

# Shigefusa Chichibu

## 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.

300  
papers

9,926  
citations

46  
h-index

92  
g-index

323  
ext. papers

10,590  
ext. citations

2.7  
avg, IF

5.66  
L-index

#	Paper	IF	Citations
300	Reactive RF magnetron sputtering epitaxy of NiO thin films on (0001) sapphire and (100) MgO substrates. <i>Japanese Journal of Applied Physics</i> , <b>2022</b> , 61, 025505	1.4	0
299	Enhanced quantum efficiency of a self-organized silica mixed red phosphor CaAlSiN <sub>3</sub> :Eu. <i>Journal of Solid State Chemistry</i> , <b>2022</b> , 309, 122968	3.3	
298	Dual-peak electroluminescence spectra generated from Al <sub>n</sub> /12Ga <sub>1-n</sub> /12N (n = 2, 3, 4) for AlGa <sub>N</sub> -based LEDs with nonflat quantum wells. <i>Journal Physics D: Applied Physics</i> , <b>2022</b> , 55, 255102	3	0
297	Improved minority carrier lifetime in p-type GaN segments prepared by vacancy-guided redistribution of Mg. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 182106	3.4	5
296	Dopant activation process in Mg-implanted GaN studied by monoenergetic positron beam. <i>Scientific Reports</i> , <b>2021</b> , 11, 20660	4.9	4
295	Boundary Conditions for Simulations of Fluid Flow and Temperature Field during Ammonothermal Crystal Growth. Machine-Learning Assisted Study of Autoclave Wall Temperature Distribution. <i>Crystals</i> , <b>2021</b> , 11, 254	2.3	5
294	Numerical Simulation of Ammonothermal Crystal Growth of GaN. Current State, Challenges, and Prospects. <i>Crystals</i> , <b>2021</b> , 11, 356	2.3	6
293	Discrete AlN mole fraction of n/12 (n = 48) in Ga-rich zones functioning as electron pathways created in nonflat AlGa <sub>N</sub> layers grown on high-miscut sapphire substrates. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 164503	2.5	2
292	Reduced nonradiative recombination rates in c-plane Al <sub>0.83</sub> In <sub>0.17</sub> N films grown on a nearly lattice-matched GaN substrate by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 091105	3.4	1
291	Effective neutron detection using vertical-type B <sub>GaN</sub> diodes. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 124501	2.5	0
290	Facile method for the synthesis of zinc- or magnesium-doped gallium nitride powders from gallium metal. <i>Journal of Crystal Growth</i> , <b>2021</b> , 570, 126190	1.6	1
289	Discrete wavelengths observed in electroluminescence originating from Al <sub>1/2</sub> Ga <sub>1/2</sub> N and Al <sub>1/3</sub> Ga <sub>2/3</sub> N created in nonflat AlGa <sub>N</sub> quantum wells. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 485107	3.7	1
288	Innovative Techniques for Fast Growth and Fabrication of High Purity GaN Single Crystals. <i>Springer Series in Materials Science</i> , <b>2021</b> , 65-76	0.9	
287	Urbach-Martienssen tail as the origin of the two-peak structure in the photoluminescence spectra for the near-band-edge emission of a freestanding GaN crystal observed by omnidirectional photoluminescence spectroscopy. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 171103	3.4	1
286	Ammonothermal growth of 2 inch long GaN single crystals using an acidic NH <sub>4</sub> F mineralizer in a Ag-lined autoclave. <i>Applied Physics Express</i> , <b>2020</b> , 13, 055505	2.4	8
285	Analyzing oxygen and silicon incorporation in GaN microstructures composed of c-planes and angled facets by confocal magneto-photoluminescence microscopy. <i>AIP Advances</i> , <b>2020</b> , 10, 035215	1.5	
284	Hole capture-coefficient of intrinsic nonradiative recombination centers that commonly exist in bulk, epitaxial, and proton-irradiated ZnO. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 215704	2.5	2

283	Impact of high-temperature implantation of Mg ions into GaN. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, 056502	1.4	3
282	Temperature dependence of internal quantum efficiency of radiation for the near-band-edge emission of GaN crystals quantified by omnidirectional photoluminescence spectroscopy. <i>Applied Physics Express</i> , <b>2020</b> , 13, 105504	2.4	2
281	Detailed analysis of Ga-rich current pathways created in an n-Al <sub>0.7</sub> Ga <sub>0.3</sub> N layer grown on an AlN template with dense macrosteps. <i>Applied Physics Express</i> , <b>2020</b> , 13, 124001	2.4	4
280	Correlation between the internal quantum efficiency and photoluminescence lifetime of the near-band-edge emission in a ZnO single crystal grown by the hydrothermal method. <i>Applied Physics Express</i> , <b>2020</b> , 13, 121005	2.4	1
279	Suppression of Green Luminescence of Mg-Ion-Implanted GaN by Subsequent Implantation of Fluorine Ions at High Temperature. <i>Physica Status Solidi (B): Basic Research</i> , <b>2020</b> , 257, 1900554	1.3	6
278	Review Defect-Tolerant Luminescent Properties of Low InN Mole Fraction In <sub>x</sub> Ga <sub>1-x</sub> N Quantum Wells under the Presence of Polarization Fields. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 015016	2	3
277	Roles of carbon impurities and intrinsic nonradiative recombination centers on the carrier recombination processes of GaN crystals. <i>Applied Physics Express</i> , <b>2020</b> , 13, 012004	2.4	15
276	Self-organized micro-light-emitting diode structure for high-speed solar-blind optical wireless communications. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 031103	3.4	9
275	Effects of ultra-high-pressure annealing on characteristics of vacancies in Mg-implanted GaN studied using a monoenergetic positron beam. <i>Scientific Reports</i> , <b>2020</b> , 10, 17349	4.9	9
274	Annealing behaviors of vacancy-type defects in AlN deposited by radio-frequency sputtering and metalorganic vapor phase epitaxy studied using monoenergetic positron beams. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 085704	2.5	10
273	Room-temperature cavity-polaritons in planar ZnO microcavities fabricated by a top-down process. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 071103	3.4	2
272	Self-formed compositional superlattices triggered by cation orderings in m-plane AlInN on GaN. <i>Scientific Reports</i> , <b>2020</b> , 10, 18570	4.9	4
271	Quantification of the quantum efficiency of radiation of a freestanding GaN crystal placed outside an integrating sphere. <i>Applied Physics Express</i> , <b>2019</b> , 12, 062010	2.4	5
270	Annealing Behavior of Vacancy-Type Defects in Mg- and H-Implanted GaN Studied Using Monoenergetic Positron Beams. <i>Physica Status Solidi (B): Basic Research</i> , <b>2019</b> , 256, 1900104	1.3	15
269	Comparison of Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells designed for 265 and 285 nm deep-ultraviolet LEDs grown on AlN templates having macrosteps. <i>Applied Physics Express</i> , <b>2019</b> , 12, 064009	2.4	8
268	Internal quantum efficiency of radiation in a bulk CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite crystal quantified by using the omnidirectional photoluminescence spectroscopy. <i>APL Materials</i> , <b>2019</b> , 7, 071116	5.7	18
267	Room temperature photoluminescence lifetime for the near-band-edge emission of epitaxial and ion-implanted GaN on GaN structures. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC0802	1.4	14
266	Impact of growth temperature on the structural properties of BGaN films grown by metal-organic vapor phase epitaxy using trimethylboron. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SC1042	1.4	3

