

# Hiroshi Amano

## List of Publications by Year in descending order

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208  
papers

11,809  
citations

100601

38  
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31191

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g-index

208  
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208  
docs citations

208  
times ranked

6215  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ohmic Contact to p-Type GaN Enabled by Post-Growth Diffusion of Magnesium. IEEE Electron Device Letters, 2022, 43, 150-153.	2.2	12
2	Inhomogeneous Barrier Height Characteristics of n-Type AlInP for Red AlGaInP-Based Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2022, 11, 035007.	0.9	0
3	Sputtered polycrystalline MgZnO/Al reflective electrodes for enhanced light emission in AlGaIn-based homojunction tunnel junction DUV-LED. Applied Physics Express, 2022, 15, 044001.	1.1	7
4	Improved performance of deep ultraviolet AlGaIn-based light-emitting diode by reducing contact resistance of Al-based reflector. Journal of Alloys and Compounds, 2022, 910, 164895.	2.8	2
5	Space Charge Profiles and Carrier Transport Properties in Dopant-Free GaN-Based n Junction Formed by Distributed Polarization Doping. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	1.2	4
6	Impact of heat treatment process on threshold current density in AlGaIn-based deep-ultraviolet laser diodes on AlN substrate. Applied Physics Express, 2021, 14, 051003.	1.1	9
7	Optimization of Ni/Ag-Based Reflectors to Improve the Performance of 273 nm Deep Ultraviolet AlGaIn-Based Light Emitting Diodes. ECS Journal of Solid State Science and Technology, 2021, 10, 045005.	0.9	3
8	Electrical properties and structural defects of p-type GaN layers grown by halide vapor phase epitaxy. Journal of Crystal Growth, 2021, 566-567, 126173.	0.7	9
9	Demonstration of Observation of Dislocations in GaN by Novel Birefringence Method. Physica Status Solidi (B): Basic Research, 2020, 257, 1900553.	0.7	5
10	Suppression of Green Luminescence of Mg-Implanted GaN by Subsequent Implantation of Fluorine Ions at High Temperature. Physica Status Solidi (B): Basic Research, 2020, 257, 1900554.	0.7	12
11	Indium incorporation and optical properties of polar, semipolar and nonpolar InAlN. Semiconductor Science and Technology, 2020, 35, 035004.	1.0	11
12	Improvement of The Light Output of Blue InGaIn-Based Light Emitting Diodes by Using a Buried Stripe-Type-n-Contact and Reflective Bonding Pad. ECS Journal of Solid State Science and Technology, 2020, 9, 015021.	0.9	0
13	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
14	Surface passivation of light emitting diodes: From nano-size to conventional mesa-etched devices. Surfaces and Interfaces, 2020, 21, 100765.	1.5	11
15	Epitaxial Combination of Two-Dimensional Hexagonal Boron Nitride with Single-Crystalline Diamond Substrate. ACS Applied Materials & Interfaces, 2020, 12, 46466-46475.	4.0	13
16	Electrical properties of GaN metal-insulator-semiconductor field-effect transistors with Al <sub>2</sub> O <sub>3</sub> /GaN interfaces formed on vicinal Ga-polar and nonpolar surfaces. Applied Physics Letters, 2020, 117, .	1.5	12
17	Improved Leakage and Output Characteristics of Pixelated LED Array for Headlight application. ECS Journal of Solid State Science and Technology, 2020, 9, 045011.	0.9	1
18	Improving the Leakage Characteristics and Efficiency of GaN-based Micro-Light-Emitting Diode with Optimized Passivation. ECS Journal of Solid State Science and Technology, 2020, 9, 055001.	0.9	35

