

# Motoaki Iwaya

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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 passivation depth of porous fluorescent 6H-SiC with Si/C faces using atomic layer deposition. <i>Japanese Journal of Applied Physics</i> , <b>2022</b> , 61, 035502	1.4	
147	MOVPE growth of Si-doped GaN cap layers embedding GaN nanowires with multiple-quantum shells. <i>Journal of Crystal Growth</i> , <b>2022</b> , 578, 126423	1.6	1
146	Reduction of dislocation density in lattice-relaxed Al <sub>0.68</sub> Ga <sub>0.32</sub> N film grown on periodical 1 $\mu$ m spacing AlN pillar concave-convex patterns and its effect on the performance of UV-B laser diodes. <i>Applied Physics Express</i> , <b>2022</b> , 15, 031004	2.4	2
145	Fabrication of vertical AlGaIn-based deep-ultraviolet light-emitting diodes operating at high current density (~43 kA cm <sup>-2</sup> ) using a laser liftoff method. <i>Applied Physics Express</i> , <b>2022</b> , 15, 041006	2.4	0
144	Improvement of 650-nm red-emitting GaIn <sub>0.17</sub> N/GaIn <sub>0.38</sub> N multiple quantum wells on ScAlMgO <sub>4</sub> (0001) substrate by suppressing impurity diffusion/penetration. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 142102	3.4	3
143	Morphology Control and Crystalline Quality of p-Type GaN Shells Grown on Coaxial GaInN/GaN Multiple Quantum Shell Nanowires. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 54486-54496	9.5	1
142	AlGaIn-based UV-B laser diode with a high optical confinement factor. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 163504	3.4	11
141	Room temperature pulsed operation of nitride nanowire-based multi-quantum shell laser diodes by MOVPE. <i>Applied Physics Express</i> , <b>2021</b> , 14, 074004	2.4	2
140	Analysis of carrier injection efficiency of AlGaIn UV-B laser diodes based on the relationship between threshold current density and cavity length. <i>Japanese Journal of Applied Physics</i> , <b>2021</b> , 60, 074002	1.4	4
139	Color-tunable emission in coaxial GaInN/GaN multiple quantum shells grown on three-dimensional nanostructures. <i>Applied Surface Science</i> , <b>2021</b> , 539, 148279	6.7	6
138	Crystal Growth and Characterization of n-GaN in a Multiple Quantum Shell Nanowire-Based Light Emitter with a Tunnel Junction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 37883-37892	9.5	3
137	Space-charge effect on photogenerated-current and -voltage in III-nitride optoelectronic semiconductors. <i>Photonics Research</i> , <b>2021</b> , 9, 1820	6	1
136	Emission characteristics of GaInN/GaN multiple quantum shell nanowire-based LEDs with different p-GaN growth conditions. <i>Nanophotonics</i> , <b>2021</b> ,	6.3	2
135	Effects of Mg dopant in Al-composition-graded Al <sub>x</sub> Ga <sub>1-x</sub> N (0.45 $\leq$ x) on vertical electrical conductivity of ultrawide bandgap AlGaIn p-n junction. <i>Applied Physics Express</i> , <b>2021</b> , 14, 096503	2.4	4
134	Influence of silane flow rate on the structural and optical properties of GaN nanowires with multiple-quantum-shells. <i>Journal of Crystal Growth</i> , <b>2021</b> , 570, 126201	1.6	0
133	Low-threshold-current (~85 mA) of AlGaIn-based UV-B laser diode with refractive-index waveguide structure. <i>Applied Physics Express</i> , <b>2021</b> , 14, 094009	2.4	5
132	Reduction of dislocation density in Al <sub>0.6</sub> Ga <sub>0.4</sub> N film grown on sapphire substrates using annealed sputtered AlN templates and its effect on UV-B laser diodes. <i>Journal of Crystal Growth</i> , <b>2021</b> , 575, 126325	1.6	4

131	n-type GaN surface etched green light-emitting diode to reduce non-radiative recombination centers. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 021102	3.4	7
130	Characterizations of GaN nanowires and GaInN/GaN multi-quantum shells grown by MOVPE. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, SGGE05	1.4	5
129	Analysis of Spontaneous Subpeak Emission from the Guide Layers of the Ultraviolet-B Laser Diode Structure Containing Composition-Graded p-AlGaIn Cladding Layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900864	1.6	5
128	High Crystallinity and Highly Relaxed Al <sub>0.60</sub> Ga <sub>0.40</sub> N Films Using Growth Mode Control Fabricated on a Sputtered AlN Template with High-Temperature Annealing. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900868	1.6	10