265	Theoretical Formulation of Experimentally Observed Quantum Efficiency of Radiation in Semiconducting Crystal. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	1
264	An Outdoor Evaluation of 1-Gbps Optical Wireless Communication using AlGaIn-based LED in 280-nm Band <b>2019</b> ,		1
263	In-plane optical polarization and dynamic properties of the near-band-edge emission of an m-plane freestanding AlN substrate and a homoepitaxial film. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 151903	3.4	3
262	Two-dimensional analysis of the nonuniform quantum yields of multiple quantum wells for AlGaIn-based deep-ultraviolet LEDs grown on AlN templates with dense macrosteps using cathodoluminescence spectroscopy. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 215703	2.5	9
261	Carrier localization structure combined with current micropaths in AlGaIn quantum wells grown on an AlN template with macrosteps. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 011102	3.4	28
260	Photocatalytic NO removal over calcium-bridged siloxenes under ultraviolet and visible light irradiation. <i>Dalton Transactions</i> , <b>2018</b> , 47, 7070-7076	4.3	7
259	Nearly temperature-independent ultraviolet light emission intensity of indirect excitons in hexagonal BN microcrystals. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 065104	2.5	13
258	Carrier Trapping by Vacancy-Type Defects in Mg-Implanted GaN Studied Using Monoenergetic Positron Beams. <i>Physica Status Solidi (B): Basic Research</i> , <b>2018</b> , 255, 1700521	1.3	39
257	The origins and properties of intrinsic nonradiative recombination centers in wide bandgap GaN and AlGaIn. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 161413	2.5	70
256	Polarity-dependence of the defect formation in c-axis oriented ZnO by the irradiation of an 8 MeV proton beam. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 161562	2.5	5
255	Effects of extra metals added in an autoclave during acidic ammonothermal growth of m-plane GaN single crystals using an NH <sub>4</sub> F mineralizer. <i>Applied Physics Express</i> , <b>2018</b> , 11, 091002	2.4	7
254	Room-temperature photoluminescence lifetime for the near-band-edge emission of (000 1 $\bar{1}$ ) p-type GaN fabricated by sequential ion-implantation of Mg and H. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 191901	3.4	26
253	1.6-Gbps LED-Based Ultraviolet Communication at 280 nm in Direct Sunlight <b>2018</b> ,		4
252	Large electron capture-cross-section of the major nonradiative recombination centers in Mg-doped GaN epilayers grown on a GaN substrate. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 211901	3.4	35
251	A design strategy for achieving more than 90% of the overlap integral of electron and hole wavefunctions in high-AlN-mole-fraction Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells. <i>Applied Physics Express</i> , <b>2017</b> , 10, 015802	2.4	10
250	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> , <b>2017</b> , 110, 181102	3.4	13
249	A Low-Symmetry Cubic Mesophase of Dendronized CdS Nanoparticles and Their Structure-Dependent Photoluminescence. <i>Chem</i> , <b>2017</b> , 2, 860-876	16.2	22
248	Photocatalytic activity of silicon-based nanoflakes for the decomposition of nitrogen monoxide. <i>Dalton Transactions</i> , <b>2017</b> , 46, 8643-8648	4.3	11

247	Nitrogen vacancies as a common element of the green luminescence and nonradiative recombination centers in Mg-implanted GaN layers formed on a GaN substrate. <i>Applied Physics Express</i> , <b>2017</b> , 10, 061002	2.4	49
246	Local structure around In atoms in coherently grown m-plane InGaN film. <i>Journal of Synchrotron Radiation</i> , <b>2017</b> , 24, 1012-1016	2.4	
245	High temperature degradation mechanism of a red phosphor, CaAlSiN <sub>3</sub> :Eu for solid-state lighting. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 113104	2.5	11
244	Demonstration of omnidirectional photoluminescence (ODPL) spectroscopy for precise determination of internal quantum efficiency of radiation in GaN single crystals. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 032111	3.4	11
243	Defect-Resistant Radiative Performance of m-Plane Immiscible Al In N Epitaxial Nanostructures for Deep-Ultraviolet and Visible Polarized Light Emitters. <i>Advanced Materials</i> , <b>2017</b> , 29, 1603644	24	30
242	Phase transformation during simultaneous chalcogenization of CuIn(S,Se) 2 thin films using metalorganic sources. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2017</b> , 14, 1600159		
241	Spectroscopic ellipsometry studies on them-plane Al <sub>1-x</sub> In <sub>x</sub> N epilayers grown by metalorganic vapor phase epitaxy on a freestanding GaN substrate. <i>Japanese Journal of Applied Physics</i> , <b>2016</b> , 55, 05FG04	1.4	4
240	Vacancies and electron trapping centers in acidic ammonothermal GaN probed by a monoenergetic positron beam. <i>Journal of Crystal Growth</i> , <b>2016</b> , 448, 117-121	1.6	17
239	Impacts of Dislocations and Point Defects on the Internal Quantum Efficiency of the Near-Band-Edge Emission in AlGaN-Based DUV Light-Emitting Materials. <i>Springer Series in Materials Science</i> , <b>2016</b> , 115-136	0.9	1
238	Determination of absolute value of quantum efficiency of radiation in high quality GaN single crystals using an integrating sphere. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 015704	2.5	24
237	Electronic and optical characteristics of anm-plane GaN single crystal grown by hydride vapor phase epitaxy on a GaN seed synthesized by the ammonothermal method using an acidic mineralizer. <i>Japanese Journal of Applied Physics</i> , <b>2016</b> , 55, 05FA03	1.4	4
236	Electrical properties of undoped and Li-doped NiO thin films deposited by RF sputtering without intentional heating. <i>Japanese Journal of Applied Physics</i> , <b>2016</b> , 55, 088003	1.4	12
235	Controlling the carrier lifetime of nearly threading-dislocation-free ZnO homoepitaxial films by 3d transition-metal doping. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 021904	3.4	9
234	Structural and optical properties of AlN grown by solid source solution growth method. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 085501	1.4	
233	Local excitation and emission dynamics of an isolated single basal-plane stacking-fault in GaN studied by spatio-time-resolved cathodoluminescence. <i>Japanese Journal of Applied Physics</i> , <b>2015</b> , 54, 030303	1.4	0
232	Low-resistivitym-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> , <b>2015</b> , 8, 095501	2.4	19
231	Reduction in the concentration of cation vacancies by proper Si-doping in the well layers of high AlN mole fraction Al <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121602	3.4	21
230	Fabrication of visible-light transparent solar cells composed of NiO/NixZn1-xO/ZnO heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2015</b> , 12, 785-788		16

