Masataka Higashiwaki

List of Publications by Year
in descending order

177 papers	13,873 citations	25034 57 h-index	20961 115 g-index
184 all docs	184 docs citations	184 times ranked	5181 citing authors

#	Article	IF	Citations
1	Fabrication of Î²-Ga₂O₃/Si heterointerface and characterization of interfacial structures for high-power device applications. Japanese Journal of Applied Physics, 2022, 61, SF1001.	1.5	9
2	Î²-Ga2O3 material properties, growth technologies, and devices: a review. AAPPS Bulletin, 2022, 32, 1.	6.1	66
3	Î²-Gallium oxide power electronics. APL Materials, 2022, 10, .	5.1	184
4	Fabrication of <i>n</i>-Si/<i>n</i>-Ga2O3 heterojunctions by surface-activated bonding and their electrical properties. Journal of Applied Physics, 2022, 131, .	2.5	4
5	A trapping tolerant drain current based temperature measurement of <i>Î²</i>-Ga₂O₃ MOSFETs. Applied Physics Letters, 2022, 120, 073502.	3.3	4
6	Vertical Î²-Ga₂O₃ Schottky barrier diodes with trench staircase field plate. Applied Physics Express, 2022, 15, 054001.	2.4	29
7	Deep levels and conduction processes in nitrogen-implanted Ga2O3 Schottky barrier diodes. , 2022, , .		0
8	Effect of substrate orientation on homoepitaxial growth of <i>Î²</i> -Ga2O3 by halide vapor phase epitaxy. Applied Physics Letters, 2022, 120, .	3.3	13
9	Wide bandgap semiconductor materials and devices. Journal of Applied Physics, 2022, 131, .	2.5	12
10	Gallium Oxide Power Device Technologies. , 2022, , .		0
11	Fundamental technologies for gallium oxide transistors. Semiconductors and Semimetals, 2021, 107, 1-22.	0.7	3
12	Aperture-limited conduction and its possible mechanism in ion-implanted current aperture vertical <i>Î²</i> -Ga2O3 MOSFETs. Applied Physics Letters, 2021, 118, .	3.3	19
13	Effect of (AlGa)₂O₃ back barrier on device characteristics of Î²-Ga₂O₃ metal-oxide-semiconductor field-effect transistors with Si-implanted channel. Japanese Journal of Applied Physics, 2021, 60, 030906.	1.5	11
14	Effect of thermal annealing on photoexcited carriers in nitrogen-ion-implanted <i>Î²</i>-Ga2O3 crystals detected by photocurrent measurement. AIP Advances, 2021, 11, .	1.3	3
15	Ultrawide bandgap semiconductors. Applied Physics Letters, 2021, 118, .	3.3	38
16	Selective observation of transverse optical phonons of Au modes to evaluate free charge carrier parameters in Î²-Ga2O3 substrate and homoepitaxial film. Applied Physics Letters, 2021, 118, 252101.	3.3	0
17	Terahertz emission spectroscopy of GaN-based heterostructures. Journal of Applied Physics, 2021, 129, 245702.	2.5	4
18	Î²â€Gallium Oxide Devices: Progress and Outlook. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100357.	2.4	25

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19	Fabrication of Ga₂O₃/Si direct bonding interface for high power device applications. , 2021, , .		0
20	Impact of thermal annealing on deep levels in nitrogen-implanted Î²-Ga2O3 Schottky barrier diodes. Journal of Applied Physics, 2021, 130, .	2.5	3
21	Enhancement-Mode eta -Ga₂O₃ Current Aperture Vertical MOSFETs With N-Ion-Implanted Blocker. IEEE Electron Device Letters, 2020, 41, 296-299.	3.9	65
22	Reduction in leakage current through interface between Ga2O3 epitaxial layer and substrate by ion implantation doping of compensating impurities. Applied Physics Letters, 2020, 117, .	3.3	13
23	Vertical <i>Î²</i>-Gaâ‚‚Oâ‚ƒ Power Transistors: A Review. IEEE Transactions on Electron Devices, 2020, 67, 3925-3937.	3.0	91
