

Shigefusa Chichibu

List of Publications by Year in descending order

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318
papers

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323
all docs

323
docs citations

323
times ranked

7139
citing authors

#	ARTICLE	IF	CITATIONS
1	Repeated temperature modulation epitaxy for p-type doping and light-emitting diode based on ZnO. Nature Materials, 2004, 4, 42-46.	13.3	1,963
2	Origin of defect-insensitive emission probability in In-containing (Al,In,Ga)N alloy semiconductors. Nature Materials, 2006, 5, 810-816.	13.3	625
3	Effective band gap inhomogeneity and piezoelectric field in InGaN/GaN multiquantum well structures. Applied Physics Letters, 1998, 73, 2006-2008.	1.5	427
4	Blue Light-Emitting Diode Based on ZnO. Japanese Journal of Applied Physics, 2005, 44, L643-L645.	0.8	408
5	Spatially resolved cathodoluminescence spectra of InGaN quantum wells. Applied Physics Letters, 1997, 71, 2346-2348.	1.5	358
6	Biaxial strain dependence of exciton resonance energies in wurtzite GaN. Journal of Applied Physics, 1997, 81, 417-424.	1.1	240
7	Correlation between the photoluminescence lifetime and defect density in bulk and epitaxial ZnO. Applied Physics Letters, 2003, 82, 532-534.	1.5	232
8	Nonpolar and Semipolar Group III Nitride-Based Materials. MRS Bulletin, 2009, 34, 304-312.	1.7	232
9	Exciton localization in InGaN quantum well devices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2204.	1.6	227
10	Nitrogen doped Mg _x Zn _{1-x} O/ZnO single heterostructure ultraviolet light-emitting diodes on ZnO substrates. Applied Physics Letters, 2010, 97, .	1.5	184
11	Emission mechanisms of bulk GaN and InGaN quantum wells prepared by lateral epitaxial overgrowth. Applied Physics Letters, 1999, 74, 1460-1462.	1.5	158
12	Quantum-Confined Stark Effect in an AlGaIn/GaN/AlGaIn Single Quantum Well Structure. Japanese Journal of Applied Physics, 1999, 38, L914-L916.	0.8	145
13	Continuous-Wave Operation of m-Plane InGaIn Multiple Quantum Well Laser Diodes. Japanese Journal of Applied Physics, 2007, 46, L187-L189.	0.8	143
14	Limiting factors of room-temperature nonradiative photoluminescence lifetime in polar and nonpolar GaN studied by time-resolved photoluminescence and slow positron annihilation techniques. Applied Physics Letters, 2005, 86, 021914.	1.5	138
15	Polarized photoreflectance spectra of excitonic polaritons in a ZnO single crystal. Journal of Applied Physics, 2003, 93, 756-758.	1.1	114
16	The origins and properties of intrinsic nonradiative recombination centers in wide bandgap GaN and AlGaIn. Journal of Applied Physics, 2018, 123, .	1.1	112
17	Improvements in quantum efficiency of excitonic emissions in ZnO epilayers by the elimination of point defects. Journal of Applied Physics, 2006, 99, 093505.	1.1	105
18	Impacts of Si-doping and resultant cation vacancy formation on the luminescence dynamics for the near-band-edge emission of Al _{0.6} Ga _{0.4} N films grown on AlN templates by metalorganic vapor phase epitaxy. Journal of Applied Physics, 2013, 113, .	1.1	98