229	Preparation of CuInS <sub>2</sub> thin films by sulfurization using ditertiarybutylsulfide. <i>Thin Solid Films</i> , <b>2014</b> , 558, 400-404	2.2	4
228	Ammonothermal growth of GaN on a self-nucleated GaN seed crystal. <i>Journal of Crystal Growth</i> , <b>2014</b> , 404, 168-171	1.6	16
227	Polarized XAFS study of AlK-edge form-plane AlGa <sub>n</sub> films. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 502, 012031	0.3	1
226	Homoepitaxial growth of ZnO films with reduced impurity concentrations by helicon-wave-excited-plasma sputtering epitaxy using a crystalline ZnO target prepared by hydrothermal technique. <i>Japanese Journal of Applied Physics</i> , <b>2014</b> , 53, 100301	1.4	2
225	High internal quantum efficiency ultraviolet to green luminescence peaks from pseudomorphic m-plane Al <sub>1-x</sub> In <sub>x</sub> N epilayers grown on a low defect density m-plane freestanding GaN substrate. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 213501	2.5	18
224	Experimental determination of band offsets of NiO-based thin film heterojunctions. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 163108	2.5	33
223	Electronic Structure and Spontaneous Polarization in Sc <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N Alloys Lattice-Matched to GaN: A First-Principles Study. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JM04	1.4	
222	Fabrication of Visible-Light-Transparent Solar Cells Using p-Type NiO Films by Low Oxygen Fraction Reactive RF Sputtering Deposition. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 021102	1.4	42
221	Excitonic emission dynamics in homoepitaxial AlN films studied using polarized and spatio-time-resolved cathodoluminescence measurements. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 142103	3.4	21
220	Acidic ammonothermal growth of GaN crystals using GaN powder as a nutrient. <i>CrystEngComm</i> , <b>2013</b> , 15, 5382	3.3	13
219	Ammonothermal Crystal Growth of GaN Using an NH <sub>4</sub> F Mineralizer. <i>Crystal Growth and Design</i> , <b>2013</b> , 13, 4158-4161	3.5	48
218	Spatio-Time-Resolved Cathodoluminescence Studies on Freestanding GaN Substrates Grown by Hydride Vapor Phase Epitaxy. <i>ECS Transactions</i> , <b>2013</b> , 50, 1-8	1	2
217	Local carrier dynamics around the sub-surface basal-plane stacking faults of GaN studied by spatio-time-resolved cathodoluminescence using a front-excitation-type photoelectron-gun. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 052108	3.4	11
216	Time-resolved luminescence studies on AlN and high AlN mole fraction AlGa <sub>n</sub> alloys. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 501-506		6
215	Impacts of Si-doping and resultant cation vacancy formation on the luminescence dynamics for the near-band-edge emission of Al <sub>0.6</sub> Ga <sub>0.4</sub> N films grown on AlN templates by metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 213506	2.5	73
214	Exciton binding energies in chalcopyrite semiconductors. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	13
213	Structural, elastic, and polarization parameters and band structures of wurtzite ZnO and MgO. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 073503	2.5	46
212	First-principles study of spontaneous polarization and band gap bowing in Sc <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N alloys lattice-matched to GaN. <i>Semiconductor Science and Technology</i> , <b>2012</b> , 27, 105014	1.8	3

211	Powder synthesis and ammonothermal crystal growth of GaN from metallic Ga in the presence of NH <sub>4</sub> I. <i>CrystEngComm</i> , <b>2012</b> , 14, 3351	3.3	7
210	Photoluminescence Study of Defect Levels in CuInS <sub>2</sub> Thin Films Grown by Sulfurization Using Di-tert-butylsulfide. <i>Japanese Journal of Applied Physics</i> , <b>2012</b> , 51, 031202	1.4	4
209	Signatures of $\pi$ - $\beta$ mixed-mode polaritons in polarized reflectance spectra of ZnO. <i>Journal of Physics Condensed Matter</i> , <b>2012</b> , 24, 415801	1.8	3
208	Local lifetime and luminescence efficiency for the near-band-edge emission of freestanding GaN substrates determined using spatio-time-resolved cathodoluminescence. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 212106	3.4	11
207	Time-resolved photoluminescence, positron annihilation, and Al <sub>0.23</sub> Ga <sub>0.77</sub> N/GaN heterostructure growth studies on low defect density polar and nonpolar freestanding GaN substrates grown by hydride vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 103518	2.5	56
206	Femtosecond-laser-driven photoelectron-gun for time-resolved cathodoluminescence measurement of GaN. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 043905	1.7	12
205	Lateral transport properties of Nb-doped rutile- and anatase-TiO <sub>2</sub> films epitaxially grown on c-plane GaN. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 072107	3.4	4
204	Valence-band-ordering of a strain-free bulk ZnO single crystal identified by four-wave-mixing spectroscopy technique. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 093522	2.5	7
203	Defect characterization in Mg-doped GaN studied using a monoenergetic positron beam. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 014508	2.5	28
202	Advantages and remaining issues of state-of-the-art m-plane freestanding GaN substrates grown by halide vapor phase epitaxy from m-plane InGaN epitaxial growth. <i>Semiconductor Science and Technology</i> , <b>2012</b> , 27, 024008	1.8	15
201	Photoluminescence Study of Defect Levels in CuInS <sub>2</sub> Thin Films Grown by Sulfurization Using Di-tert-butylsulfide. <i>Japanese Journal of Applied Physics</i> , <b>2012</b> , 51, 031202	1.4	2
200	Morphological and Structural Changes in Cu(In,Ga)Se <sub>2</sub> Thin Films by Selenization Using Diethylselenide. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 05FB05	1.4	3
199	Optical polarization properties of m-plane Al <sub>x</sub> Ga <sub>1-x</sub> N epitaxial films grown on m-plane freestanding GaN substrates toward nonpolar ultraviolet LEDs. <i>Optics Express</i> , <b>2011</b> , 19 Suppl 4, A1008-213	3.3	4
198	Spontaneous polarization and band gap bowing in Y <sub>x</sub> Al <sub>y</sub> Ga <sub>1-x-y</sub> N alloys lattice-matched to GaN. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 074114	2.5	6
197	Point defects in GaN and related group-III nitrides studied by means of positron annihilation <b>2011</b> ,		3
196	Helicon-wave-excited plasma sputtering epitaxy of Nb-doped TiO <sub>2</sub> films on GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 534-536		2
195	Growth of Cu(In,Al)(S,Se) <sub>2</sub> Thin Films by Selenization and Sulfurization for a Wide Bandgap Absorber. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 05FB07	1.4	1
194	Implementation of Spatio-Time-Resolved Cathodoluminescence Spectroscopy for Studying Local Carrier Dynamics in a Low Dislocation Density $m$ -Plane In <sub>0.05</sub> Ga <sub>0.95</sub> N Epilayer Grown on a Freestanding GaN Substrate. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 111002	1.4	6