#	ARTICLE	IF	CITATIONS
19	Halide vapor phase epitaxy of p-type Mg-doped GaN utilizing MgO. Applied Physics Express, 2020, 13, 061007.	1.1	12
20	Pulsed-flow growth of polar, semipolar and nonpolar AlGaIn. Journal of Materials Chemistry C, 2020, 8, 8668-8675.	2.7	9
21	Effects of Ultraviolet Wavelength and Ambient Temperature on Reliability of Silicones in InAlGaIn-Based Light-Emitting-Diode Package. ECS Journal of Solid State Science and Technology, 2020, 9, 035005.	0.9	2
22	Oblique-Angle Deposited SiO <sub>2</sub> /Al Omnidirectional Reflector for Enhancing the Performance of AlGaIn-Based Ultraviolet Light-Emitting Diode. ECS Journal of Solid State Science and Technology, 2020, 9, 026005.	0.9	5
23	Using SiO <sub>2</sub> -Based Distributed Bragg Reflector to Improve the Performance of AlGaInP-Based Red Micro-Light Emitting Diode. ECS Journal of Solid State Science and Technology, 2020, 9, 036002.	0.9	4
24	Demonstration of Observation of Dislocations in GaN by Novel Birefringence Method. Physica Status Solidi (B): Basic Research, 2020, 257, 2070021.	0.7	0
25	Experimental observation of high intrinsic thermal conductivity of AlN. Physical Review Materials, 2020, 4, .	0.9	60
26	Heavy Mg Doping to Form Reliable Rh Reflective Ohmic Contact for 278 nm Deep Ultraviolet AlGaIn-Based Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2020, 9, 065016.	0.9	6
27	Thermodynamic analysis of the gas phase reaction of Mg-doped GaN growth by HVPE using MgO. Japanese Journal of Applied Physics, 2020, 59, 088001.	0.8	5
28	Growth of high-quality GaN by halogen-free vapor phase epitaxy. Applied Physics Express, 2020, 13, 085509.	1.1	6
29	Fabrication of a GaInN/GaInP/GaInAs/Ge four-junction solar cell using the wafer bonding technology. Japanese Journal of Applied Physics, 2019, 58, 072003.	0.8	0
30	A 271.8 nm deep-ultraviolet laser diode for room temperature operation. Applied Physics Express, 2019, 12, 124003.	1.1	217
31	Hole injection mechanism in the quantum wells of blue light emitting diode with V pits for micro-display application. Applied Physics Express, 2019, 12, 102016.	1.1	6
32	Untwinned semipolar (10 $\bar{1}$ ...3) Al <sub>x</sub> Ga <sub>1-x</sub> N layers grown on m-plane sapphire. Semiconductor Science and Technology, 2019, 34, 125012.	1.0	4
33	Via-Hole-Type Flip-Chip Packaging to Improve the Thermal Characteristics and Reliability of Blue Light Emitting Diodes. ECS Journal of Solid State Science and Technology, 2019, 8, Q165-Q170.	0.9	5
34	The emergence and prospects of deep-ultraviolet light-emitting diode technologies. Nature Photonics, 2019, 13, 233-244.	15.6	800
35	Fully Ion Implanted Normally-Off GaN DMOSFETs with ALD-Al <sub>2</sub> O <sub>3</sub> Gate Dielectrics. Materials, 2019, 12, 689.	1.3	21
36	Nonpolar m-plane Al <sub>x</sub> Ga <sub>1-x</sub> N layers grown on m-plane sapphire by MOVPE. Journal of Crystal Growth, 2019, 512, 100-104.		

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37	Aluminium incorporation in polar, semi- and non-polar AlGaIn layers: a comparative study of x-ray diffraction and optical properties. Scientific Reports, 2019, 9, 15802.	1.6	12
38	Electronic structure analysis of core structures of threading dislocations in GaN. , 2019, , .		1
39	Reduction of Dislocations in GaN on Silicon Substrate Using In Situ Etching. Physica Status Solidi (B): Basic Research, 2018, 255, 1700387.	0.7	6
40	<i>m</i> -Plane GaN Schottky Barrier Diodes Fabricated With MOVPE Layer on Several Off-Angle <i>m</i> -Plane GaN Substrates. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700645.	0.8	20
41	Full-duplex light communication with a monolithic multicomponent system. Light: Science and Applications, 2018, 7, 83.	7.7	59
42	MOVPE growth and high-temperature annealing of (101 $\bar{0}$ ) AlN layers on (101 $\bar{0}$ ) sapphire. Journal of Crystal Growth, 2018, 502, 14-18.	0.7	14
43	Reduction of Dislocations in GaN on Silicon Substrate Using In Situ Etching (Phys. Status Solidi B) Tj ETQq1 1 0.784314 rgBT /Overlock High-temperature thermal annealing of nonpolar (1 0<mml:math> Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 487 Td (xmlns:mml="http://www	0.7	1

