Jae-Hyun Ryou

List of Publications by Year
in descending order

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208	4,095	136740	161609
papers	citations	32 h-index	54 g-index

212	212	212	4197
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of Quantum-Confined Stark Effect in InGaN-Based Quantum Wells. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1080-1091.	1.9	233
2	Ordered Nanowire Array Blue/Nearâ€UV Light Emitting Diodes. Advanced Materials, 2010, 22, 4749-4753.	11.1	206
3	Improvement of peak quantum efficiency and efficiency droop in III-nitride visible light-emitting diodes with an InAlN electron-blocking layer. Applied Physics Letters, 2010, 96, .	1.5	183
4	New Insight into Niâ€Rich Layered Structure for Nextâ€Generation Li Rechargeable Batteries. Advanced Energy Materials, 2018, 8, 1701788.	10.2	169
5	Barrier effect on hole transport and carrier distribution in InGaNâˆ•GaN multiple quantum well visible light-emitting diodes. Applied Physics Letters, 2008, 93, .	1.5	129
6	Improvement of quantum efficiency by employing active-layer-friendly lattice-matched InAlN electron blocking layer in green light-emitting diodes. Applied Physics Letters, 2010, 96, .	1.5	89
7	Biocompatible and sustainable power supply for self-powered wearable and implantable electronics using III-nitride thin-film-based flexible piezoelectric generator. Nano Energy, 2019, 57, 670-679.	8.2	87
8	Efficiency droop due to electron spill-over and limited hole injection in III-nitride visible light-emitting diodes employing lattice-matched InAlN electron blocking layers. Applied Physics Letters, 2012, 101, .	1.5	80
9	Deep-ultraviolet lasing at 243â€‰nm from photo-pumped AlGaN/AlN heterostructure on AlN substrate. Applied Physics Letters, 2013, 102, .	1.5	77
10	Performance of Deep Ultraviolet GaN Avalanche Photodiodes Grown by MOCVD. IEEE Photonics Technology Letters, 2007, 19, 1744-1746.	1.3	71
11	Electrical characteristics of contacts to thin film N-polar n-type GaN. Applied Physics Letters, 2008, 93, .	1.5	65
12	Low-noise GaN ultraviolet p-i-n photodiodes on GaN substrates. Applied Physics Letters, 2009, 94, .	1.5	65
13	Nanostructured-NiO/Si heterojunction photodetector. Materials Science in Semiconductor Processing, 2017, 71, 29-34.	1.9	61
14	Control of quantum-confined Stark effect in InGaNâˆ•GaN multiple quantum well active region by p-type layer for III-nitride-based visible light emitting diodes. Applied Physics Letters, 2008, 92, .	1.5	60
15	Piezoelectric pressure sensor based on flexible gallium nitride thin film for harsh-environment and high-temperature applications. Sensors and Actuators A: Physical, 2020, 305, 111940.	2.0	57
16	High Durable, Biocompatible, and Flexible Piezoelectric Pulse Sensor Using Singleâ€Crystalline IIIâ€N Thin Film. Advanced Functional Materials, 2019, 29, 1903162.	7.8	56
17	Graded-Index Separate Confinement Heterostructure AlGaN Nanowires: Toward Ultraviolet Laser Diodes Implementation. ACS Photonics, 2018, 5, 3305-3314.	3.2	54
18	Bandgap bowing in BGaN thin films. Applied Physics Letters, 2008, 93, .	1.5	51