127	Effects of Mg and Si doping in the guide layers of AlGaIn-based ultraviolet-B band lasers. <i>Journal of Crystal Growth</i> , <b>2020</b> , 535, 125537	1.6	7
126	Controlled synthesis of nonpolar GaInN/GaN multiple-quantum-shells on GaN nanowires by metal-organic chemical vapour deposition. <i>Applied Surface Science</i> , <b>2020</b> , 509, 145271	6.7	10
125	GaN-based vertical cavity surface emitting lasers with lateral optical confinements and conducting distributed Bragg reflectors. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, SGGE08	1.4	4
124	Room-temperature continuous-wave operations of GaN-based vertical-cavity surface-emitting lasers with buried GaInN tunnel junctions. <i>Applied Physics Express</i> , <b>2020</b> , 13, 111003	2.4	4
123	High-quality AlInN/GaN distributed Bragg reflectors grown by metalorganic vapor phase epitaxy. <i>Applied Physics Express</i> , <b>2020</b> , 13, 125504	2.4	2
122	In-situ curvature measurements of AlInN/GaN distributed Bragg reflectors during growths containing substrate temperature ramping steps. <i>Journal of Crystal Growth</i> , <b>2020</b> , 531, 125357	1.6	1
121	Growth and Characterization of Core-Shell Structures Consisting of GaN Nanowire Core and GaInN/GaN Multi-Quantum Shell. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 015007	2	12
120	Fabrication and Characterization of Multiquantum Shell Light-Emitting Diodes with Tunnel Junction. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900774	1.6	5
119	Efficiency Enhancement Mechanism of an Underlying Layer in GaInN-Based Green Light-Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900713	1.6	5
118	Improved Uniform Current Injection into Core-Shell-Type GaInN Nanowire Light-Emitting Diodes by Optimizing Growth Condition and Indium-Tin-Oxide Deposition. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900715	1.6	11
117	Thermodynamic analysis of GaInN-based light-emitting diodes operated by quasi-resonant optical excitation. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 123103	2.5	5
116	Development of Monolithically Grown Coaxial GaInN/GaN Multiple Quantum Shell Nanowires by MOCVD. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	8
115	Photoluminescence Characterization of Fluorescent SiC with High Boron and Nitrogen Concentrations. <i>Materials Science Forum</i> , <b>2020</b> , 1004, 265-271	0.4	4
114	Voltage-Controlled Anodic Oxidation of Porous Fluorescent SiC for Effective Surface Passivation. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	1

113	Correlation between Optical and Structural Characteristics in Coaxial GaInN/GaN Multiple Quantum Shell Nanowires with AlGaN Spacers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 51082-51091	9.5	5
112	MOVPE growth of n-GaN cap layer on GaInN/GaN multi-quantum shell LEDs. <i>Journal of Crystal Growth</i> , <b>2020</b> , 539, 125571	1.6	4
111	GaN-based vertical-cavity surface-emitting lasers using n-type conductive AlInN/GaN bottom distributed Bragg reflectors with graded interfaces. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC014	1.4	9
110	450 nm GaInN ridge stripe laser diodes with AlInN/AlGaN multiple cladding layers. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC28	1.4	11
109	. <i>IEEE Journal of Quantum Electronics</i> , <b>2019</b> , 55, 1-11	2	8
108	Optical and structural characterization of GaInN/GaN multiple quantum wells grown on nonpolar a-plane GaN templates by metalorganic vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1054	1.4	1
107	The dependence of AlN molar fraction of AlGaN in wet etching by using tetramethylammonium hydroxide aqueous solution. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC30	1.4	14
106	Hybrid simulation of light extraction efficiency in multi-quantum-shell (MQS) NW (nanowire) LED with a current diffusion layer. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC17	1.4	9
105	Ultraviolet-B band lasers fabricated on highly relaxed thick Al <sub>0.55</sub> Ga <sub>0.45</sub> N films grown on various types of AlN wafers. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1052	1.4	20
104	Optimization of indium tin oxide layer thickness for surface-plasmon-enhanced green light-emitting diodes. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC27	1.4	2
103	Light confinement and high current density in UVB laser diode structure using Al composition-graded p-AlGaN cladding layer. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 191103	3.4	20