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19	Study of defects in GaN grown by the two-flow metalorganic chemical vapor deposition technique using monoenergetic positron beams. Journal of Applied Physics, 2001, 90, 181-186.	1.1	92
20	Radiative and nonradiative processes in strain-free Al _x Ga _{1-x} N films studied by time-resolved photoluminescence and positron annihilation techniques. Journal of Applied Physics, 2004, 95, 2495-2504.	1.1	88
21	Localized quantum well excitons in InGaN single-quantum-well amber light-emitting diodes. Journal of Applied Physics, 2000, 88, 5153-5157.	1.1	81
22	Localized exciton dynamics in strained cubic In _{0.1} Ga _{0.9} N/GaN multiple quantum wells. Applied Physics Letters, 2001, 79, 4319-4321.	1.5	81
23	Optical and structural studies in InGaN quantum well structure laser diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 2177.	1.6	72
24	Layer-by-layer growth of high-optical-quality ZnO film on atomically smooth and lattice relaxed ZnO buffer layer. Applied Physics Letters, 2003, 83, 2784-2786.	1.5	70
25	Prospective emission efficiency and in-plane light polarization of nonpolar m-plane In _x Ga _{1-x} N-GaN blue light emitting diodes fabricated on freestanding GaN substrates. Applied Physics Letters, 2006, 89, 091906.	1.5	70
26	Nitrogen vacancies as a common element of the green luminescence and nonradiative recombination centers in Mg-implanted GaN layers formed on a GaN substrate. Applied Physics Express, 2017, 10, 061002.	1.1	70
27	Relation between Al vacancies and deep emission bands in AlN epitaxial films grown by NH ₃ -source molecular beam epitaxy. Applied Physics Letters, 2007, 90, 241914.	1.5	69
28	Exciton Spectra of Cubic and Hexagonal GaN Epitaxial Films. Japanese Journal of Applied Physics, 1997, 36, 1976-1983.	0.8	68
29	Extremely high quantum efficiency of donor-acceptor-pair emission in N-and-B-doped 6H-SiC. Journal of Applied Physics, 2006, 99, 093108.	1.1	67
30	Time-resolved photoluminescence, positron annihilation, and Al _{0.23} Ga _{0.77} N/GaN heterostructure growth studies on low defect density polar and nonpolar freestanding GaN substrates grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2012, 111, .	1.1	67
31	Helicon-wave-excited-plasma sputtering epitaxy of ZnO on sapphire (0001) substrates. Journal of Applied Physics, 2002, 91, 874-877.	1.1	66
32	Exciton-polariton spectra and limiting factors for the room-temperature photoluminescence efficiency in ZnO. Semiconductor Science and Technology, 2005, 20, S67-S77.	1.0	66
33	Exciton spectra of an AlN epitaxial film on (0001) sapphire substrate grown by low-pressure metalorganic vapor phase epitaxy. Applied Physics Letters, 2002, 81, 652-654.	1.5	65
34	Vacancy-oxygen complexes and their optical properties in AlN epitaxial films studied by positron annihilation. Journal of Applied Physics, 2009, 105, .	1.1	63
35	Cathodoluminescence characterization of dislocations in gallium nitride using a transmission electron microscope. Journal of Applied Physics, 2003, 94, 4315-4319.	1.1	60
36	Carrier Trapping by Vacancy-Type Defects in Mg-Implanted GaN Studied Using Monoenergetic Positron Beams. Physica Status Solidi (B): Basic Research, 2018, 255, 1700521.	0.7	60