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55	Improved crystal quality of semipolar (101 $\bar{1}$ 3) GaN on Si(001) substrates using AlN/GaN superlattice interlayer. Journal of Crystal Growth, 2016, 454, 114-120.	0.7	15
56	Deep level study of Mg-doped GaN using deep level transient spectroscopy and minority carrier transient spectroscopy. Physical Review B, 2016, 94, .	1.1	12
57	Emission Characteristics of InGaN/GaN Core-Shell Nanorods Embedded in a 3D Light-Emitting Diode. Nanoscale Research Letters, 2016, 11, 215.	3.1	35
58	Effect of piezoelectric field on carrier dynamics in InGaN-based solar cells. Journal Physics D: Applied Physics, 2016, 49, 025103.	1.3	19
59	Highly elongated vertical GaN nanorod arrays on Si substrates with an AlN seed layer by pulsed-mode metal-organic vapor deposition. CrystEngComm, 2016, 18, 1505-1514.	1.3	33
60	Growth of GaN on sapphire via low-temperature deposited buffer layer and realization of p-type GaN by Mg doping followed by low-energy electron beam irradiation (Nobel Lecture). Annalen Der Physik, 2015, 527, 327-333.	0.9	16
61	Bildung von GaN-Schichten auf Saphir durch Niedertemperatur-Pufferschichten und Erzeugung von p-GaN durch Magnesium-Dotierung und Elektronenbeschuss (Nobel-Aufsatz). Angewandte Chemie, 2015, 127, 7874-7879.	1.6	1
62	Growth of GaN Layers on Sapphire by Low-Temperature-Deposited Buffer Layers and Realization of p-type GaN by Magesium Doping and Electron Beam Irradiation (Nobel Lecture). Angewandte Chemie - International Edition, 2015, 54, 7764-7769.	7.2	37
63	Polarization dilution in a Ga-polar UV-LED to reduce the influence of polarization charges. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 920-924.	0.8	5
64	Electrical characteristics of <i>a</i> -plane low-Mg-doped p-GaN Schottky contacts. Physica Status Solidi (B): Basic Research, 2015, 252, 1024-1030.	0.7	3
65	Nobel Lecture: Growth of GaN on sapphire via low-temperature deposited buffer layer and realization of $p$ -type GaN by Mg doping followed by low-energy electron beam irradiation. Reviews of Modern Physics, 2015, 87, 1133-1138.	16.4	90
66	Growth of GaN on Sapphire via Low-Temperature Deposited Buffer Layer and Realization of p-Type GaN by Mg Doping Followed by Low-Energy Electron Beam Irradiation. International Journal of Modern Physics B, 2015, 29, 1530015.	1.0	2
67	Excitation density dependence of radiative and nonradiative recombination lifetimes in InGaN/GaN multiple quantum wells. Physica Status Solidi (B): Basic Research, 2015, 252, 940-945.	0.7	16
68	Optically pumped lasing properties of $(1\bar{1}01)$ InGaN/GaN stripe multiquantum wells with ridge cavity structure on patterned (001) Si substrates. Applied Physics Express, 2015, 8, 022702.	1.1	28
69	Dynamic properties of excitons in ZnO/AlGaIn/GaN hybrid nanostructures. Scientific Reports, 2015, 5, 7889.	1.6	6
70	Highly ordered catalyst-free InGaIn/GaN core-shell architecture arrays with expanded active area region. Nano Energy, 2015, 11, 294-303.	8.2	47
71	MOCVD of Nitrides. , 2015, , 683-704.		4
72	Growth of InGaIn/GaN multiple quantum wells on size-controllable nanopyramid arrays. Japanese Journal of Applied Physics, 2014, 53, 030306.	0.8	7