193	Sulfurization Growth of CuInS <sub>2</sub> Thin Film Using Ditertiarybutylsulfide as a Less Hazardous Source. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 065503	1.4	6
192	Microstructure and interface control of GaN/MgAl <sub>2</sub> O <sub>4</sub> grown by metalorganic chemical vapor deposition: Substrate-orientation dependence. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 023504	2.5	10
191	Impacts of anisotropic tilt mosaics of state-of-the-art m-plane freestanding GaN substrates on the structural and luminescent properties of m-plane Al <sub>x</sub> Ga <sub>1-x</sub> N epilayers. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 021208	1.3	5
190	Transparent semiconducting Nb-doped anatase TiO <sub>2</sub> films deposited by helicon-wave-excited-plasma sputtering. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 011017	1.3	11
189	Collateral evidence for an excellent radiative performance of Al <sub>x</sub> Ga <sub>1-x</sub> N alloy films of high AlN mole fractions. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 051902	3.4	23
188	Time-Resolved Photoluminescence of a Two-Dimensional Electron Gas in an Al <sub>0.2</sub> Ga <sub>0.8</sub> N/GaN Heterostructure Fabricated on Ammonothermal GaN Substrates. <i>Applied Physics Express</i> , <b>2011</b> , 4, 045501	1.4	7
187	Morphological and Structural Changes in Cu(In,Ga)Se <sub>2</sub> Thin Films by Selenization Using Diethylselenide. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 05FB05	1.4	4
186	Growth of Cu(In,Al)(S,Se) <sub>2</sub> Thin Films by Selenization and Sulfurization for a Wide Bandgap Absorber. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 05FB07	1.4	4
185	Sulfurization Growth of CuInS <sub>2</sub> Thin Film Using Ditertiarybutylsulfide as a Less Hazardous Source. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 065503	1.4	3
184	Implementation of Spatio-Time-Resolved Cathodoluminescence Spectroscopy for Studying Local Carrier Dynamics in a Low Dislocation Density m-Plane In <sub>0.05</sub> Ga <sub>0.95</sub> N Epilayer Grown on a Freestanding GaN Substrate. <i>Japanese Journal of Applied Physics</i> , <b>2011</b> , 50, 111002	1.4	
183	Light polarization characteristics of m-plane Al <sub>x</sub> Ga <sub>1-x</sub> N films suffering from in-plane anisotropic tensile stresses. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 033701	2.5	12
182	Photoluminescence and positron annihilation studies on Mg-doped nitrogen-polarity semipolar (101 $\bar{1}$ $\bar{1}$ ) GaN heteroepitaxial layers grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 091913	3.4	9
181	Major impacts of point defects and impurities on the carrier recombination dynamics in AlN. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 201904	3.4	26
180	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> , <b>2010</b> , 108, 063541	2.5	19
179	Identification of extremely radiative nature of AlN by time-resolved photoluminescence. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 061906	3.4	24
178	Interface chemistry and electronic structure of GaN/MgAl <sub>2</sub> O <sub>4</sub> revealed by angle-resolved photoemission spectroscopy. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 161907	3.4	7
177	Optimization of the Growth Conditions for Molecular Beam Epitaxy of Mg <sub>x</sub> Zn <sub>1-x</sub> O (0 $\leq$ x $\leq$ 0.12) Films on Zn-Polar ZnO Substrates. <i>Japanese Journal of Applied Physics</i> , <b>2010</b> , 49, 071104	1.4	15
176	Optical and Solar Cell Properties of Alpha-ray, Proton, and Gamma-ray Irradiated Cu(In,Ga)Se <sub>2</sub> Thin Films and Solar Cells. <i>Japanese Journal of Applied Physics</i> , <b>2010</b> , 49, 042302	1.4	12



175	Nitrogen doped Mg <sub>x</sub> Zn <sub>1-x</sub> O/ZnO single heterostructure ultraviolet light-emitting diodes on ZnO substrates. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 013501	3.4	166
174	Crystal Phase-Selective Epitaxy of Rutile and Anatase Nb-Doped TiO <sub>2</sub> Films on a GaN Template by the Helicon-Wave-Excited-Plasma Sputtering Epitaxy Method. <i>Applied Physics Express</i> , <b>2010</b> , 3, 091102	2.4	14
173	Optical Properties of GaN Substrates. <i>Springer Series in Materials Science</i> , <b>2010</b> , 277-293	0.9	
172	Vacancy-oxygen complexes and their optical properties in AlN epitaxial films studied by positron annihilation. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 054501	2.5	54
171	Free and bound exciton fine structures in AlN epilayers grown by low-pressure metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 023529	2.5	44
170	Impacts of anisotropic lattice relaxation on crystal mosaicity and luminescence spectra of m-plane Al <sub>x</sub> Ga <sub>1-x</sub> N films grown on m-plane freestanding GaN substrates by NH <sub>3</sub> source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 071910	3.4	8
169	Structural, Optical, and Homoepitaxial Studies on the Bulk GaN Single Crystals Spontaneously Nucleated by the Na-Flux Method. <i>Applied Physics Express</i> , <b>2009</b> , 2, 091004	2.4	
168	Thermal stability of semi-insulating property of Fe-doped GaN bulk films studied by photoluminescence and monoenergetic positron annihilation techniques. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 083542	2.5	20
167	Study on dephasing dynamics of Exciton Fine Structure in GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S719-S722		1
166	Preparation of Cu(In,Al)Se <sub>2</sub> thin films by selenization using diethylselenide. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1016-1018		4
165	Fabrication of a n -type ZnO/p -type CuAlO <sub>2</sub> heterojunction diode by sputtering deposition methods. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1105-1108		15
164	Ga-doped ZnO transparent conducting films prepared by helicon-wave-excited plasma sputtering. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1109-1111		2
163	Fabrication of Zn-doped Cu(In,Ga)Se <sub>2</sub> thin film solar cells prepared by Zn diffusion from the gas phase using dimethylzinc. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1213-1216		3
162	Preparation of CuInSe <sub>2</sub> thin films by metal-organic decomposition with oxidation-reduction and subsequent selenization using diethylselenide. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1038-1042		3
161	Synthesis, crystal structure and characterization of iron pyroborate (Fe <sub>2</sub> B <sub>2</sub> O <sub>5</sub> ) single crystals. <i>Journal of Solid State Chemistry</i> , <b>2009</b> , 182, 2004-2009	3.3	14
160	Nonpolar and Semipolar Group III Nitride-Based Materials. <i>MRS Bulletin</i> , <b>2009</b> , 34, 304-312	3.2	217
159	Helicon-Wave-Excited-Plasma Sputtering as an Expandable Epitaxy Method for Planar Semiconductor Thin Films. <i>Applied Physics Express</i> , <b>2009</b> , 2, 105503	2.4	6
158	Local Structural Study of Mg <sub>0.06</sub> Zn <sub>0.94</sub> O Film by Polarized XAFS. <i>E-Journal of Surface Science and Nanotechnology</i> , <b>2009</b> , 7, 596-600	0.7	1