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37	Structural, elastic, and polarization parameters and band structures of wurtzite ZnO and MgO. Journal of Applied Physics, 2012, 112, .	1.1	59
38	Experimental determination of band offsets of NiO-based thin film heterojunctions. Journal of Applied Physics, 2014, 116, .	1.1	59
39	Visible and Ultraviolet Photoluminescence from Cu ²⁺ /V ²⁺ Chalcopyrite Semiconductors Grown by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1997, 36, 1703-1714.	0.8	58
40	High temperature growth of ZnS films on bare Si and transformation of ZnS to ZnO by thermal oxidation. Applied Physics Letters, 2001, 78, 616-618.	1.5	58
41	Photoreflectance spectra of a ZnO heteroepitaxial film on the nearly lattice-matched ScAlMgO ₄ (0001) substrate grown by laser molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 2860-2862.	1.5	58
42	Impact of growth polar direction on the optical properties of GaN grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2001, 78, 28-30.	1.5	57
43	Improved quantum efficiency in nonpolar (112̄ ₀) AlGa _x /Ga _{1-x} N quantum wells grown on GaN prepared by lateral epitaxial overgrowth. Applied Physics Letters, 2004, 84, 3768-3770.	1.5	57
44	Radiative and nonradiative excitonic transitions in nonpolar (112̄ ₀) and polar (0001̄ ₀) and (0001) ZnO epilayers. Applied Physics Letters, 2004, 84, 1079-1081.	1.5	55
45	Large electron capture-cross-section of the major nonradiative recombination centers in Mg-doped GaN epilayers grown on a GaN substrate. Applied Physics Letters, 2018, 112, .	1.5	55
46	Localized exciton dynamics in nonpolar (112̄ ₀) In _x Ga _{1-x} N multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth. Applied Physics Letters, 2005, 86, 1519-18.	1.5	54
47	Analysis of MBE growth mode for GaN epilayers by RHEED. Journal of Crystal Growth, 1998, 189-190, 364-369.	0.7	52
48	Evidence of localization effects in InGa _x single-quantum-well ultraviolet light-emitting diodes. Applied Physics Letters, 2000, 76, 1671-1673.	1.5	52
49	Ammonothermal Crystal Growth of GaN Using an NH ₄ F Mineralizer. Crystal Growth and Design, 2013, 13, 4158-4161.	1.4	52
50	Fabrication of Visible-Light-Transparent Solar Cells Using p-Type NiO Films by Low Oxygen Fraction Reactive RF Sputtering Deposition. Japanese Journal of Applied Physics, 2013, 52, 021102.	0.8	49
51	Recombination dynamics of localized excitons in cubic In _x Ga _{1-x} N/GaN multiple quantum wells grown by radio frequency molecular beam epitaxy on 3C-SiC substrate. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1856.	1.6	47
52	Plasma-assisted Molecular Beam Epitaxy of High Optical Quality MgZnO Films on Zn-polar ZnO Substrates. Applied Physics Express, 0, 1, 091202.	1.1	47
53	Photoreflectance spectra of excitonic polaritons in GaN substrate prepared by lateral epitaxial overgrowth. Applied Physics Letters, 2000, 76, 1576-1578.	1.5	46
54	Free and bound exciton fine structures in AlN epilayers grown by low-pressure metalorganic vapor phase epitaxy. Journal of Applied Physics, 2009, 105, .	1.1	45

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55	Impact of strain on free-exciton resonance energies in wurtzite AlN. Journal of Applied Physics, 2007, 102, 123707.	1.1	44
56	Quantum-confined Stark effects in the m-plane In _{0.15} Ga _{0.85} N/GaN multiple quantum well blue light-emitting diode fabricated on low defect density freestanding GaN substrate. Applied Physics Letters, 2007, 91, .	1.5	44
57	Photorefectance of Cu-based III-V ₂ heteroepitaxial layers grown by metalorganic chemical vapor deposition. Journal of Applied Physics, 1996, 79, 2043-2054.	1.1	43
58	Use of diethylselenide as a less-hazardous source for preparation of CuInSe ₂ photo-absorbers by selenization of metal precursors. Journal of Crystal Growth, 2002, 243, 404-409.	0.7	42
59	Growth of AlGaIn nanowires by metalorganic chemical vapor deposition. Applied Physics Letters, 2005, 87, 183108.	1.5	40
60	Dielectric SiO ₂ /ZrO ₂ distributed Bragg reflectors for ZnO microcavities prepared by the reactive helicon-wave-excited-plasma sputtering method. Applied Physics Letters, 2006, 88, 161914.	1.5	40
61	Room-temperature photoluminescence lifetime for the near-band-edge emission of (0001) p-type GaN fabricated by sequential ion-implantation of Mg and H. Applied Physics Letters, 2018, 113, .	1.5	40
62	Direct correlation between the internal quantum efficiency and photoluminescence lifetime in undoped ZnO epilayers grown on Zn-polar ZnO substrates by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2008, 103, .	1.1	38
63	Defect-Resistant Radiative Performance of Al _{1-x} In _x N Epitaxial Nanostructures for Deep-Ultraviolet and Visible Polarized Light Emitters. Advanced Materials, 2017, 29, 1603644.	11.1	38
64	Optical properties of nearly stacking-fault-free m-plane GaN homoepitaxial films grown by metal organic vapor phase epitaxy on low defect density freestanding GaN substrates. Applied Physics Letters, 2008, 92, 091912.	1.5	37
65	Carrier localization structure combined with current micropaths in AlGaIn quantum wells grown on an AlN template with macrosteps. Applied Physics Letters, 2019, 114, .	1.5	37
66	Band-edge photoluminescence of CuGaSe ₂ films grown by molecular beam epitaxy. Journal of Applied Physics, 1996, 79, 4318.	1.1	36
67	Optical Properties of InGaIn/GaN Quantum Wells with Si Doped Barriers. Japanese Journal of Applied Physics, 1998, 37, L1362-L1364.	0.8	34
68	Reduced defect densities in the ZnO epilayer grown on Si substrates by laser-assisted molecular-beam epitaxy using a ZnS epitaxial buffer layer. Applied Physics Letters, 2004, 85, 5586-5588.	1.5	34
69	Defect characterization in Mg-doped GaN studied using a monoenergetic positron beam. Journal of Applied Physics, 2012, 111, .	1.1	33
70	Excitonic photoluminescence in a CuAlSe ₂ chalcopyrite semiconductor grown by low-pressure metalorganic chemical vapor deposition. Journal of Applied Physics, 1993, 74, 6446-6447.	1.1	32
71	Room-temperature near-band-edge photoluminescence from CuInSe ₂ heteroepitaxial layers grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 1997, 70, 1840-1842.	1.5	32
72	Greenish-white electroluminescence from p-type CuGaS ₂ heterojunction diodes using n-type ZnO as an electron injector. Applied Physics Letters, 2004, 85, 4403.	1.5	32