24	Characterization of trap states in buried nitrogen-implanted <i>Î²</i>-Ga2O3. Applied Physics Letters, 2020, 117, .	3.3	7
25	Vertical Gallium Oxide Transistors with Current Aperture Formed Using Nitrogen-Ion Implantation Process. , 2020, , .		2
26	Comment on â€œCharacteristics of Multi-photon Absorption in a <i>Î²</i>-Ga₂O₃ Single Crystalâ€•[J. Phys. Soc. Jpn. 88, 113701 (2019)]. Journal of the Physical Society of Japan, 2020, 89, 036001.	1.6	0
27	Carrier capture kinetics, deep levels, and isolation properties of <i>Î²</i> -Ga2O3 Schottky-barrier diodes damaged by nitrogen implantation. Applied Physics Letters, 2020, 117, .	3.3	20
28	Delay-time analysis in radio-frequency <i>Î²</i> -Ga2O3 field effect transistors. Applied Physics Letters, 2020, 117, .	3.3	29
29	Field-Effect Transistors 2. Springer Series in Materials Science, 2020, , 583-607.	0.6	0
30	Phonon Properties. Springer Series in Materials Science, 2020, , 501-534.	0.6	1
31	Charge trapping and degradation of Ga2O3 isolation structures for power electronics. , 2020, , .		0
32	Vertical Ga₂O₃ Schottky Barrier Diodes With Guard Ring Formed by Nitrogen-Ion Implantation. IEEE Electron Device Letters, 2019, 40, 1487-1490.	3.9	126
33	Stability and degradation of isolation and surface in Ga2O3 devices. Microelectronics Reliability, 2019, 100-101, 113453.	1.7	6
34	Single-crystal-Ga2O3/polycrystalline-SiC bonded substrate with low thermal and electrical resistances at the heterointerface. Applied Physics Letters, 2019, 114, .	3.3	43
35	Normally-Off Ga₂O₃MOSFETs With Unintentionally Nitrogen-Doped Channel Layer Grown by Plasma-Assisted Molecular Beam Epitaxy. IEEE Electron Device Letters, 2019, 40, 1064-1067.	3.9	50
36	Wide bandgap oxides. APL Materials, 2019, 7, .	5.1	2

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37	Gallium Oxide Field Effect Transistors â€” Establishing New Frontiers of Power Switching and Radiation-Hard Electronics. International Journal of High Speed Electronics and Systems, 2019, 28, 1940002.	0.7	9
38	Invited: Process and Characterization of Vertical Ga2O3 Transistors. , 2019, , .		0
39	Enhancement-Mode Current Aperture Vertical Ga₂O₃ MOSFETs. , 2019, , .		2
40	Observation of Electroreflectance Spectra of eta-Ga2O3 Single Crystal. , 2019, , .		0
41	Electroreflectance study on optical anisotropy in <i>Î²</i>-Ga2O3. Applied Physics Letters, 2019, 115, .	3.3	9
42	Raman Thermography of Peak Channel Temperature in <inline-formula> <tex-math notation="LaTeX">eta </tex-math> </inline-formula>-Ga²O³ MOSFETs. IEEE Electron Device Letters, 2019, 40, 189-192.	3.9	54
43	Current Aperture Vertical <inline-formula> <tex-math notation="LaTeX">eta </tex-math> </inline-formula>-Ga₂O₃ MOSFETs Fabricated by N- and Si-Ion Implantation Doping. IEEE Electron Device Letters, 2019, 40, 431-434.	3.9	135
44	Vertical Ga₂O₃ Schottky Barrier Diodes with Guard Ring Formed by Nitrogen-Ion Implantation. , 2019, , .		3
45	Comparison of O2 and H2O as oxygen source for homoepitaxial growth of Î²-Ga2O3 layers by halide vapor phase epitaxy. Journal of Crystal Growth, 2018, 492, 39-44.	1.5	23
46	Relation Between Electrical and Optical Properties of pâ€Type NiO Films. Physica Status Solidi (B): Basic Research, 2018, 255, 1700311.	1.5	13
47	Guest Editorial: The dawn of gallium oxide microelectronics. Applied Physics Letters, 2018, 112, .	3.3	480
48	Radiation hardness of <i>Î²</i>-Ga2O3 metal-oxide-semiconductor field-effect transistors against gamma-ray irradiation. Applied Physics Letters, 2018, 112, .	3.3	75