102	Tuning the Resonant Frequency of a Surface Plasmon by Double-Metallic Ag/Au Nanoparticles for High-Efficiency Green Light-Emitting Diodes. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 305	2.6	5
101	Determination of internal quantum efficiency in GaInN-based light-emitting diode under electrical injection: carrier recombination dynamics analysis. <i>Applied Physics Express</i> , <b>2019</b> , 12, 032006	2.4	16
100	Cp2Mg in-situ monitoring in a MOVPE reactor using a quantum cascade laser. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1013	1.4	
99	Improvement of emission efficiency with a sputtered AlN buffer layer in GaInN-based green light-emitting diodes. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1040	1.4	5
98	Electrical properties of relaxed p-GaN/p-AlGaN superlattices and their application in ultraviolet-B light-emitting devices. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1016	1.4	3
97	Influence of trap level on an Al <sub>0.6</sub> Ga <sub>0.4</sub> N/Al <sub>0.5</sub> Ga <sub>0.5</sub> N metal-semiconductor-metal UV photodetector. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC26	1.4	1
96	Sapphire substrate off-angle and off-direction dependences on characteristics of AlGaIn-based deep ultraviolet light-emitting diodes. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1025	1.4	8

95	High photosensitivity AlGaIn/GaN heterojunction field-effect transistor type visible photosensors. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC22	1.4	1
94	Structural and optical impacts of AlGaIn undershells on coaxial GaInN/GaN multiple-quantum-shells nanowires. <i>Nanophotonics</i> , <b>2019</b> , 9, 101-111	6.3	7
93	Enhanced Device Performance of GaInN-Based Green Light-Emitting Diode with Sputtered AlN Buffer Layer. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 788	2.6	10
92	Study on N and B Doping by Closed Sublimation Growth Using Separated Ta Crucible. <i>Materials Science Forum</i> , <b>2019</b> , 963, 34-37	0.4	1
91	Effect of AlGaIn undershell on the cathodoluminescence properties of coaxial GaInN/GaN multiple-quantum-shells nanowires. <i>Nanoscale</i> , <b>2019</b> , 11, 18746-18757	7.7	16
90	Improved Reverse Leakage Current in GaInN-Based LEDs With a Sputtered AlN Buffer Layer. <i>IEEE Photonics Technology Letters</i> , <b>2019</b> , 31, 1971-1974	2.2	1
89	Characterization of nonpolar a-plane GaN epi-layers grown on high-density patterned r-plane sapphire substrates. <i>Journal of Crystal Growth</i> , <b>2018</b> , 484, 50-55	1.6	10
88	Growth of High-Quality AlN and AlGaIn Films on Sputtered AlN/Sapphire Templates via High-Temperature Annealing. <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1700506	1.3	26
87	High quality Al <sub>0.99</sub> Ga <sub>0.01</sub> N layers on sapphire substrates grown at 1150 °C by metalorganic vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2017</b> , 56, 015504	1.4	6
86	Characterization and optimization of sputtered AlN buffer layer on r-plane sapphire substrate to improve the crystalline quality of nonpolar a-plane GaN. <i>Journal of Crystal Growth</i> , <b>2017</b> , 480, 90-95	1.6	10
85	High-quality AlN film grown on a nanosized concave/convex surface sapphire substrate by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 162102	3.4	22
84	Annealing of the sputtered AlN buffer layer on r-plane sapphire and its effect on a-plane GaN crystalline quality. <i>Physica Status Solidi (B): Basic Research</i> , <b>2017</b> , 254, 1600723	1.3	7
83	High-performance solar-blind Al <sub>0.6</sub> Ga <sub>0.4</sub> N/Al <sub>0.5</sub> Ga <sub>0.5</sub> N MSM type photodetector. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 191103	3.4	28
82	Room-temperature continuous-wave operation of GaN-based vertical-cavity surface-emitting lasers with n-type conducting AlInN/GaN distributed Bragg reflectors. <i>Applied Physics Express</i> , <b>2016</b> , 9, 102101	2.4	57
81	Demonstration of electron beam excitation laser using a GaInN-based multiquantum well active layer. <i>Applied Physics Express</i> , <b>2016</b> , 9, 101001	2.4	1
80	GaN-based tunnel junctions with graded layers. <i>Applied Physics Express</i> , <b>2016</b> , 9, 081005	2.4	24
79	GaN-based tunnel junctions with high InN mole fractions grown by MOVPE. <i>Physica Status Solidi (B): Basic Research</i> , <b>2015</b> , 252, 1127-1131	1.3	23