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73	Major impacts of point defects and impurities on the carrier recombination dynamics in AlN. Applied Physics Letters, 2010, 97, .	1.5	31
74	Photoluminescence of CuGaS ₂ epitaxial layers grown by metalorganic vapor phase epitaxy. Journal of Applied Physics, 2000, 87, 3793-3799.	1.1	30
75	Investigation of direct and indirect band gaps of [100]-oriented nearly strain-free β -FeSi ₂ films grown by molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 556-558.	1.5	30
76	Microstructural evolution in m-plane GaN growth on m-plane SiC. Applied Physics Letters, 2008, 92, 051112.	1.5	30
77	An attenuated-total-reflection study on the surface phonon-polariton in GaN. Journal of Physics Condensed Matter, 2000, 12, 7041-7044.	0.7	29
78	Identification of extremely radiative nature of AlN by time-resolved photoluminescence. Applied Physics Letters, 2010, 96, .	1.5	28
79	Determination of absolute value of quantum efficiency of radiation in high quality GaN single crystals using an integrating sphere. Journal of Applied Physics, 2016, 120, .	1.1	28
80	Electroreflectance of CuInSe ₂ Single Crystals. Japanese Journal of Applied Physics, 1997, 36, L543-L546.	0.8	27
81	Improved characteristics and issues of m-plane InGaN films grown on low defect density m-plane freestanding GaN substrates by metalorganic vapor phase epitaxy. Applied Physics Letters, 2008, 93, .	1.5	27
82	Collateral evidence for an excellent radiative performance of Al _x Ga _{1-x} N alloy films of high AlN mole fractions. Applied Physics Letters, 2011, 99, 051902.	1.5	27
83	Excitonic emission dynamics in homoepitaxial AlN films studied using polarized and spatio-time-resolved cathodoluminescence measurements. Applied Physics Letters, 2013, 103, .	1.5	27
84	Reduction in the concentration of cation vacancies by proper Si-doping in the well layers of high AlN mole fraction Al _x Ga _{1-x} N multiple quantum wells grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2015, 107, 121602.	1.5	27
85	A Low-Symmetry Cubic Mesophase of Dendronized CdS Nanoparticles and Their Structure-Dependent Photoluminescence. Chem, 2017, 2, 860-876.	5.8	27
86	Annealing Behavior of Vacancy-Type Defects in Mg- and H-implanted GaN Studied Using Monoenergetic Positron Beams. Physica Status Solidi (B): Basic Research, 2019, 256, 1900104.	0.7	27
87	Origin of localized excitons in In-containing three-dimensional bulk (Al,In,Ga)N alloy films probed by time-resolved photoluminescence and monoenergetic positron annihilation techniques. Philosophical Magazine, 2007, 87, 2019-2039.	0.7	26
88	Photoreflectance Study of CuAlSe ₂ Heteroepitaxial Layers. Japanese Journal of Applied Physics, 1993, 32, L167-L169.	0.8	25
89	Heteroepitaxial Growth of CuGaS ₂ Layers by Low-Pressure Metalorganic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 1995, 34, 3991-3997.	0.8	25
90	Optical and electrical properties of AgIn(SSe) ₂ crystals. Physica B: Condensed Matter, 2001, 302-303, 349-356.	1.3	25