49	Electron effective mass in Sn-doped monoclinic single crystal Î²-gallium oxide determined by mid-infrared optical Hall effect. Applied Physics Letters, 2018, 112, .	3.3	43
50	Ultrawideâ€Bandgap Semiconductors: Research Opportunities and Challenges. Advanced Electronic Materials, 2018, 4, 1600501.	5.1	839
51	Halide vapor phase epitaxy of Si doped Î²-Ga2O3 and its electrical properties. Thin Solid Films, 2018, 666, 182-184.	1.8	146
52	Acceptor doping of <i>Î²</i>-Ga2O3 by Mg and N ion implantations. Applied Physics Letters, 2018, 113, .	3.3	129
53	Recent Advances in Ga2O3 MOSFET Technologies. , 2018, , .		1
54	All-ion-implanted planar-gate current aperture vertical Ga₂O₃ MOSFETs with Mg-doped blocking layer. Applied Physics Express, 2018, 11, 064102.	2.4	73

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55	Modeling and interpretation of UV and blue luminescence intensity in <i>Î²</i>-Ga2O3 by silicon and nitrogen doping. Journal of Applied Physics, 2018, 124, .	2.5	83
56	Pulsed Large Signal RF Performance of Field-Plated Ga₂O₃ MOSFETs. IEEE Electron Device Letters, 2018, 39, 1572-1575.	3.9	55
57	Optical signatures of deep level defects in Ga2O3. Applied Physics Letters, 2018, 112, .	3.3	113
58	Latest progress in gallium-oxide electronic devices. , 2018, , .		0
59	Smart Power Devices and ICs Using GaAs and Wide and Extreme Bandgap Semiconductors. IEEE Transactions on Electron Devices, 2017, 64, 856-873.	3.0	106
60	First Demonstration of Ga₂O₃Trench MOS-Type Schottky Barrier Diodes. IEEE Electron Device Letters, 2017, 38, 783-785.	3.9	166
61	Enhancement-mode Ga₂O₃ MOSFETs with Si-ion-implanted source and drain. Applied Physics Express, 2017, 10, 041101.	2.4	144
62	1-kV vertical Ga2O3 field-plated Schottky barrier diodes. Applied Physics Letters, 2017, 110, .	3.3	421
63	State-of-the-art technologies of gallium oxide power devices. Journal Physics D: Applied Physics, 2017, 50, 333002.	2.8	212
64	Radiation hardness of Ga<inf>2</inf>O<inf>3</inf> MOSFETs against gamma-ray irradiation. , 2017, , .		1
65	First demonstration of vertical Ga₂O₃ MOSFET: Planar structure with a current aperture. , 2017, , .		13
66	Band-to-band transitions, selection rules, effective mass, and excitonic contributions in monoclinic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î²</mml:mi><mml:mtext>â^’</mml:mtext><mml:msub>< mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2017, 96, .	3.2	117
67	Demonstration of Ga<inf>2</inf>O<inf>3</inf> trench MOS-type Schottky barrier diodes. , 2017, , .		2
68	Epitaxially grown crystalline Al₂O₃ interlayer on Î²-Ga₂O₃(010) and its suppressed interface state density. Japanese Journal of Applied Physics, 2016, 55, 1202B5.	1.5	39
69	Large conduction band offset at SiO₂ /Î²-Ga₂ O₃ heterojunction determined by X-ray photoelectron spectroscopy. Physica Status Solidi (B): Basic Research, 2016, 253, 623-625.	1.5	57
70	Theoretical and experimental investigation of optical absorption anisotropy in <i>Î²</i>-Ga₂O₃. Journal of Physics Condensed Matter, 2016, 28, 224005.	1.8	59
71	Gallium Oxide and Related Semiconductors. Japanese Journal of Applied Physics, 2016, 55, 120201.	1.5	1
72	Spectroscopic ellipsometry studies on Î²-Ga₂O₃films and single crystal. Japanese Journal of Applied Physics, 2016, 55, 1202B2.	1.5	33

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73	Temperature-dependent capacitanceâ€"voltage and currentâ€"voltage characteristics of Pt/Ga2O3 (001) Schottky barrier diodes fabricated on <i>n</i>â€"â€"Ga2O3 drift layers grown by halide vapor phase epitaxy. Applied Physics Letters, 2016, 108, .	3.3	268