78	Relationship between misfit-dislocation formation and initial threading-dislocation density in GaInN/GaN heterostructures. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 115501	1.4	12

77	Homoepitaxial growth of AlN layers on freestanding AlN substrate by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2014</b> , 390, 46-50	1.6	4
76	In situ X-ray diffraction monitoring of GaInN/GaN superlattice during organometallic vapor phase epitaxy growth. <i>Journal of Crystal Growth</i> , <b>2014</b> , 393, 108-113	1.6	7
75	Control of crystallinity of GaN grown on sapphire substrate by metalorganic vapor phase epitaxy using in situ X-ray diffraction monitoring method. <i>Journal of Crystal Growth</i> , <b>2014</b> , 401, 367-371	1.6	30
74	Analysis of strain relaxation process in GaInN/GaN heterostructure by in situ X-ray diffraction monitoring during metalorganic vapor-phase epitaxial growth. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 211-214	2.5	17
73	GaN-Based Tunnel Junctions in n <sup>+</sup> pn Light Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JH06	1.4	41
72	Extremely Low-Resistivity and High-Carrier-Concentration Si-Doped Al <sub>0.05</sub> Ga <sub>0.95</sub> N. <i>Applied Physics Express</i> , <b>2013</b> , 6, 121002	2.4	20
71	Nitride-based hetero-field-effect-transistor-type photosensors with extremely high photosensitivity. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 215-217	2.5	3
70	Dislocation density dependence of stimulated emission characteristics in AlGaIn/Al multiquantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 1537-1540		6
69	White light-emitting diode based on fluorescent SiC. <i>Thin Solid Films</i> , <b>2012</b> , 522, 23-25	2.2	21
68	Development of AlN/diamond heterojunction field effect transistors. <i>Diamond and Related Materials</i> , <b>2012</b> , 24, 206-209	3.5	26
67	MOVPE growth of nonpolar a-plane GaN with low oxygen contamination and specular surface on a freestanding GaN substrate. <i>Journal of Crystal Growth</i> , <b>2012</b> , 351, 126-130	1.6	
66	In situ X-ray diffraction monitoring during metalorganic vapor phase epitaxy growth of low-temperature-GaN buffer layer. <i>Journal of Crystal Growth</i> , <b>2012</b> , 361, 1-4	1.6	6
65	Properties of nitride-based photovoltaic cells under concentrated light illumination. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2012</b> , 6, 145-147	2.5	9
64	Injection efficiency in AlGaIn-based UV laser diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2384-2386		13
63	Reduction in threshold current density of 355 nm UV laser diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 1564-1568		10
62	GaN-based solar cells using GaInN/GaN superlattices. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2463-2465		5
61	Fabrication of Nonpolar $\sqrt{3}\sqrt{3}$ -Plane Nitride-Based Solar Cell on $\sqrt{3}\sqrt{3}$ -Plane Sapphire Substrate. <i>Applied Physics Express</i> , <b>2011</b> , 4, 101001	2.4	11
60	Improvement of Light Extraction Efficiency for AlGaIn-Based Deep Ultraviolet Light-Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 122101	1.4	44

59	Improved Efficiency of 255-280 nm AlGaIn-Based Light-Emitting Diodes. <i>Applied Physics Express</i> , <b>2010</b> , 3, 061004	2.4	204
58	Strain Relaxation Mechanisms in AlGaIn Epitaxy on AlN Templates. <i>Applied Physics Express</i> , <b>2010</b> , 3, 111003	1.6	18
57	Realization of Nitride-Based Solar Cell on Freestanding GaN Substrate. <i>Applied Physics Express</i> , <b>2010</b> , 3, 111001	2.4	48
56	Compensation effect of Mg-doped a- and c-plane GaN films grown by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 3131-3135	1.6	24
55	Defects in highly Mg-doped AlN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 1299-1301	1.6	1
54	Realization of extreme light extraction efficiency for moth-eye LEDs on SiC substrate using high-reflection electrode. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 2180-2182		8
53	Activation of Mg-Doped p-Type Al <sub>0.17</sub> Ga <sub>0.83</sub> N in Oxygen Ambient. <i>Japanese Journal of Applied Physics</i> , <b>2009</b> , 48, 101002	1.4	1
52	High-performance UV emitter grown on high-crystalline-quality AlGaIn underlying layer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2009</b> , 206, 1199-1204	1.6	33