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91	Experimental Determination of Valence Band Discontinuities at Cu(Al,Ga)(S,Se) ₂ /GaAs(001) Heterointerfaces Using Ultraviolet Photoemission Spectroscopy. Japanese Journal of Applied Physics, 2001, 40, L428-L430.	0.8	25
92	V defects of ZnO thin films grown on Si as an ultraviolet optical path. Applied Physics Letters, 2004, 84, 502-504.	1.5	25
93	Room temperature photoluminescence lifetime for the near-band-edge emission of epitaxial and ion-implanted GaN on GaN structures. Japanese Journal of Applied Physics, 2019, 58, SC0802.	0.8	25
94	Fabrication of p-CuGaS ₂ /n-ZnO:Al heterojunction light-emitting diode grown by metalorganic vapor phase epitaxy and helicon-wave-excited-plasma sputtering methods. Journal of Physics and Chemistry of Solids, 2005, 66, 1868-1871.	1.9	24
95	Thermal stability of semi-insulating property of Fe-doped GaN bulk films studied by photoluminescence and monoenergetic positron annihilation techniques. Journal of Applied Physics, 2009, 105, 083542.	1.1	24
96	High internal quantum efficiency ultraviolet to green luminescence peaks from pseudomorphic m-plane Al _{1-x} In _x N epilayers grown on a low defect density m-plane freestanding GaN substrate. Journal of Applied Physics, 2014, 116, .	1.1	24
97	Internal quantum efficiency of radiation in a bulk CH ₃ NH ₃ PbBr ₃ perovskite crystal quantified by using the omnidirectional photoluminescence spectroscopy. APL Materials, 2019, 7, .	2.2	24
98	Annealing behaviors of vacancy-type defects in AlN deposited by radio-frequency sputtering and metalorganic vapor phase epitaxy studied using monoenergetic positron beams. Journal of Applied Physics, 2020, 128, .	1.1	24
99	Effects of controlled As pressure annealing on deep levels of liquid-encapsulated Czochralski GaAs single crystals. Journal of Applied Physics, 1988, 64, 3987-3993.	1.1	23
100	Metalorganic vapor phase epitaxy of Cu(Al _x Ga _{1-x})(SySe _{1-y}) ₂ chalcopyrite semiconductors and their band offsets. Journal of Physics and Chemistry of Solids, 2003, 64, 1481-1489.	1.9	23
101	Ultraviolet photoluminescence from CuAlS ₂ heteroepitaxial layers grown by low-pressure metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 66, 3513-3515.	1.5	22
102	Exciton-exciton interaction and heterobiexcitons in GaN. Physical Review B, 2003, 67, .	1.1	22
103	Anisotropic optical gain in m-plane In _x Ga _{1-x} N/GaN multiple quantum well laser diode wafers fabricated on the low defect density freestanding GaN substrates. Applied Physics Letters, 2008, 93, 091112.	1.5	22
104	Improvement of Al-Polar AlN Layer Quality by Three-Stage Flow-Modulation Metalorganic Chemical Vapor Deposition. Applied Physics Express, 0, 1, 021102.	1.1	22
105	Vacancies and electron trapping centers in acidic ammonothermal GaN probed by a monoenergetic positron beam. Journal of Crystal Growth, 2016, 448, 117-121.	0.7	22
106	Nearly temperature-independent ultraviolet light emission intensity of indirect excitons in hexagonal BN microcrystals. Journal of Applied Physics, 2018, 123, .	1.1	22
107	Effects of ultra-high-pressure annealing on characteristics of vacancies in Mg-implanted GaN studied using a monoenergetic positron beam. Scientific Reports, 2020, 10, 17349.	1.6	22
108	Photoreflectance and Photoluminescence Studies of CuAl _x Ga _{1-x} Se ₂ Alloys. Japanese Journal of Applied Physics, 1993, 32, L1304-L1307.	0.8	21