74	Current status of Ga₂O₃ power devices. Japanese Journal of Applied Physics, 2016, 55, 1202A1.	1.5	188
75	Electronic properties of the residual donor in unintentionally doped Î²-Ga2O3. Journal of Applied Physics, 2016, 120, .	2.5	68
76	Temperature-dependent exciton resonance energies and their correlation with IR-active optical phonon modes in <i>Î²</i>-Ga2O3 single crystals. Applied Physics Letters, 2016, 108, .	3.3	72
77	Characterization of channel temperature in Ga2O3 metal-oxide-semiconductor field-effect transistors by electrical measurements and thermal modeling. Applied Physics Letters, 2016, 109, .	3.3	78
78	Anisotropy, phonon modes, and free charge carrier parameters in monoclinic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math>-gallium oxide single crystals. Physical Review B, 2016, 93, .	3.2	147
79	Ga2O3 field-plated schottky barrier diodes with a breakdown voltage of over 1 kV. , 2016, , .		2
80	Electron channel mobility in silicon-doped Ga₂O₃ MOSFETs with a resistive buffer layer. Japanese Journal of Applied Physics, 2016, 55, 1202B9.	1.5	90
81	Recent progress in Ga₂O₃power devices. Semiconductor Science and Technology, 2016, 31, 034001.	2.0	783
82	Field-Plated Ga₂O₃MOSFETs With a Breakdown Voltage of Over 750 V. IEEE Electron Device Letters, 2016, 37, 212-215.	3.9	431
83	Gallium Oxide Schottky Barrier Diodes. IEEJ Transactions on Electronics, Information and Systems, 2016, 136, 479-483.	0.2	0
84	Current Status of Gallium Oxide-Based Power Device Technology. , 2015, , .		3
85	Estimation of carrier density of wide bandgap semiconductor β-Ga<inf>2</inf>O<inf>3</inf> single crystals by THz reflectance measurement. , 2015, , .		0
86	Anomalous Fe diffusion in Si-ion-implanted Î²â€"Ga2O3 and its suppression in Ga2O3 transistor structures through highly resistive buffer layers. Applied Physics Letters, 2015, 106, .	3.3	78
87	Anisotropic thermal conductivity in single crystal Î²-gallium oxide. Applied Physics Letters, 2015, 106, .	3.3	361
88	Impacts of AlOxformation on emission properties of AlN/GaN heterostructures. Applied Physics Express, 2015, 8, 052401.	2.4	2
89	Ga<inf>2</inf>O<inf>3</inf> Schottky barrier diodes with n[−]-Ga<inf>2</inf>O<inf>3</inf> drift layers grown by HVPE. , 2015, , .		23
90	Valence band ordering in Î²-Ga₂O₃studied by polarized transmittance and reflectance spectroscopy. Japanese Journal of Applied Physics, 2015, 54, 112601.	1.5	261

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91	Homoepitaxial growth of Î²-Ga₂O₃layers by halide vapor phase epitaxy. Applied Physics Express, 2015, 8, 015503.	2.4	288
92	Band alignment and electrical properties of Al2O3/<i>Î²</i>-Ga2O3 heterojunctions. Applied Physics Letters, 2014, 104, .	3.3	177
93	Development of gallium oxide power devices. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 21-26.	1.8	418
94	Growth of crystallized AlO on AlN/GaN heterostructures by in-situ RF-MBE. Journal of Crystal Growth, 2014, 405, 64-67.	1.5	1
95	Systematic investigation of the growth rate of Î²-Ga₂O₃(010) by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2014, 7, 095501.	2.4	122
96	Growth temperature dependences of structural and electrical properties of Ga2O3 epitaxial films grown on Î²-Ga2O3 (010) substrates by molecular beam epitaxy. Journal of Crystal Growth, 2014, 392, 30-33.	1.5	107
97	Polarized Raman spectra in Î²-Ga2O3 single crystals. Journal of Crystal Growth, 2014, 401, 330-333.	1.5	119