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73	In situ X-ray investigation of changing barrier growth temperatures on InGaN single quantum wells in metal-organic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 2014, 115, 094906.	1.1	9
74	Morphology development of GaN nanowires using a pulsed-mode MOCVD growth technique. <i>CrystEngComm</i> , 2014, 16, 2273-2282.	1.3	82
75	Multijunction GaInN-based solar cells using a tunnel junction. <i>Applied Physics Express</i> , 2014, 7, 034104.	1.1	22
76	Enhancement of light output power on GaN-based light-emitting diodes using two-direction stripe-patterned sapphire substrate. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 722-725.	0.8	4
77	Improvement of light extraction efficiency of 350-nm emission UV light-emitting diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 836-839.	0.8	5
78	X-ray investigations of GaInN single quantum wells grown by atomic layer epitaxy and metalorganic vapor phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 393-396.	0.8	0
79	Introduction Part A. Progress and Prospect of Growth of Wide-Band-Gap III-Nitrides. <i>Topics in Applied Physics</i> , 2013, , 1-9.	0.4	0
80	Effects of exciton localization on internal quantum efficiency of InGaN nanowires. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	38
81	Characteristics of a-plane GaN films grown on optimized silicon-dioxide-patterned r-plane sapphire substrates. <i>Thin Solid Films</i> , 2013, 546, 108-113.	0.8	7
82	Structural evolution of AlN buffer and crystal quality of GaN films on a- and c-sapphire grown by metalorganic vapor phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 369-372.	0.8	5
83	Effects of Nano- and Microscale SiO <sub>2</sub> Masks on the Growth of a-Plane GaN Layers on r-Plane Sapphire. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JC04.	0.8	1
84	Thick InGaN Growth by Metal Organic Vapor Phase Epitaxy with Sputtered InGaN Buffer Layer. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JB11.	0.8	12
85	Combination of Indium-Tin Oxide and SiO <sub>2</sub> /AlN Dielectric Multilayer Reflective Electrodes for Ultraviolet-Light-Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JC07.	0.8	11
86	Microstructure Analysis of AlGaIn on AlN Underlying Layers with Different Threading Dislocation Densities. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JE22.	0.8	3
87	Analysis of Broken Symmetry in Convergent-Beam Electron Diffraction along $112\bar{1},0$ and $11\bar{1},00$ Zone-Axes of AlN for Polarity Determination. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 08JE15.	0.8	5
88	Dislocation density dependence of stimulated emission characteristics in AlGaIn/Al multiquantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1537-1540.	0.8	6
89	K16200 Future Prospect of Nitride Semiconductor Devices. <i>The Proceedings of Mechanical Engineering Congress Japan</i> , 2013, 2013, _K16200-1_-_K16200-3_.	0.0	0
90	Thermoelectric Power Measurement of Catalyst-free Si-doped GaAs Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1439, 83-87.	0.1	1

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91	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.	0.7	0
92	Laser lift-off of AlN/sapphire for UV light-emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 753-756.	0.8	34
93	Fabrication of AlInN/AlN/GaN/GaN heterostructure field-effect transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 942-944.	0.8	1
94	Growth of GaN and AlGaN on (100) $\text{Ga}_2\text{O}_3$ substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 519-522.	0.8	30
95	Properties of nitride-based photovoltaic cells under concentrated light illumination. Physica Status Solidi - Rapid Research Letters, 2012, 6, 145-147.	1.2	12
96	Demonstration of diamond field effect transistors by AlN/diamond heterostructure. Physica Status Solidi - Rapid Research Letters, 2011, 5, 125-127.	1.2	39
97	Growth of AlGaN/GaN heterostructure on vicinal $m$ -plane free-standing GaN substrates prepared by the Na flux method. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1191-1194.	0.8	4
98	Low leakage current in AlGaN/GaN HFETs with preflow of Mg source before growth of u-GaN buffer layer. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1607-1610.	0.8	2
99	Development of high efficiency 255-355 nm AlGaIn-based light-emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1594-1596.	0.8	98
100	AlGaIn/GaN heterostructure field-effect transistor. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1614-1616.	0.8	13
101	Frontispiece: Development of high efficiency 255-355 nm AlGaIn-based light-emitting diodes (Phys. Status Solidi C) Tj ETQg 1 0.784	0.8	10
102	Internal quantum efficiency and internal loss of ultraviolet laser diodes on the low dislocation density AlGaIn underlying layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 464-466.	0.8	4
103	Achieving high-growth-rate in GaN homoepitaxy using high-density nitrogen radical source. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2089-2091.	0.8	12
104	Injection efficiency in AlGaIn-based UV laser diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2384-2386.	0.8	14
105	Drain bias stress and memory effects in AlGaIn/GaN heterostructure field-effect transistors with p-GaN gate. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2424-2426.	0.8	0
106	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.	0.8	13
107	Evidence for moving of threading dislocations during the VPE growth in GaN thin layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1487-1490.	0.8	5
108	Optimization of initial MOVPE growth of non-polar and a-plane GaN on Na flux grown LPE-GaN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2095-2097.	0.8	3