51	Activation energy of Mg in a -plane Ga <sub>1-x</sub> In <sub>x</sub> N (0 < x < 1). <i>Physica Status Solidi (B): Basic Research</i> , <b>2009</b> , 246, 1188-1190	1.3	3
50	Relaxation and recovery processes of Al <sub>x</sub> Ga <sub>1-x</sub> N grown on AlN underlying layer. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2850-2852	1.6	11
49	Novel UV devices on high-quality AlGaIn using grooved underlying layer. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2860-2863	1.6	52
48	One-sidewall-seeded epitaxial lateral overgrowth of a-plane GaN by metalorganic vapor-phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2887-2890	1.6	29
47	InGaIn growth with various InN mole fractions on m-plane ZnO substrate by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2929-2932	1.6	2
46	Growth of thick GaInN on grooved (101 $\bar{1}$ 0) GaN/(101 $\bar{1}$ 0) 4H-SiC. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2926-2928	1.6	3
45	AlN and AlGaIn by MOVPE for UV Light Emitting Devices. <i>Materials Science Forum</i> , <b>2008</b> , 590, 175-210	0.4	2
44	High hole concentration in Mg-doped a-plane Ga <sub>1-x</sub> In <sub>x</sub> N (0 < x < 1). <i>Applied Physics Letters</i> , <b>2008</b> , 93, 182108	3.4	11
43	High-efficiency AlGaIn-based UV light-emitting diode on laterally overgrown AlN. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 2326-2329	1.6	50
42	Impact of high-temperature growth by metal-organic vapor phase epitaxy on microstructure of AlN on 6H-SiC substrates. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 2308-2313	1.6	64

41	Realization of low-dislocation-density, smooth surface, and thick GaInN films on m-plane GaN templates. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 3308-3312	1.6	14
40	Control of p-type conduction in a-plane Ga <sub>1-x</sub> In <sub>x</sub> N (0. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 4996-4998	1.6	1
39	Control of stress and crystalline quality in GaInN films used for green emitters. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 4920-4922	1.6	8
38	Epitaxial lateral overgrowth of Al <sub>x</sub> Ga <sub>1-x</sub> N (x>0.2) on sapphire and its application to UV-B-light-emitting devices. <i>Journal of Crystal Growth</i> , <b>2007</b> , 298, 265-267	1.6	18
37	Epitaxial lateral overgrowth of AlN on trench-patterned AlN layers. <i>Journal of Crystal Growth</i> , <b>2007</b> , 298, 257-260	1.6	89
36	Annihilation mechanism of threading dislocations in AlN grown by growth form modification method using V/III ratio. <i>Journal of Crystal Growth</i> , <b>2007</b> , 300, 136-140	1.6	56
35	Dislocations in AlN Epilayers Grown on Sapphire Substrate by High-Temperature Metal-Organic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, 1458-1462	1.4	80
34	Influence of High Temperature in the Growth of Low Dislocation Content AlN Bridge Layers on Patterned 6H-SiC Substrates by Metalorganic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, L307-L310	1.4	39
33	Control of Threshold Voltage of Enhancement-Mode Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN Junction Heterostructure Field-Effect Transistors Using p-GaN Gate Contact. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, 115-118	1.4	26
32	Realization of High-Crystalline-Quality Thick m-Plane GaInN Film on 6H-SiC Substrate by Epitaxial Lateral Overgrowth. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, L948-L950	1.4	12
31	Thermodynamic Aspects of Growth of AlGa <sub>N</sub> by High-Temperature Metal Organic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 2502-2504	1.4	24
30	Anisotropically Biaxial Strain in a-Plane AlGa <sub>N</sub> on GaN Grown on r-Plane Sapphire. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 2509-2513	1.4	19
29	Details of the improvement of crystalline quality of a-plane GaN using one-step lateral growth. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 955, 1		
28	Fabrication of high-performance photodetector based on AlGa <sub>N</sub> /GaN hetero-field-effect transistors with p-GaN gate. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 955, 1		
27	High-Temperature Metal-Organic Vapor Phase Epitaxial Growth of AlN on Sapphire by Multi Transition Growth Mode Method Varying V/III Ratio. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 8639-8643	1.4	79