98	$hbox{Ga}_{2} hbox{O}_{3}$ Schottky Barrier Diodes Fabricated by Using Single-Crystal etaâ€“ $hbox{Ga}_{2} hbox{O}_{3}$ (010) Substrates. IEEE Electron Device Letters, 2013, 34, 493-495.	3.9	339
99	Research and development on Ga<inf>2</inf>O<inf>3</inf> transistors and diodes. , 2013, , .		0
100	Depletion-mode Ga2O3 metal-oxide-semiconductor field-effect transistors on Î²-Ga2O3 (010) substrates and temperature dependence of their device characteristics. Applied Physics Letters, 2013, 103, .	3.3	562
101	Depletion-mode Ga<inf>2</inf>O<inf>3</inf> MOSFETs. , 2013, , .		5
102	MBE grown Ga2O3 and its power device applications. Journal of Crystal Growth, 2013, 378, 591-595.	1.5	251
103	Correlation between blue luminescence intensity and resistivity in <i>Î²</i>-Ga2O3 single crystals. Applied Physics Letters, 2013, 103, .	3.3	267
104	Si-Ion Implantation Doping in Î²-Ga₂O₃and Its Application to Fabrication of Low-Resistance Ohmic Contacts. Applied Physics Express, 2013, 6, 086502.	2.4	251
105	Depletion-mode Ga<inf>2</inf>O<inf>3</inf> MOSFETs on β-Ga<inf>2</inf>O<inf>3</inf> (010) substrates with Si-ion-implanted channel and contacts. , 2013, , .		28
106	Gallium oxide (Ga2O3) metal-semiconductor field-effect transistors on single-crystal Î²-Ga2O3 (010) substrates. Applied Physics Letters, 2012, 100, .	3.3	1,337
107	Ga<inf>2</inf>O<inf>3</inf> Schottky barrier diodes fabricated on single-crystal β-Ga<inf>2</inf>O<inf>3</inf> substrates. , 2012, , .		1
108	Effects of Barrier Thinning on Small-Signal and 30-GHz Power Characteristics of AlGaN/GaN Heterostructure Field-Effect Transistors. IEEE Transactions on Electron Devices, 2011, 58, 1681-1686.	3.0	25

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109	Two-Stage High-Gain High-Power Distributed Amplifier Using Dual-Gate GaN HEMTs. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 2059-2063.	4.6	33
110	Effects of oxidation on surface chemical states and barrier height of AlGaN/GaN heterostructures. Applied Physics Letters, 2010, 97, .	3.3	65
111	Distributed surface donor states and the two-dimensional electron gas at AlGaN/GaN heterojunctions. Journal Physics D: Applied Physics, 2010, 43, 505501.	2.8	66
112	Distribution of donor states on etched surface of AlGaN/GaN heterostructures. Journal of Applied Physics, 2010, 108, 063719.	2.5	78
113	Enhancement-Mode<i>m</i>-plane AlGaN/GaN Heterojunction Field-Effect Transistors. Applied Physics Express, 2009, 2, 011001.	2.4	31
114	A comparative study of effects of SiNx deposition method on AlGaN/GaN heterostructure field-effect transistors. Applied Physics Letters, 2009, 94, .	3.3	40
115	Effect of Dielectric Thickness on Power Performance of AlGaN/GaN HEMTs. IEEE Electron Device Letters, 2009, 30, 313-315.	3.9	31
116	Small-signal and 30-GHz power performance of AlGaN/GaN HFETs without back barriers. , 2009, , .		0
117	GaN-based FETs using Cat-CVD SiN passivation for millimeter-wave applications. Thin Solid Films, 2008, 516, 548-552.	1.8	20
118	Millimeter-wave GaN HFET technology. Proceedings of SPIE, 2008, , .	0.8	7
119	A comparative study of SiN deposition methods for millimeter-wave AlGaN/GaN HFETs. , 2008, , .		2
120	Development of High-Frequency GaN HFETs for Millimeter-Wave Applications. IEICE Transactions on Electronics, 2008, E91-C, 984-988.	0.6	8
121	Reduction in potential barrier height of AlGaNâˆ•GaN heterostructures by SiN passivation. Journal of Applied Physics, 2007, 101, 043703.	2.5	62