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109	Transparent electrode for UV light-emitting-diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2375-2377.	0.8	7
110	Fabrication of Nonpolar $a$ -Plane Nitride-Based Solar Cell on $r$ -Plane Sapphire Substrate. <i>Applied Physics Express</i> , 2011, 4, 101001.	1.1	12
111	Internal Quantum Efficiency of Whole-Composition-Range AlGa <sub>N</sub> Multiquantum Wells. <i>Applied Physics Express</i> , 2011, 4, 052101.	1.1	220
112	Freestanding Highly Crystalline Single Crystal AlN Substrates Grown by a Novel Closed Sublimation Method. <i>Applied Physics Express</i> , 2011, 4, 045503.	1.1	6
113	Improvement of Light Extraction Efficiency for AlGa <sub>N</sub> -Based Deep Ultraviolet Light-Emitting Diodes. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 122101.	0.8	27
114	Compensation effect of Mg-doped $a$ - and $c$ -plane GaN films grown by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2010, 312, 3131-3135.	0.7	30
115	Defects in highly Mg-doped AlN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1299-1301.	0.8	1
116	Improved Efficiency of 255°280 nm AlGa <sub>N</sub> -Based Light-Emitting Diodes. <i>Applied Physics Express</i> , 2010, 3, 061004.	1.1	233
117	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> , 2009, 48, 101002.	0.8	1
118	Strong Emission from GaInN/GaN Multiple Quantum Wells on High-Crystalline-Quality Thick-Plane GaInN Underlying Layer on Grooved GaN. <i>Applied Physics Express</i> , 2009, 2, 061004.	1.1	11
119	High-performance UV emitter grown on high-crystalline-quality AlGa <sub>N</sub> underlying layer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 1199-1204.	0.8	41
120	Activation energy of Mg in $a$ -plane Ga <sub>1-x</sub> In <sub>x</sub> N (0 <math>x</math> <math>\leq 1</math>). <i>Tj ETQq0.0.0 rgBT<sub>3</sub>Overlock</i>	0.7	3
121	One-sidewall-seeded epitaxial lateral overgrowth of $a$ -plane GaN by metalorganic vapor-phase epitaxy. <i>Journal of Crystal Growth</i> , 2009, 311, 2887-2890.	0.7	31
122	InGa <sub>N</sub> growth with various InN mole fractions on $m$ -plane ZnO substrate by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2009, 311, 2929-2932.	0.7	2
123	Growth of thick GaInN on grooved (101°1°) GaN/(101°2°) 4H-SiC. <i>Journal of Crystal Growth</i> , 2009, 311, 2926-2928.	0.7	3
124	Temperature dependence of excitonic transitions in $a$ -plane AlN epitaxial layers. <i>Journal of Applied Physics</i> , 2009, 105, 083533.	1.1	17
125	Dynamical study of the radiative recombination processes in GaN/AlGa <sub>N</sub> QWs. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 316-318.	1.1	0
126	Sidewall epitaxial lateral overgrowth of nonpolar $a$ -plane GaN by metalorganic vapor phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1575-1578.	0.8	16



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127	Improvement in crystalline quality of thick GaInN on m-plane 6H-SiC substrates using sidewall epitaxial lateral overgrowth. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 3045-3047.	0.8	2
128	Realization of low-dislocation-density, smooth surface, and thick GaInN films on m-plane GaN templates. <i>Journal of Crystal Growth</i> , 2008, 310, 3308-3312.	0.7	15
129	Control of p-type conduction in a-plane Ga <sub>1-x</sub> In <sub>x</sub> N (0<x<0.10) grown on r-plane sapphire substrate by metalorganic vapor-phase epitaxy. <i>Journal of Crystal Growth</i> , 2008, 310, 4996-4998.	0.7	1
130	Control of stress and crystalline quality in GaInN films used for green emitters. <i>Journal of Crystal Growth</i> , 2008, 310, 4920-4922.	0.7	8
131	AlN and AlGaIn by MOVPE for UV Light Emitting Devices. <i>Materials Science Forum</i> , 2008, 590, 175-210.	0.3	2
132	High hole concentration in Mg-doped a-plane Ga <sub>1-x</sub> In <sub>x</sub> N (x<0.30) grown on r-plane sapphire substrate by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	14
133	Photoluminescence from highly excited AlN epitaxial layers. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	31
134	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> , 2007, 46, L948.	0.8	14
135	Photonic Devices. , 2007, , 97-230.		1
136	Fundamental Properties of Wide Bandgap Semiconductors. , 2007, , 25-96.		0
137	Crystallographic polarity and crystallinity characterization of polar and nonpolar GaN epitaxial films by X-ray diffraction analyses. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 1775-1779.	0.7	2
138	Preface to Special Issue on Market Explosion of 405 nm Emission Semiconductor Laser of GaN System. <i>The Review of Laser Engineering</i> , 2007, 35, 64-64.	0.0	0
139	Electroluminescent Diodes and Laser Diodes. , 2006, , 529-546.		0
140	Effects of Si doping position on the emission energy and recombination dynamics of GaN/AlGaIn multiple quantum wells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 149-153.	0.8	1
141	X-ray diffraction reciprocal lattice space mapping of a-plane AlGaIn on GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1524-1528.	0.7	12
142	Origin of defect-insensitive emission probability in In-containing (Al,In,Ga)N alloy semiconductors. <i>Nature Materials</i> , 2006, 5, 810-816.	13.3	625
143	Details of the improvement of crystalline quality of a-plane GaN using one-step lateral growth. <i>Materials Research Society Symposia Proceedings</i> , 2006, 955, 1.	0.1	0
144	Optical Properties of Undoped, n-Doped and p-Doped GaN/AlN Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2006, 955, 1.	0.1	1