157	Microstructural evolution in m-plane GaN growth on m-plane SiC. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 0511134	2.4	28
156	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. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 063502	2.5	36
155	Impact of Point Defects on the Luminescence Properties of (Al,Ga)N. <i>Materials Science Forum</i> , <b>2008</b> , 590, 233-248	0.4	16
154	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. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 091912	3.4	34
153	Anisotropic optical gain in m-plane In <sub>x</sub> Ga <sub>1-x</sub> N/GaN multiple quantum well laser diode wafers fabricated on the low defect density freestanding GaN substrates. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 091312	3.1	22
152	Plasma-assisted Molecular Beam Epitaxy of High Optical Quality MgZnO Films on Zn-polar ZnO Substrates. <i>Applied Physics Express</i> , <b>2008</b> , 1, 091202	2.4	44
151	Improved characteristics and issues of m-plane InGaN films grown on low defect density m-plane freestanding GaN substrates by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 151908	3.4	26
150	Improvement of Al-Polar AlN Layer Quality by Three-Stage Flow-Modulation Metalorganic Chemical Vapor Deposition. <i>Applied Physics Express</i> , <b>2008</b> , 1, 021102	2.4	22
149	Four-wave mixing spectroscopy of ultraviolet excitons in strained GaN <b>2008</b> ,		2
148	Mg x Zn 1-x O epitaxial films grown on ZnO substrates by molecular beam epitaxy <b>2008</b> ,		9
147	Correlation between the violet luminescence intensity and defect density in AlN epilayers grown by ammonia-source molecular beam epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 2129-2132		8
146	Helicon-wave-excited plasma sputtering deposition of CuAlO <sub>2</sub> thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 3101-3103		3
145	Preparation of ZnO:Ga thin films by helicon-wave-excited plasma sputtering. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2008</b> , 5, 3135-3137		
144	Recombination dynamics of excitons in Mg <sub>0.11</sub> Zn <sub>0.89</sub> O alloy films grown using the high-temperature-annealed self-buffer layer by laser-assisted molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 141903	3.4	19
143	Local Structure around In Atoms in In <sub>x</sub> Ga <sub>1-x</sub> N Multi-Quantum-Wells Studied by XAFS. <i>AIP Conference Proceedings</i> , <b>2007</b> ,	0	1
142	Coherent manipulation of A and B excitons in GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2007</b> , 4, 2776-2779		1
141	Radiative and nonradiative lifetimes in nonpolar m-plane In <sub>x</sub> Ga <sub>1-x</sub> N/GaN multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2007</b> , 25, 1524		21
140	Impact of strain on free-exciton resonance energies in wurtzite AlN. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 123707	2.5	40

139	Relation between Al vacancies and deep emission bands in AlN epitaxial films grown by NH <sub>3</sub> -source molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 241914	3.4	60
138	Effects of the high-temperature-annealed self-buffer layer on the improved properties of ZnO epilayers grown by helicon-wave-excited-plasma sputtering epitaxy on a-plane sapphire substrates. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 073505	2.5	8
137	Atomic distribution in In <sub>x</sub> Ga <sub>1-x</sub> N single quantum wells studied by extended x-ray absorption fine structure. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	13
136	Quantum-confined Stark effects in the m-plane In <sub>0.15</sub> Ga <sub>0.85</sub> N/GaN multiple quantum well blue light-emitting diode fabricated on low defect density freestanding GaN substrate. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 181903	3.4	39
135	Impacts of dislocation bending and impurity incorporation on the local cathodoluminescence spectra of GaN grown by ammonothermal method. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 251911	3.4	11
134	Continuous-Wave Operation of m-Plane InGaN Multiple Quantum Well Laser Diodes. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, L187-L189	1.4	131
133	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. <i>Philosophical Magazine</i> , <b>2007</b> , 87, 2019-2039	1.6	24
132	Prospective emission efficiency and in-plane light polarization of nonpolar m-plane In <sub>x</sub> Ga <sub>1-x</sub> N/GaN blue light emitting diodes fabricated on freestanding GaN substrates. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 091906	3.4	67
131	Dielectric SiO <sub>2</sub> /rO <sub>2</sub> distributed Bragg reflectors for ZnO microcavities prepared by the reactive helicon-wave-excited-plasma sputtering method. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 161914	3.4	36
130	Recombination dynamics of a 268nm emission peak in Al <sub>0.53</sub> In <sub>0.11</sub> Ga <sub>0.36</sub> N/Al <sub>0.58</sub> In <sub>0.02</sub> Ga <sub>0.40</sub> N multiple quantum wells. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 111912	3.4	17
129	Extremely high quantum efficiency of donor-acceptor-pair emission in N-and-B-doped 6H-SiC. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 093108	2.5	59
128	Improvements in quantum efficiency of excitonic emissions in ZnO epilayers by the elimination of point defects. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 093505	2.5	96
127	Exciton dynamics in nonpolar (11 $\bar{2}$ 0) InGaN/GaN multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2082-2086		
126	Use of diethylselenide for the preparation of CuInGaSe <sub>2</sub> films by selenization of metal precursors premixed with Se. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2543-2546		1
125	Preparation of high Ga-content CuInGaSe <sub>2</sub> films by selenization of metal precursors using diethylselenide as a less-hazardous source. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2539-2542		6
124	Influence of the stacking order on structural features of the Cu-In-Ga-Se precursors for formation of Cu(In,Ga)Se <sub>2</sub> thin films prepared by thermal reaction of InSe/Cu/GaSe alloys to elemental Se vapor and diethylselenide gas. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 2572-2575		
123	Strain-relaxation in NH <sub>3</sub> -source molecular beam epitaxy of AlN epilayers on GaN epitaxial templates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, 1603-1606	1.6	15
122	Helicon-wave-excited plasma sputtering deposition of Ga-doped ZnO transparent conducting films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, 2882-2886	1.6	8