122	XPS study of surface potential in AlGaN/GaN heterostructure with Cat-CVD SiN passivation. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2354-2357.	0.8	3
123	Development of millimeter-wave GaN HFET technology. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2042-2048.	1.8	4
124	Enhancement-Mode AlN/GaN HFETs Using Cat-CVD SiN. IEEE Transactions on Electron Devices, 2007, 54, 1566-1570.	3.0	52
125	AlGaN/GaN MIS-HFETs with f/sub T/ of 163 GHz using cat-CVD SiN gate-insulating and passivation Layers. IEEE Electron Device Letters, 2006, 27, 16-18.	3.9	105
126	AlN/GaN Insulated-Gate HFETs Using Cat-CVD SiN. IEEE Electron Device Letters, 2006, 27, 719-721.	3.9	100

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127	30-nm-Gate AlGaN/GaN Heterostructure Field-Effect Transistors with a Current-Gain Cutoff Frequency of 181 GHz. Japanese Journal of Applied Physics, 2006, 45, L1111-L1113.	1.5	57
128	Superconductivity of InN observed in the magnetoresistance at low temperature. Journal of Physics: Conference Series, 2006, 51, 279-282.	0.4	4
129	HighfTandfmaxAlGaN/GaN HFETs achieved by using thin and high-Al-composition AlGaN barrier layers and Cat-CVD SiN passivation. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1851-1855.	1.8	11
130	Superconductivity of InN with a well defined Fermi surface. Physica Status Solidi (B): Basic Research, 2006, 243, 1679-1686.	1.5	10
131	High-Performance Short-Gate InAlN/GaN Heterostructure Field-Effect Transistors. Japanese Journal of Applied Physics, 2006, 45, L843-L845.	1.5	27
132	Effects of SiN passivation by catalytic chemical vapor deposition on electrical properties of AlGaNâˆ•GaN heterostructure field-effect transistors. Journal of Applied Physics, 2006, 100, 033714.	2.5	40
133	High sensitivity and quantitative magnetic field measurements at 600Â°C. Journal of Applied Physics, 2006, 99, 08B302.	2.5	20
134	MBE growth and device characteristics of InAlN/GaN HFETs. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2598-2601.	0.8	8
135	Effect of thermal annealing on 120-nm-T-shaped-Tiâˆ•Ptâˆ•Au-gate AlGaNâˆ•GaN high electron mobility transistors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 895.	1.6	2
136	120-nm-T-shaped-Moâˆ•Ptâˆ•Au-gate AlGaNâˆ•GaN high electron mobility transistors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, L13.	1.6	6
137	Cat-CVD SiN-passivated AlGaN-GaN HFETs with thin and high Al composition barrier Layers. IEEE Electron Device Letters, 2005, 26, 139-141.	3.9	62
138	Vacancy-type defects in Si-doped InN grown by plasma-assisted molecular-beam epitaxy probed using monoenergetic positron beams. Journal of Applied Physics, 2005, 97, 043514.	2.5	14
139	Electron density dependence of the electronic structure of InN epitaxial layers grown on sapphire (0001). Physical Review B, 2005, 72, .	3.2	39
140	AlGaN/GaN Heterostructure Field-Effect Transistors with Current Gain Cut-off Frequency of 152 GHz on Sapphire Substrates. Japanese Journal of Applied Physics, 2005, 44, L475-L478.	1.5	54
141	Barrier Thickness Dependence of Electrical Properties and DC Device Characteristics of AlGaN/GaN Heterostructure Field-Effect Transistors Grown by Plasma-Assisted Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L1147-L1149.	1.5	23
142	InAlN/GaN Heterostructure Field-Effect Transistors Grown by Plasma-Assisted Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2004, 43, L768-L770.	1.5	60