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145	Fabrication of high-performance photodetector based on AlGaIn/GaN hetero-field-effect transistors with p-GaN gate. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	0
146	The Evolution of Nitride Semiconductors. , 2005, , 23-38.		2
147	Characterization of a-plane AlGaIn/GaN heterostructure grown on r-plane sapphire substrate. Materials Research Society Symposia Proceedings, 2005, 892, 121.	0.1	0
148	Highly p-Type a-GaN Grown on r-Plane Sapphire Substrate. Materials Research Society Symposia Proceedings, 2005, 892, 381.	0.1	0
149	High-Power Operation of Pure Blue GaN-Based Semiconductor Laser. The Review of Laser Engineering, 2005, 33, 651-654.	0.0	0
150	Nitride-Based Light-Emitting Diodes Grown on Particular Substrates: ZrB <sub>2</sub> (3038) 4H-SiC and r-faced Sapphire.. Materials Research Society Symposia Proceedings, 2004, 831, 91.	0.1	0
151	Moth-Eye Light-Emitting Diodes. Materials Research Society Symposia Proceedings, 2004, 831, 19.	0.1	1
152	Group III nitrides grown on 4H-SiC (30<ovl>3</ovl>8) substrate by metal-organic vapor phase epitaxy. Materials Research Society Symposia Proceedings, 2004, 831, 165.	0.1	1
153	Impact of H <sub>2</sub> -preannealing of the Sapphire Substrate on the Crystallization of Low-Temperature-Deposited AlN Buffer Layer. Materials Research Society Symposia Proceedings, 2004, 831, 642.	0.1	0
154	Laser diode of 350.9nm wavelength grown on sapphire substrate by MOVPE. Journal of Crystal Growth, 2004, 272, 270-273.	0.7	33
155	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. Journal of Crystal Growth, 2004, 272, 377-380.	0.7	11
156	High Efficiency UV Light Emitter Using High-Crystalline-Quality AlGaIn. The Review of Laser Engineering, 2004, 32, 387-391.	0.0	0
157	Growth of GaN on ZrB <sub>2</sub> substrate by metal-organic vapor phase epitaxy. Applied Surface Science, 2003, 216, 502-507.	3.1	30
158	Mechanism of H <sub>2</sub> pre-annealing on the growth of GaN on sapphire by MOVPE. Applied Surface Science, 2003, 216, 585-589.	3.1	17
159	Electrical properties of strained AlN/GaN superlattices on GaN grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2002, 80, 802-804.	1.5	17
160	Low-dislocation-density Al <sub>x</sub> Ga <sub>1-x</sub> N single crystals grown on grooved substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 197-201.	1.7	3
161	Critical issues in Al <sub>x</sub> Ga <sub>1-x</sub> N growth. Optical Materials, 2002, 19, 219-222.	1.7	26
162	Relaxation of misfit-induced stress in nitride-based heterostructures. Journal of Crystal Growth, 2002, 237-239, 947-950.	0.7	9