121	Origin of defect-insensitive emission probability in In-containing (Al,In,Ga)N alloy semiconductors. <i>Nature Materials</i> , <b>2006</b> , 5, 810-6	27	548
120	Exciton-polariton spectra and limiting factors for the room-temperature photoluminescence efficiency in ZnO. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, S67-S77	1.8	61
119	Fabrication of p-CuGaS <sub>2</sub> /n-ZnO:Al heterojunction light-emitting diode grown by metalorganic vapor phase epitaxy and helicon-wave-excited-plasma sputtering methods. <i>Journal of Physics and Chemistry of Solids</i> , <b>2005</b> , 66, 1868-1871	3.9	22
118	Reduction of bound-state and nonradiative defect densities in nonpolar (11 $\bar{2}$ 0) AlGa <sub>x</sub> N/GaN quantum wells by the use of lateral epitaxial overgrowth technique. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 2700-2703		
117	Vacancy-type defects in Si-doped InN grown by plasma-assisted molecular-beam epitaxy probed using monoenergetic positron beams. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 043514	2.5	14
116	Growth of AlGa <sub>x</sub> N nanowires by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 183108	3.4	39
115	Limiting factors of room-temperature nonradiative photoluminescence lifetime in polar and nonpolar GaN studied by time-resolved photoluminescence and slow positron annihilation techniques. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 021914	3.4	116
114	Localized exciton dynamics in nonpolar (11 $\bar{2}$ 0) In <sub>x</sub> Ga <sub>1-x</sub> N multiple quantum wells grown on GaN templates prepared by lateral epitaxial overgrowth. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 151918	3.4	50
113	Blue Light-Emitting Diode Based on ZnO. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, L643-L645	1.4	380
112	MOCVD Growth and Characterization of AlGaInN Nanowires and Nanostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 892, 714		
111	In situ monitoring of Zn* and Mg* species during helicon-wave-excited-plasma sputtering epitaxy of ZnO and Mg <sub>0.06</sub> Zn <sub>0.94</sub> O films. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 2220		9
110	Biexciton formation and exciton-exciton correlation effects in bulk ZnO. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S276-S278	1.8	6
109	Improved surface morphology in GaN homoepitaxy by NH <sub>3</sub> -source molecular-beam epitaxy. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 2158		2
108	Radiative and nonradiative excitonic transitions in nonpolar (11 $\bar{2}$ 0) and polar (0001) and (0001) ZnO epilayers. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1079-1081	3.4	50
107	Greenish-white electroluminescence from p-type CuGaS <sub>2</sub> heterojunction diodes using n-type ZnO as an electron injector. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4403	3.4	31
106	Radiative and nonradiative processes in strain-free Al <sub>x</sub> Ga <sub>1-x</sub> N films studied by time-resolved photoluminescence and positron annihilation techniques. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 2495-2504	2.5	82
105	Importance of lattice matching and surface arrangement for the helicon-wave-excited-plasma sputtering epitaxy of ZnO. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 7856-7861	2.5	20
104	Improved quantum efficiency in nonpolar (11 $\bar{2}$ 0) AlGa <sub>x</sub> N/GaN quantum wells grown on GaN prepared by lateral epitaxial overgrowth. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3768-3770	3.4	50

103	V defects of ZnO thin films grown on Si as an ultraviolet optical path. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 502-504	3.4	25
102	Vapor-liquid-solid Growth of III-Nitride Nanowires and Heterostructures by Metal-Organic Chemical Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 831, 248		
101	Reduced Defect Densities in Cubic GaN Epilayers with AlGa <sub>0.1</sub> N/GaN Superlattice Underlayers Grown on (001) GaAs Substrates by Metalorganic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2004</b> , 43, 958-965	1.4	6
100	Critical Roles of Decomposition-Shielding Layer Deposited at Low Temperature Governing the Structural and Photoluminescence Properties of Cubic GaN Epilayers Grown on (001) GaAs by Metalorganic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2004</b> , 43, 106-110	1.4	4
99	Repeated temperature modulation epitaxy for p-type doping and light-emitting diode based on ZnO. <i>Nature Materials</i> , <b>2004</b> , 4, 42-46	27	1830
98	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> , <b>2004</b> , 201, 2841-2845		18
97	Reduced defect densities in the ZnO epilayer grown on Si substrates by laser-assisted molecular-beam epitaxy using a ZnS epitaxial buffer layer. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5586-5588	3.4	30
96	Recombination dynamics of localized excitons in cubic In <sub>x</sub> Ga <sub>1-x</sub> N/GaN multiple quantum wells grown by radio frequency molecular beam epitaxy on 3C-BiC substrate. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2003</b> , 21, 1856		41
95	Heteroepitaxy of Hexagonal ZnS Thin Films Directly on Si (111). <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 7029-7032	1.4	4
94	Influence of Internal Electric Field on the Recombination Dynamics of Localized Excitons in an InGa <sub>0.1</sub> N Double-Quantum-Well Laser Diode Wafer Operated at 450 nm. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 7276-7283	1.4	17
93	Scattering processes and dynamics of exciton-biexciton system in GaN <b>2003</b> ,		2
92	Correlation between the photoluminescence lifetime and defect density in bulk and epitaxial ZnO. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 532-534	3.4	215
91	Light emission versus energy gap in group-III nitrides: hydrostatic pressure studies. <i>Physica Status Solidi (B): Basic Research</i> , <b>2003</b> , 235, 225-231	1.3	11
90	Exciton-biexciton correlation effects on FWM in GaN. <i>Physica Status Solidi (B): Basic Research</i> , <b>2003</b> , 240, 348-351	1.3	1
89	Anomalous pressure dependence of light emission in cubic InGa <sub>0.1</sub> N. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 2682-2685		
88	Effects of deposition parameters of low-temperature GaN layer on the structural and optical properties of cubic GaN epilayers grown on GaAs(001) substrates by MOVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 2099-2102		2
87	Metalorganic vapor phase epitaxy of Cu <sub>1-x</sub> (Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> (SySe <sub>1-y</sub> ) <sub>2</sub> chalcopyrite semiconductors and their band offsets. <i>Journal of Physics and Chemistry of Solids</i> , <b>2003</b> , 64, 1481-1489	3.9	19
86	Polarized photorefectance spectra of excitonic polaritons in a ZnO single crystal. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 756-758	2.5	103