26	Low-Leakage-Current Enhancement-Mode AlGa <sub>N</sub> /GaN Heterostructure Field-Effect Transistor Using p-Type Gate Contact. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, L319-L321	1.4	28
25	High On/Off Ratio in Enhancement-Mode Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN Junction Heterostructure Field-Effect Transistors with P-Type GaN Gate Contact. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, L1048-L1050	1.4	19
24	X-ray diffraction reciprocal lattice space mapping of a-plane AlGa <sub>N</sub> on GaN. <i>Physica Status Solidi (B): Basic Research</i> , <b>2006</b> , 243, 1524-1528	1.3	10



23	Flat (11bar20) GaN Thin Film on Precisely Offset-Controlled (1bar102) Sapphire Substrate. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 7418-7420	1.4	37
22	Control of p-Type Conduction in a-Plane GaN Grown on Sapphire r-Plane Substrate. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, L1516-L1518	1.4	34
21	Impact of H <sub>2</sub> -Preannealing of the Sapphire Substrate on the Crystallinity of Low-Temperature-Deposited AlN Buffer Layer. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 3913-3917	1.4	5
20	High-Efficiency Nitride-Based Light-Emitting Diodes with Moth-Eye Structure. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 7414-7417	1.4	36
19	Moth-Eye Light-Emitting Diodes. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 831, 19		1
18	Study on the Seeded Growth of AlN Bulk Crystals by Sublimation. <i>Japanese Journal of Applied Physics</i> , <b>2004</b> , 43, 7448-7453	1.4	5
17	350.9 nm UV Laser Diode Grown on Low-Dislocation-Density AlGa <sub>N</sub> . <i>Japanese Journal of Applied Physics</i> , <b>2004</b> , 43, L499-L500	1.4	125
16	Laser diode of 350.9nm wavelength grown on sapphire substrate by MOVPE. <i>Journal of Crystal Growth</i> , <b>2004</b> , 272, 270-273	1.6	26
15	High-quality Al <sub>0.12</sub> Ga <sub>0.88</sub> N film with low dislocation density grown on facet-controlled Al <sub>0.12</sub> Ga <sub>0.88</sub> N by MOVPE. <i>Journal of Crystal Growth</i> , <b>2004</b> , 272, 377-380	1.6	10
14	High-Power UV-Light-Emitting Diode on Sapphire. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 400-403	1.4	25
13	In-plane GaN/AlGa <sub>N</sub> heterostructure fabricated by selective mass transport planar technology. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2002</b> , 93, 139-142	3.1	8
12	Relaxation of misfit-induced stress in nitride-based heterostructures. <i>Journal of Crystal Growth</i> , <b>2002</b> , 237-239, 947-950	1.6	9
11	Low-temperature-deposited AlGa <sub>N</sub> interlayer for improvement of AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructure. <i>Journal of Crystal Growth</i> , <b>2001</b> , 223, 83-91	1.6	75
10	Fracture of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN Heterostructure -- Compositional and Impurity Dependence --. <i>Japanese Journal of Applied Physics</i> , <b>2001</b> , 40, L195-L197	1.4	28
9	Photoresponse and Defect Levels of AlGa <sub>N</sub> /Ga <sub>N</sub> Heterobipolar Phototransistor Grown on Low-Temperature AlN Interlayer. <i>Japanese Journal of Applied Physics</i> , <b>2001</b> , 40, L498-L501	1.4	16
8	Realization of crack-free and high-quality thick Al <sub>x</sub> Ga <sub>1-x</sub> N for UV optoelectronics using low-temperature interlayer. <i>Applied Surface Science</i> , <b>2000</b> , 159-160, 405-413	6.7	50
7	Performance of Ga <sub>N</sub> -Based Semiconductor Laser with Spectral Broadening due to Compositional Inhomogeneity in GaInN Active Layer. <i>Japanese Journal of Applied Physics</i> , <b>2000</b> , 39, 390-392	1.4	4
6	Solar-Blind UV Photodetectors Based on Ga <sub>N</sub> /AlGa <sub>N</sub> p-i-n Photodiodes. <i>Japanese Journal of Applied Physics</i> , <b>2000</b> , 39, L387-L389	1.4	97

5	Microscopic Investigation of Al <sub>0.43</sub> Ga <sub>0.57</sub> N on Sapphire. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L1515-L1518	1.4	29
4	Low-Intensity Ultraviolet Photodetectors Based on AlGa <sub>N</sub> . <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L487-L489	1.4	41
3	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. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, L316-L318	1.4	170
2	Stress and Defect Control in GaN Using Low Temperature Interlayers. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, L1540-L1542	1.4	132
1	Recent development of UV-B laser diodes. <i>Japanese Journal of Applied Physics</i> ,	1.4	3