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109	Raman scattering from phonon-polaritons in GaN. <i>Physical Review B</i> , 2000, 62, 10861-10866.	1.1	21
110	Localized excitons in an In _{0.06} Ga _{0.94} N multiple-quantum-well laser diode lased at 400 nm. <i>Applied Physics Letters</i> , 2001, 79, 341-343.	1.5	21
111	Importance of lattice matching and surface arrangement for the helicon-wave-excited-plasma sputtering epitaxy of ZnO. <i>Journal of Applied Physics</i> , 2004, 95, 7856-7861.	1.1	21
112	Radiative and nonradiative lifetimes in nonpolar m-plane In _x Ga _{1-x} N GaN multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth. <i>Journal of Vacuum Science & Technology B</i> , 2007, 25, 1524-1528.	1.3	21
113	Recombination dynamics of excitons in Mg _{0.11} Zn _{0.89} O alloy films grown using the high-temperature-annealed self-buffer layer by laser-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2007, 90, 141903.	1.5	21
114	Surface stoichiometry and activity control for atomically smooth low dislocation density ZnO and pseudomorphic MgZnO epitaxy on a Zn-polar ZnO substrate by the helicon-wave-excited-plasma sputtering epitaxy method. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	21
115	Fabrication of visible-light transparent solar cells composed of NiO/Ni _x Zn _{1-x} O/ZnO heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2015, 12, 785-788.	0.8	21
116	Low-resistivity m-plane freestanding GaN substrate with very low point-defect concentrations grown by hydride vapor phase epitaxy on a GaN seed crystal synthesized by the ammonothermal method. <i>Applied Physics Express</i> , 2015, 8, 095501.	1.1	21
117	Band gap bowing and exciton localization in strained cubic In _x Ga _{1-x} N films grown on 3C-SiC(001) by rf molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2001, 79, 3600-3602.	1.5	20
118	Direct comparison of photoluminescence lifetime and defect densities in ZnO epilayers studied by time-resolved photoluminescence and slow positron annihilation techniques. <i>Physica Status Solidi A</i> , 2004, 201, 2841-2845.	1.7	20
119	Recombination dynamics of a 268nm emission peak in Al _{0.53} In _{0.11} Ga _{0.36} N-Al _{0.58} In _{0.02} Ga _{0.40} N multiple quantum wells. <i>Applied Physics Letters</i> , 2006, 88, 111912.	1.5	20
120	Ammonothermal growth of GaN on a self-nucleated GaN seed crystal. <i>Journal of Crystal Growth</i> , 2014, 404, 168-171.	0.7	20
121	Ultraviolet light-absorbing and emitting diodes consisting of a p-type transparent-semiconducting NiO film deposited on an n-type GaN homoepitaxial layer. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	20
122	Roles of carbon impurities and intrinsic nonradiative recombination centers on the carrier recombination processes of GaN crystals. <i>Applied Physics Express</i> , 2020, 13, 012004.	1.1	20
123	Growth and doping characteristics of ZnSeTe epilayers by MOCVD. <i>Journal of Crystal Growth</i> , 1997, 170, 518-522.	0.7	19
124	Comparison of Optical Properties of GaN/AlGaIn and InGaIn/AlGaIn Single Quantum Wells. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 2417-2424.	0.8	19
125	Observation of Exciton-Polariton Emissions from a ZnO Epitaxial Film on the a-Face of Sapphire Grown by Radical-Source Molecular-Beam-Epitaxy. <i>Japanese Journal of Applied Physics</i> , 2002, 41, L935-L937.	0.8	19
126	Optical nonlinearities and phase relaxation of excitons in GaN. <i>Physical Review B</i> , 2002, 65, .	1.1	19