85	Position Controlled GaN Nano-Structures Fabricated by Low Energy Focused Ion Beam System.. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 792, 621		
84	Exciton-exciton interaction and heterobiexcitons in GaN. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	19
83	Cathodoluminescence characterization of dislocations in gallium nitride using a transmission electron microscope. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 4315-4319	2.5	51
82	Properties of optical phonons in cubic In <sub>x</sub> Ga <sub>1-x</sub> N. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 52-54	3.4	5
81	Layer-by-layer growth of high-optical-quality ZnO film on atomically smooth and lattice relaxed ZnO buffer layer. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 2784-2786	3.4	66
80	Localized exciton dynamics in InGa <sub>x</sub> N quantum well structures. <i>Applied Surface Science</i> , <b>2002</b> , 190, 330-338.	3.7	11
79	Crystal growth of AgIn <sub>1-x</sub> Ga <sub>x</sub> Se <sub>2</sub> crystals grown by a vertical gradient freeze method. <i>Journal of Crystal Growth</i> , <b>2002</b> , 236, 257-260	1.6	17
78	Use of diethylselenide as a less-hazardous source for preparation of CuInSe <sub>2</sub> photo-absorbers by selenization of metal precursors. <i>Journal of Crystal Growth</i> , <b>2002</b> , 243, 404-409	1.6	37
77	Investigation of direct and indirect band gaps of [100]-oriented nearly strain-free FeSi <sub>2</sub> films grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 556-558	3.4	28
76	Exciton spectra of an AlN epitaxial film on (0001) sapphire substrate grown by low-pressure metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 652-654	3.4	63
75	Different pressure coefficients of the light emission in cubic and hexagonal InGa <sub>x</sub> N/GaN quantum wells. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 232-234	3.4	14
74	Band gap energy bowing and residual strain in CuAl(S <sub>x</sub> Se <sub>1-x</sub> ) <sub>2</sub> chalcopyrite semiconductor epilayers grown by low-pressure metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 5909-5914	2.5	3
73	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> , <b>2002</b> , 41, L935-L937	1.4	19
72	Optical nonlinearities and phase relaxation of excitons in GaN. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	18
71	Photoreflectance spectra of a ZnO heteroepitaxial film on the nearly lattice-matched ScAlMgO <sub>4</sub> (0001) substrate grown by laser molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 2860-2862	3.4	52
70	Helicon-wave-excited-plasma sputtering epitaxy of ZnO on sapphire (0001) substrates. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 874-877	2.5	62
69	Excitonic polariton structures in Wurtzite GaN. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 302-303, 268-276	2.8	2
68	Optical and electrical properties of AgIn(SSe) <sub>2</sub> crystals. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 302-303, 349-356	3.5	23

67	Photoluminescence spectra of CuGaSe <sub>2</sub> crystals. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 302-303, 357-363	2.8	11
66	Green to ultraviolet photoluminescence from CuAl <sub>x</sub> Ga <sub>1-x</sub> S <sub>2</sub> chalcopyrite semiconductor heteroepitaxial alloys grown by low-pressure metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2001</b> , 226, 473-480	1.6	8
65	Optical and structural studies in InGaN quantum well structure laser diodes. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2001</b> , 19, 2177		66
64	Experimental Determination of Valence Band Discontinuities at Cu(AI,Ga)(S,Se) <sub>2</sub> /GaAs(001) Heterointerfaces Using Ultraviolet Photoemission Spectroscopy. <i>Japanese Journal of Applied Physics</i> , <b>2001</b> , 40, L428-L430	1.4	23
63	Localized exciton dynamics in strained cubic In <sub>0.1</sub> Ga <sub>0.9</sub> N/GaN multiple quantum wells. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 4319-4321	3-4	72
62	Current-modulated electroluminescence spectroscopy and its application to InGaN single-quantum-well blue and green light-emitting diodes. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 1100-1102	3-4	2
61	High temperature growth of ZnS films on bare Si and transformation of ZnS to ZnO by thermal oxidation. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 616-618	3-4	50
60	Impact of growth polar direction on the optical properties of GaN grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 28-30	3-4	50
59	Structural studies of Cu <sub>2</sub> Te chalcopyrite semiconductor heteroepitaxial films grown by low-pressure metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 5406-5413	2.5	8
58	Localized excitons in an In <sub>0.06</sub> Ga <sub>0.94</sub> N multiple-quantum-well laser diode lased at 400 nm. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 341-343	3-4	20
57	Band gap bowing and exciton localization in strained cubic In <sub>x</sub> Ga <sub>1-x</sub> N films grown on 3C-SiC (001) by rf molecular-beam epitaxy. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3600-3602	3-4	17
56	Study of defects in GaN grown by the two-flow metalorganic chemical vapor deposition technique using monoenergetic positron beams. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 181-186	2.5	80
55	Exciton Spectra of AlN Epitaxial Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 693, 751		
54	Similarities in the Optical Properties of Hexagonal and Cubic InGaN Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 693, 722		
53	Impact of the Growth Polar Direction on the Optical Properties of GaN Films Grown by Metalorganic Vapor Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 639, 1161		
52	Comparison of Optical Properties of GaN/AlGa <sub>N</sub> and InGa <sub>N</sub> /AlGa <sub>N</sub> Single Quantum Wells. <i>Japanese Journal of Applied Physics</i> , <b>2000</b> , 39, 2417-2424	1.4	17
51	An attenuated-total-reflection study on the surface phonon-polariton in GaN. <i>Journal of Physics Condensed Matter</i> , <b>2000</b> , 12, 7041-7044	1.8	24
50	Photoreflectance spectra of excitonic polaritons in GaN substrate prepared by lateral epitaxial overgrowth. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1576-1578	3-4	42

49	Raman scattering from phonon-polaritons in GaN. <i>Physical Review B</i> , <b>2000</b> , 62, 10861-10866	3.3	20
48	Optical properties of CuGaSe <sub>2</sub> and CuAlSe <sub>2</sub> layers epitaxially grown on Cu(In <sub>0.04</sub> Ga <sub>0.96</sub> )Se <sub>2</sub> substrates. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 7294-7302	2.5	17
47	Forward Raman scattering by quasilongitudinal optical phonons in GaN. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 5202-5205	2.5	5
46	Photoluminescence of CuGaS <sub>2</sub> epitaxial layers grown by metalorganic vapor phase epitaxy. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 3793-3799	2.5	27
45	Structural analysis of In <sub>x</sub> Ga <sub>1-x</sub> N single quantum wells by coaxial-impact collision ion scattering spectroscopy. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2512-2514	3.4	8
44	Localized quantum well excitons in InGaN single-quantum-well amber light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2000</b> , 88, 5153-5157	2.5	74
43	Role of Localized Quantum Well Excitons in InGaN Quantum Well Structure Correlated with Microstructural Analysis. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 639, 931		
42	Evidence of localization effects in InGaN single-quantum-well ultraviolet light-emitting diodes. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1671-1673	3.4	51
41	Two-phonon absorption spectra in wurtzite GaN. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 2076-2078	3.4	2
40	Infrared Lattice Absorption in Wurtzite GaN. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L151-L153	1.4	3
39	Optical Properties of an InGaN Active Layer in Ultraviolet Light Emitting Diode. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L975-L977	1.4	5
38	Properties of Quantum Well Excitons in GaN/AlGa <sub>N</sub> and InGa <sub>N</sub> /Ga <sub>N</sub> /AlGa <sub>N</sub> UV, Blue, Green, and Amber Light Emitting Diode Structures. <i>Physica Status Solidi A</i> , <b>1999</b> , 176, 85-90		1
37	Quantum-Confined Stark Effect in an AlGa <sub>N</sub> /Ga <sub>N</sub> /AlGa <sub>N</sub> Single Quantum Well Structure. <i>Japanese Journal of Applied Physics</i> , <b>1999</b> , 38, L914-L916	1.4	129
36	Emission mechanisms of bulk GaN and InGa <sub>N</sub> quantum wells prepared by lateral epitaxial overgrowth. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 1460-1462	3.4	149
35	Spectroscopic Studies in InGa <sub>N</sub> Quantum Wells. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 93-105		9
34	Effective band gap inhomogeneity and piezoelectric field in InGa <sub>N</sub> /Ga <sub>N</sub> multiquantum well structures. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2006-2008	3.4	380
33	Analysis of MBE growth mode for GaN epilayers by RHEED. <i>Journal of Crystal Growth</i> , <b>1998</b> , 189-190, 364-369	1.6	48
32	Exciton localization in InGa <sub>N</sub> quantum well devices. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1998</b> , 16, 2204		205