143	Estimation of band-gap energy of intrinsic InN from photoluminescence properties of undoped and Si-doped InN films grown by plasma-assisted molecular-beam epitaxy. Journal of Crystal Growth, 2004, 269, 162-166.	1.5	35
144	Non-Recessed-Gate Enhancement-Mode AlGaN/GaN High Electron Mobility Transistors with High RF Performance. Japanese Journal of Applied Physics, 2004, 43, 2255-2258.	1.5	71

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145	Plasma-assisted MBE growth of InN films and InAlN/InN heterostructures. Journal of Crystal Growth, 2003, 251, 494-498.	1.5	35
146	Epitaxial growth of high-quality InN films on sapphire substrates by plasma-assisted molecular-beam epitaxy. Journal of Crystal Growth, 2003, 252, 128-135.	1.5	44
147	Control of electron density in InN by Si doping and optical properties of Si-doped InN. Physica Status Solidi (B): Basic Research, 2003, 240, 417-420.	1.5	24
148	Fabrication of sub-50-nm-gate i-AlGaN/GaN HEMTs on sapphire. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2368-2371.	0.8	35
149	Electronic structure of InN observed by Shubnikovâ€"de Haas measurements. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2822-2825.	0.8	7
150	Effect of Low-Temperature-Grown GaN Intermediate Layer on InN Growth by Plasma-Assisted MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 360-363.	0.8	2
151	Optical properties of Si-doped InN grown on sapphire (0001). Physical Review B, 2003, 68, .	3.2	114
152	High-Quality InN Film Grown on a Low-Temperature-Grown GaN Intermediate Layer by Plasma-Assisted Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2002, 41, L540-L542.	1.5	83
153	Fabrication Technology and Device Performance of Sub-50-nm-Gate InP-Based High Electron Mobility Transistors. Japanese Journal of Applied Physics, 2002, 41, 1094-1098.	1.5	28
154	Ultra-short 25-nm-gate lattice-matched InAlAs/InGaAs HEMTs within the range of 400 GHz cutoff frequency. IEEE Electron Device Letters, 2001, 22, 367-369.	3.9	69
155	High fT 50-nm-Gate InAlAs/InGaAs High Electron Mobility Transistors Lattice-Matched to InP Substrates. Japanese Journal of Applied Physics, 2000, 39, L838-L840.	1.5	21
156	DC and RF Performance of 50 nm Gate Pseudomorphic In0.7Ga0.3As/In0.52Al0.48As High Electron Mobility Transistors Grown on (411)A-Oriented InP Substrates by Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2000, 39, L720-L722.	1.5	7
157	Laser operation at room temperature of self-organized In[sub 0.1]Ga[sub 0.9]As/(GaAs)[sub 6](AlAs)[sub 1] quantum wires grown on (775)B-oriented GaAs substrates by molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1672.	1.6	19
158	Self-organized GaAs quantum-wire lasers grown on (775)B-oriented GaAs substrates by molecular beam epitaxy. Applied Physics Letters, 1999, 74, 780-782.	3.3	61
159	In0.15Ga0.85As/GaAs quantum wire structures grown on (553)B GaAs substrates by molecular beam epitaxy. Journal of Crystal Growth, 1999, 201-202, 824-827.	1.5	16
160	GaAs/(GaAs)4(AlAs)2 quantum wire lasers grown on (775)B-oriented GaAs substrates by molecular beam epitaxy. Journal of Crystal Growth, 1999, 201-202, 886-890.	1.5	15
161	High-density In0.14Ga0.86As/(GaAs)5(AlAs)5 quantum wires naturally formed on (775)B-oriented GaAs substrates by molecular beam epitaxy. Microelectronic Engineering, 1998, 43-44, 335-340.	2.4	9
162	Temperature dependence of exciton lifetimes in high-density GaAs/(GaAs)4(AlAs)2 quantum wires grown on (775)B-oriented GaAs substrates by molecular beam epitaxy. Solid-State Electronics, 1998, 42, 1581-1585.	1.4	5

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