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19	High-Output Lead-Free Flexible Piezoelectric Generator Using Single-Crystalline GaN Thin Film. ACS Applied Materials & Interfaces, 2018, 10, 12839-12846.	4.0	51
20	Light-extraction efficiency control in AlGaN-based deep-ultraviolet flip-chip light-emitting diodes: a comparison to InGaN-based visible flip-chip light-emitting diodes. Optics Express, 2015, 23, 20340.	1.7	49
21	Origins of unintentional incorporation of gallium in AlInN layers during epitaxial growth, part I: Growth of AlInN on AlN and effects of prior coating. Journal of Crystal Growth, 2014, 388, 137-142.	0.7	45
22	Distributed Bragg reflectors based on diluted boron-based BAlN alloys for deep ultraviolet optoelectronic applications. Applied Physics Letters, 2012, 100, 051101.	1.5	44
23	Origins of unintentional incorporation of gallium in InAlN layers during epitaxial growth, part II: Effects of underlying layers and growth chamber conditions. Journal of Crystal Growth, 2014, 388, 143-149.	0.7	44
24	Widely tunable mid-infrared quantum cascade lasers using sampled grating reflectors. Optics Express, 2012, 20, 23339.	1.7	42
25	Modulated precursor flow epitaxial growth of AlN layers on native AlN substrates by metal-organic chemical vapor deposition. Applied Physics Letters, 2008, 93, 022103.	1.5	41
26	High performance GaN pin rectifiers grown on free-standing GaN substrates. Electronics Letters, 2006, 42, 1313.	0.5	39
27	Effects of a step-graded AlxGa1â^'xN electron blocking layer in InGaN-based laser diodes. Journal of Applied Physics, 2011, 109, .	1.1	38
28	Al_xGa_{1â^'x}N Ultraviolet Avalanche Photodiodes With Avalanche Gain Greater Than 10^{5}. IEEE Photonics Technology Letters, 2015, 27, 642-645.	1.3	38
29	Monolithic Inorganic ZnO/GaN Semiconductors Heterojunction White Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 3761-3768.	4.0	38
30	Sub-250â€‰nm low-threshold deep-ultraviolet AlGaN-based heterostructure laser employing HfO2/SiO2 dielectric mirrors. Applied Physics Letters, 2013, 103, .	1.5	36
31	Optimization of Fe doping at the regrowth interface of GaN for applications to III-nitride-based heterostructure field-effect transistors. Applied Physics Letters, 2007, 90, 093509.	1.5	35
32	Flexible GaAs solar cells on roll-to-roll processed epitaxial Ge films on metal foils: a route towards low-cost and high-performance IIIâ€“V photovoltaics. Energy and Environmental Science, 2019, 12, 756-766.	15.6	35
33	Design and Analysis of 250-nm AlInN Laser Diodes on AlN Substrates Using Tapered Electron Blocking Layers. IEEE Journal of Quantum Electronics, 2012, 48, 703-711.	1.0	34
34	Compositional instability in strained InGaN epitaxial layers induced by kinetic effects. Journal of Applied Physics, 2011, 110, .	1.1	32
35	Growth and fabrication of high-performance GaN-based ultraviolet avalanche photodiodes. Journal of Crystal Growth, 2008, 310, 5217-5222.	0.7	31
36	Highâ€Performance Flexible Thinâ€Film Transistors Based on Singleâ€Crystalâ€Like Germanium on Glass. Advanced Electronic Materials, 2016, 2, 1600041.	2.6	31