31	Optical Properties of InGaN/GaN Quantum Wells with Si Doped Barriers. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, L1362-L1364	1.4	33
30	Crystal Growth and Optical Properties of CuAl(SxSe1-x)2Alloys. <i>Japanese Journal of Applied Physics</i> , <b>1997</b> , 36, 6645-6649	1.4	3
29	Electroreflectance of CuInSe <sub>2</sub> Single Crystals. <i>Japanese Journal of Applied Physics</i> , <b>1997</b> , 36, L543-L546	1.4	23
28	Room-temperature near-band-edge photoluminescence from CuInSe <sub>2</sub> heteroepitaxial layers grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 1840-1842	3.4	29
27	Improved quality of CuGaSe <sub>2</sub> and CuAlSe <sub>2</sub> epilayers grown on CuGa <sub>0.96</sub> In <sub>0.04</sub> Se <sub>2</sub> substrates. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 533-535	3.4	11
26	Visible and Ultraviolet Photoluminescence from Cu <sub>1-x</sub> Al <sub>x</sub> Se <sub>2</sub> Chalcopyrite Semiconductors Grown by Metalorganic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>1997</b> , 36, 1703-1714	1.4	54
25	Exciton Spectra of Cubic and Hexagonal GaN Epitaxial Films. <i>Japanese Journal of Applied Physics</i> , <b>1997</b> , 36, 1976-1983	1.4	59
24	Spatially resolved cathodoluminescence spectra of InGaN quantum wells. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 2346-2348	3.4	323
23	Biaxial strain dependence of exciton resonance energies in wurtzite GaN. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 417-424	2.5	215
22	Growth and doping characteristics of ZnSeTe epilayers by MOCVD. <i>Journal of Crystal Growth</i> , <b>1997</b> , 170, 518-522	1.6	17
21	Band-edge photoluminescence of CuGaSe <sub>2</sub> films grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 4318	2.5	35
20	Photoreflectance of Cu-based Cu <sub>1-x</sub> Al <sub>x</sub> Se <sub>2</sub> heteroepitaxial layers grown by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>1996</b> , 79, 2043-2054	2.5	42
19	Raman spectra of CuAlSe <sub>2</sub> heteroepitaxial layers. <i>Journal of Applied Physics</i> , <b>1995</b> , 77, 5470-5472	2.5	9
18	Ultraviolet photoluminescence from CuAlSe <sub>2</sub> heteroepitaxial layers grown by low-pressure metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , <b>1995</b> , 66, 3513-3515	3.4	21
17	Heteroepitaxial Growth of CuGaSe <sub>2</sub> Layers by Low-Pressure Metalorganic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , <b>1995</b> , 34, 3991-3997	1.4	21
16	Low-Pressure Metalorganic Chemical Vapor Deposition of a CuGaSe <sub>2</sub> /CuAlSe <sub>2</sub> Heterostructure. <i>Japanese Journal of Applied Physics</i> , <b>1994</b> , 33, L286-L289	1.4	15
15	Zn-Related Donor-Acceptor Pair Emission in CuAlSe <sub>2</sub> Epitaxial Layers. <i>Japanese Journal of Applied Physics</i> , <b>1994</b> , 33, L345-L347	1.4	11
14	Photoreflectance Study of CuAlSe <sub>2</sub> Heteroepitaxial Layers. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, L167-L169	1.4	24

13	Photoreflectance and Photoluminescence Studies of $\text{CuAl}_x\text{Ga}_{1-x}\text{Se}_2$ Alloys. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, L1304-L1307	1.4	20
12	Excitonic photoluminescence in a $\text{CuAlSe}_2$ chalcopyrite semiconductor grown by low-pressure metalorganic chemical-vapor deposition. <i>Journal of Applied Physics</i> , <b>1993</b> , 74, 6446-6447	2.5	29
11	Low-Pressure Metalorganic Chemical Vapor Deposition of $\text{CuAlSe}_2$ Epitaxial Films. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, 139	1.4	4
10	Photoreflectance Characterization of $\text{CuAlSe}_2$ Heteroepitaxial Layers Grown by Metalorganic Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, 494	1.4	2
9	Preparation and Characterization of $\text{Cu}(\text{Al}, \text{Ga})(\text{S}, \text{Se})_2$ Ternary Alloys. <i>Japanese Journal of Applied Physics</i> , <b>1993</b> , 32, 588	1.4	2
8	Chemical Vapor Deposition of Cu Film on $\text{SiO}_2$ Using Cyclopentadienylcoppertriethylphosphine. <i>Japanese Journal of Applied Physics</i> , <b>1992</b> , 31, L1778-L1780	1.4	8
7	Role of Electron Traps on the Thermal Conversion and Its Suppression for Liquid-Encapsulated Czochralski GaAs Single Crystals. <i>Japanese Journal of Applied Physics</i> , <b>1989</b> , 28, 1750-1755	1.4	2
6	Effects of controlled As pressure annealing on deep levels of liquid-encapsulated Czochralski GaAs single crystals. <i>Journal of Applied Physics</i> , <b>1988</b> , 64, 3987-3993	2.5	21
5	Effect of carbon concentration on the thermal conversion of liquid-encapsulated Czochralski semi-insulating GaAs. <i>Applied Physics Letters</i> , <b>1988</b> , 53, 1054-1055	3.4	14
4	Effect of Dopant Concentration on Oxidation-Induced Stacking Faults in Boron-Doped CZ Silicon. <i>Japanese Journal of Applied Physics</i> , <b>1988</b> , 27, L1543-L1545	1.4	3
3	Effect of carbon concentration on the electrical properties of liquid-encapsulated Czochralski semi-insulating GaAs. <i>Journal of Applied Physics</i> , <b>1987</b> , 62, 4316-4318	2.5	9
2	Nonpolar Nitride Heterostructures and Devices grown by MOCVD 319-355		
1	Effect of Ultra-High-Pressure Annealing on Defect Reactions in Ion-Implanted GaN Studied by Positron Annihilation. <i>Physica Status Solidi (B): Basic Research</i> , 2200183	1.3	1