
24	Emission characteristics of GaInN/GaN multiple quantum shell nanowire-based LEDs with different p-GaN growth conditions. *Nanophotonics*, **2021**,	6.3	2

23	Reduction of dislocation density in lattice-relaxed Al0.68Ga0.32N film grown on periodical 1 μm spacing AlN pillar concave-convex patterns and its effect on the performance of UV-B laser diodes. *Applied Physics Express*, **2022**, 15, 031004	2.4	2
22	Optical and structural characterization of GaInN/GaN multiple quantum wells grown on nonpolar a-plane GaN templates by metalorganic vapor phase epitaxy. *Japanese Journal of Applied Physics*, **2019**, 58, SC1054	1.4	1
21	Demonstration of electron beam excitation laser using a GaInN-based multiquantum well active layer. *Applied Physics Express*, **2016**, 9, 101001	2.4	1
20	Influence of trap level on an Al0.6Ga0.4N/Al0.5Ga0.5N metal–semiconductor–metal UV photodetector. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC26	1.4	1
19	High photosensitivity AlGaN/GaInN/GaN heterojunction field-effect transistor type visible photosensors. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC22	1.4	1
18	Activation of Mg-Doped p-Type Al0.17Ga0.83N in Oxygen Ambient. *Japanese Journal of Applied Physics*, **2009**, 48, 101002	1.4	1
17	Defects in highly Mg-doped AlN. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1299-1301	1.6	1
16	Control of p-type conduction in a-plane Ga1−xInxN (0. *Journal of Crystal Growth*, **2008**, 310, 4996-4998	1.6	1
15	Moth-Eye Light-Emitting Diodes. *Materials Research Society Symposia Proceedings*, **2004**, 831, 19		1
14	Morphology Control and Crystalline Quality of p-Type GaN Shells Grown on Coaxial GaInN/GaN Multiple Quantum Shell Nanowires. *ACS Applied Materials & Interfaces*, **2021**, 13, 54486-54496	9.5	1
13	MOVPE growth of Si-doped GaN cap layers embedding GaN nanowires with multiple-quantum shells. *Journal of Crystal Growth*, **2022**, 578, 126423	1.6	1
12	In-situ curvature measurements of AlInN/GaN distributed Bragg reflectors during growths containing substrate temperature ramping steps. *Journal of Crystal Growth*, **2020**, 531, 125357	1.6	1
11	Voltage-Controlled Anodic Oxidation of Porous Fluorescent SiC for Effective Surface Passivation. *Nanomaterials*, **2020**, 10,	5.4	1
10	Study on N and B Doping by Closed Sublimation Growth Using Separated Ta Crucible. *Materials Science Forum*, **2019**, 963, 34-37	0.4	1
9	Improved Reverse Leakage Current in GaInN-Based LEDs With a Sputtered AlN Buffer Layer. *IEEE Photonics Technology Letters*, **2019**, 31, 1971-1974	2.2	1
8	Space-charge effect on photogenerated-current and -voltage in III-nitride optoelectronic semiconductors. *Photonics Research*, **2021**, 9, 1820	6	1
7	Influence of silane flow rate on the structural and optical properties of GaN nanowires with multiple-quantum-shells. *Journal of Crystal Growth*, **2021**, 570, 126201	1.6	0
6	Fabrication of vertical AlGaN-based deep-ultraviolet light-emitting diodes operating at high current density (~43 kA cm−2) using a laser liftoff method. *Applied Physics Express*, **2022**, 15, 041006	2.4	0

5	Cp2Mg in-situ monitoring in a MOVPE reactor using a quantum cascade laser. *Japanese Journal of Applied Physics*, **2019**, 58, SC1013	1.4
4	MOVPE growth of nonpolar a-plane GaN with low oxygen contamination and specular surface on a freestanding GaN substrate. *Journal of Crystal Growth*, **2012**, 351, 126-130	1.6
3	Details of the improvement of crystalline quality of a-plane GaN using one-step lateral growth. *Materials Research Society Symposia Proceedings*, **2006**, 955, 1	
2	Fabrication of high-performance photodetector based on AlGaN/GaN hetero-field-effect transistors with p-GaN gate. *Materials Research Society Symposia Proceedings*, **2006**, 955, 1	
1	Improved passivation depth of porous fluorescent 6H-SiC with Si/C faces using atomic layer deposition. *Japanese Journal of Applied Physics*, **2022**, 61, 035502	1.4