#	ARTICLE	IF	CITATIONS
163	Suppression of phase separation of AlGaIn during lateral growth and fabrication of high-efficiency UV-LED on optimized AlGaIn. Journal of Crystal Growth, 2002, 237-239, 951-955.	0.7	48
164	MOVPE growth and characterization of Al <sub>1-x</sub> In <sub>x</sub> N/GaN multiple layers. Journal of Crystal Growth, 2002, 237-239, 968-971.	0.7	1
165	Structural analysis of Si-doped AlGaIn/GaN multi-quantum wells. Journal of Crystal Growth, 2002, 237-239, 1129-1132.	0.7	22
166	Reduction of threading dislocation density in Al <sub>x</sub> Ga <sub>1-x</sub> N grown on periodically grooved substrates. Journal of Crystal Growth, 2002, 237-239, 1065-1069.	0.7	10
167	Control of strain in GaN by a combination of H <sub>2</sub> and N <sub>2</sub> carrier gases. Journal of Applied Physics, 2001, 89, 7820-7824.	1.1	19
168	Metalorganic vapor phase epitaxy growth of crack-free AlN on GaN and its application to high-mobility AlN/GaN superlattices. Applied Physics Letters, 2001, 79, 3062-3064.	1.5	48
169	Control of strain in GaN using an In doping-induced hardening effect. Physical Review B, 2001, 64, .	1.1	30
170	Crystalline and Electrical Properties of AlInN/GaN and AlN/GaN superlattices on GaN Grown by Metalorganic Vapor Phase Epitaxy. Materials Research Society Symposia Proceedings, 2001, 693, 786.	0.1	0
171	Structural characterization of Al <sub>1-x</sub> In <sub>x</sub> N lattice-matched to GaN. Journal of Crystal Growth, 2000, 209, 419-423.	0.7	8
172	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. Applied Surface Science, 2000, 159-160, 405-413.	3.1	56
173	Strain relief by In-doping and its effect on the surface and on the interface structures in (Al)GaIn on sapphire grown by metalorganic vapor-phase epitaxy. Applied Surface Science, 2000, 159-160, 414-420.	3.1	14
174	Anomalous features in the optical properties of Al <sub>1-x</sub> In <sub>x</sub> N on GaN grown by metal organic vapor phase epitaxy. Applied Physics Letters, 2000, 76, 876-878.	1.5	108
175	Nitride Semiconductor Surfaces. Characterization of Initial Growth Stage of GaInN Multilayered Structure by X-ray CTR Scattering and X-ray Reflectivity Method.. Hyomen Kagaku, 2000, 21, 162-168.	0.0	2
176	Piezoelectric Stark-like Ladder in GaN/GaInN/GaN Heterostructures. Japanese Journal of Applied Physics, 1999, 38, L163-L165.	0.8	28
177	Structural properties of InN on GaN grown by metalorganic vapor-phase epitaxy. Journal of Applied Physics, 1999, 85, 7682-7688.	1.1	108
178	Strain relief and its effect on the properties of GaN using isoelectronic In doping grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 1999, 75, 4106-4108.	1.5	48
179	Mg acceptors in GaN: Dependence of the g-anisotropy on the doping concentration. Physica B: Condensed Matter, 1999, 273-274, 43-45.	1.3	11
180	Stimulated emission with the longest wavelength in the blue region from GaInN/GaN multi-quantum well structures. Journal of Crystal Growth, 1998, 189-190, 831-836.	0.7	25