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127	Synthesis, crystal structure and characterization of iron pyroborate (Fe ₂ B ₂ O ₅) single crystals. Journal of Solid State Chemistry, 2009, 182, 2004-2009.	1.4	19
128	Electrical properties of undoped and Li-doped NiO thin films deposited by RF sputtering without intentional heating. Japanese Journal of Applied Physics, 2016, 55, 088003.	0.8	19
129	Ammonothermal growth of 2 inch long GaN single crystals using an acidic NH ₄ F mineralizer in a Ag-lined autoclave. Applied Physics Express, 2020, 13, 055505.	1.1	19
130	Crystal growth of AgIn _{1-x} Ga _x Se ₂ crystals grown by a vertical gradient freeze method. Journal of Crystal Growth, 2002, 236, 257-260.	0.7	18
131	Atomic distribution in $\text{In}_x\text{Ga}_{1-x}\text{N}$ single quantum wells studied by extended x-ray absorption fine structure. Physical Review B, 2007, 76, 045307.	1.1	18
132	Optical and Solar Cell Properties of Alpha-ray, Proton, and Gamma-ray Irradiated Cu(In,Ga)Se ₂ Thin Films and Solar Cells. Japanese Journal of Applied Physics, 2010, 49, 042302.	0.8	18
133	Optical properties of CuGaSe ₂ and CuAlSe ₂ layers epitaxially grown on Cu(In _{0.04} Ga _{0.96})Se ₂ substrates. Journal of Applied Physics, 2000, 87, 7294-7302.	1.1	17
134	Influence of Internal Electric Field on the Recombination Dynamics of Localized Excitons in an InGaN Double-Quantum-Well Laser Diode Wafer Operated at 450 nm. Japanese Journal of Applied Physics, 2003, 42, 7276-7283.	0.8	17
135	Effect of carbon concentration on the thermal conversion of liquid-encapsulated Czochralski semi-insulating GaAs. Applied Physics Letters, 1988, 53, 1054-1055.	1.5	16
136	Strain-relaxation in NH ₃ -source molecular beam epitaxy of AlN epilayers on GaN epitaxial templates. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1603-1606.	0.8	16
137	Impact of Point Defects on the Luminescence Properties of (Al,Ga)N. Materials Science Forum, 0, 590, 233-248.	0.3	16
138	Fabrication of an-type ZnO/p-type Cu-Al-O heterojunction diode by sputtering deposition methods. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1105-1108.	0.8	16
139	High temperature degradation mechanism of a red phosphor, CaAlSiN ₃ :Eu for solid-state lighting. Journal of Applied Physics, 2017, 122, .	1.1	16
140	Self-organized micro-light-emitting diode structure for high-speed solar-blind optical wireless communications. Applied Physics Letters, 2020, 117, .	1.5	16
141	Numerical Simulation of Ammonothermal Crystal Growth of GaN—Current State, Challenges, and Prospects. Crystals, 2021, 11, 356.	1.0	16
142	Low-Pressure Metalorganic Chemical Vapor Deposition of a $\text{CuGaSe}_2/\text{CuAlSe}_2$ Heterostructure. Japanese Journal of Applied Physics, 1994, 33, L286-L289.	0.8	15
143	Different pressure coefficients of the light emission in cubic and hexagonal InGaN/GaN quantum wells. Applied Physics Letters, 2002, 81, 232-234.	1.5	15
144	Optimization of the Growth Conditions for Molecular Beam Epitaxy of Mg _x Zn _{1-x} O (0 ≤ x ≤ 0.12) Films on Zn-Polar ZnO Substrates. Japanese Journal of Applied Physics, 2010, 49, 071104.	0.8	15

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145	Femtosecond-laser-driven photoelectron-gun for time-resolved cathodoluminescence measurement of GaN. Review of Scientific Instruments, 2012, 83, 043905.	0.6	15
146	Advantages and remaining issues of state-of-the-art <i>m</i> -plane freestanding GaN substrates grown by halide vapor phase epitaxy for <i>m</i> -plane InGaN epitaxial growth. Semiconductor Science and Technology, 2012, 27, 024008.	1.0	15
147	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.	1.1	14
148	Crystal Phase-Selective Epitaxy of Rutile and Anatase Nb-Doped TiO ₂ Films on a GaN Template by the Helicon-Wave-Excited-Plasma Sputtering Epitaxy Method. Applied Physics Express, 2010, 3, 091102.	1.1	14
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