#	ARTICLE	IF	CITATIONS
181	Thermal ionization energy of Si and Mg in AlGa <sub>N</sub> . Journal of Crystal Growth, 1998, 189-190, 528-531.	0.7	125
182	Characterization of the crystalline quality on GaN on sapphire and ternary alloys. Electronics and Communications in Japan, 1998, 81, 48-54.	0.2	2
183	Determination of piezoelectric fields in strained GaInN quantum wells using the quantum-confined Stark effect. Applied Physics Letters, 1998, 73, 1691-1693.	1.5	596
184	Piezoelectric Quantization in GaInN thin Films and Multiple Quantum Well Structures. Materials Research Society Symposia Proceedings, 1998, 512, 181.	0.1	7
185	Crystal Growth and Conductivity Control of Group III Nitride Semiconductors and Their Application to Short Wavelength Light Emitters. Japanese Journal of Applied Physics, 1997, 36, 5393-5408.	0.8	620
186	Chapter 7 Organometallic Vapor-Phase Epitaxy of Gallium Nitride for High-Brightness Blue Light-Emitting Diodes. Semiconductors and Semimetals, 1997, , 357-390.	0.4	11
187	Optical Properties of Strained AlGa <sub>N</sub> and GaInN on GaN. Japanese Journal of Applied Physics, 1997, 36, L177-L179.	0.8	313
188	Quantum-Confined Stark Effect due to Piezoelectric Fields in GaInN Strained Quantum Wells. Japanese Journal of Applied Physics, 1997, 36, L382-L385.	0.8	1,129
189	Melt-back etching of GaN. Solid-State Electronics, 1997, 41, 295-298.	0.8	13
190	Progress and prospect of group-III nitride semiconductors. Journal of Crystal Growth, 1997, 175-176, 29-36.	0.7	28
191	75 Å... GaN channel modulation doped field effect transistors. Applied Physics Letters, 1996, 68, 2849-2851.	1.5	68
192	Fabrication and Properties of AlGa <sub>N</sub> /GaInN Double Heterostructure Grown on 6H-SiC(0001)Si. Materials Research Society Symposia Proceedings, 1995, 395, 869.	0.1	2
193	Stimulated Emission by Current Injection from an AlGa <sub>N</sub> /Ga <sub>N</sub> /GaInN Quantum Well Device. Japanese Journal of Applied Physics, 1995, 34, L1517.	0.8	164
194	Tunable Solid-state Laser. Present and Future Prospects of Semiconductor Short Wavelength Light Emitters.. The Review of Laser Engineering, 1995, 23, 874-879.	0.0	0
195	Widegap Columnar III Nitride Semiconductors for UV/Blue Light Emitting Devices. Journal of the Electrochemical Society, 1994, 141, 2266-2271.	1.3	141
196	MOVPE growth of GaN on a misoriented sapphire substrate. Journal of Crystal Growth, 1991, 107, 509-512.	0.7	53
197	Cross-sectional TEM study of microstructures in MOVPE GaN films grown on $\hat{1}\pm$ -Al <sub>2</sub> O <sub>3</sub> with a buffer layer of AlN. Journal of Crystal Growth, 1991, 115, 381-387.	0.7	45
198	Growth of Si-doped Al <sub>x</sub> Ga <sub>1-x</sub> N on (0001) sapphire substrate by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 1991, 115, 648-651.	0.7	75

#	ARTICLE	IF	CITATIONS
199	Stimulated emission in MOVPE-grown GaN film. Journal of Luminescence, 1991, 48-49, 889-892.	1.5	16
200	Growth of single crystalline GaN film on Si substrate using 3C-SiC as an intermediate layer. Journal of Crystal Growth, 1991, 115, 634-638.	0.7	188
201	Photoluminescence of Mg-doped p-type GaN and electroluminescence of GaN p-n junction LED. Journal of Luminescence, 1991, 48-49, 666-670.	1.5	253
202	Growth of single crystal GaN substrate using hydride vapor phase epitaxy. Journal of Crystal Growth, 1990, 99, 381-384.	0.7	176
203	Preparation of $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{GaN}$ heterostructure by MOVPE. Journal of Crystal Growth, 1990, 104, 533-538.	0.7	93
204	Cathodoluminescence of MOVPE-grown GaN layer on $\hat{\pm}\text{-Al}_2\text{O}_3$ . Journal of Crystal Growth, 1990, 99, 375-380.	0.7	12
205	Effects of an buffer layer on crystallographic structure and on electrical and optical properties of GaN and $\text{Ga}_{1-x}\text{Al}_x\text{N}$ ( $0 < x \leq 0.4$ ) films grown on sapphire substrate by MOVPE. Journal of Crystal Growth, 1989, 98, 209-219.	0.7	689
206	P-Type Conduction in Mg-Doped GaN Treated with Low-Energy Electron Beam Irradiation (LEEBI). Japanese Journal of Applied Physics, 1989, 28, L2112-L2114.	0.8	1,754
207	Effects of the buffer layer in metalorganic vapour phase epitaxy of GaN on sapphire substrate. Thin Solid Films, 1988, 163, 415-420.	0.8	263
208	Misfit Strain Relaxation by Stacking Fault Generation in InGaN Quantum Wells Grown on $\text{c}$ -Plane GaN. Applied Physics Express, 0, 2, 041002.	1.1	64