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37	Epitaxial growth and characterization of InAs/GaSb and InAs/InAsSb type-II superlattices on GaSb substrates by metalorganic chemical vapor deposition for long wavelength infrared photodetectors. Journal of Crystal Growth, 2011, 314, 92-96.	0.7	30
38	III-Nitride Deep UV LED Without Electron Blocking Layer. IEEE Photonics Journal, 2019, 11, 1-11.	1.0	30
39	High-Performance Flexible Thin-Film Transistors Based on Single-Crystal-like Silicon Epitaxially Grown on Metal Tape by Roll-to-Roll Continuous Deposition Process. ACS Applied Materials & Interfaces, 2016, 8, 29565-29572.	4.0	28
40	Highlyâ€Sensitive Skinâ€Attachable Eyeâ€Movement Sensor Using Flexible Nonhazardous Piezoelectric Thin Film. Advanced Functional Materials, 2021, 31, 2008242.	7.8	28
41	Geiger-Mode Operation of GaN Avalanche Photodiodes Grown on GaN Substrates. IEEE Photonics Technology Letters, 2009, 21, 1526-1528.	1.3	27
42	Thermal Management and Characterization of High-Power Wide-Bandgap Semiconductor Electronic and Photonic Devices in Automotive Applications. Journal of Electronic Packaging, Transactions of the ASME, 2019, 141, .	1.2	27
43	Blue light emitting diodes grown on freestanding (11-20) a-plane GaN substrates. Applied Physics Letters, 2008, 92, 011123.	1.5	26
44	InAs/GaSb type-II superlattice structures and photodiodes grown by metalorganic chemical vapor deposition. Applied Physics Letters, 2010, 96, 251107.	1.5	26
45	Low resistance Ti/Au contacts to amorphous gallium indium zinc oxides. Applied Physics Letters, 2011, 98, 112107.	1.5	26
46	Strain-effect transistors: Theoretical study on the effects of external strain on III-nitride high-electron-mobility transistors on flexible substrates. Applied Physics Letters, 2015, 107, .	1.5	26
47	High efficiency GaN-based light-emitting diodes fabricated on dielectric mask-embedded structures. Applied Physics Letters, 2009, 95, 011108.	1.5	25
48	Structural and optical characterization of type-II InAs/InAs1â^'xSbx superlattices grown by metalorganic chemical vapor deposition. Applied Physics Letters, 2011, 99, .	1.5	25
49	Threshold voltage control of InAlN/GaN heterostructure field-effect transistors for depletion- and enhancement-mode operation. Applied Physics Letters, 2010, 96, .	1.5	24
50	Optimization of growth conditions for InGaAs/InAlAs/InP quantum cascade lasers by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2011, 316, 75-80.	0.7	24
51	Onset of surface stimulated emission at 260â€‰nm from AlGaN multiple quantum wells. Applied Physics Letters, 2015, 107, .	1.5	24
52	Photonic crystal disk lasers. Optics Letters, 2011, 36, 2704.	1.7	23
53	Comparison of AlGaN pâ€“iâ€“n ultraviolet avalanche photodiodes grown on free-standing GaN and sapphire substrates. Applied Physics Express, 2015, 8, 122202.	1.1	23
54	Nitride-Based Green Light-Emitting Diodes With Various p-Type Layers. Journal of Display Technology, 2007, 3, 126-132.	1.3	22

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55	High-Current-Gain Direct-Growth GaN/InGaN Double Heterojunction Bipolar Transistors. IEEE Transactions on Electron Devices, 2010, 57, 2964-2969.	1.6	22
56	High opto-electronic quality n-type single-crystalline-like GaAs thin films on flexible metal substrates. Journal of Materials Chemistry C, 2017, 5, 7919-7926.	2.7	22
57	Graded-base InGaNâˆ•GaN heterojunction bipolar light-emitting transistors. Applied Physics Letters, 2006, 89, 082108.	1.5	21
58	Al$_{x}$Ga$_{1-x}$N Ultraviolet Avalanche Photodiodes Grown on GaN Substrates. IEEE Photonics Technology Letters, 2007, 19, 1313-1315.	1.3	21
59	Bandgap and band offsets determination of semiconductor heterostructures using three-terminal ballistic carrier spectroscopy. Applied Physics Letters, 2009, 95, .	1.5	21
60	NpN-GaN/InxGa1âˆ’xN/GaN heterojunction bipolar transistor on free-standing GaN substrate. Applied Physics Letters, 2011, 99, .	1.5	21
61	Bendable III-N Visible Light-Emitting Diodes beyond Mechanical Flexibility: Theoretical Study on Quantum Efficiency Improvement and Color Tunability by External Strain. ACS Photonics, 2016, 3, 486-493.	3.2	21
62	Highâ€efficiency flexible IIIâ€V photovoltaic solar cells based on singleâ€crystalâ€like thin films directly grown on metallic tapes. Progress in Photovoltaics: Research and Applications, 2019, 27, 30-36.	4.4	21
63	III-nitride heterostructure field-effect transistors grown on semi-insulating GaN substrate without regrowth interface charge. Applied Physics Letters, 2008, 92, .	1.5	20
64	GaN/InGaN avalanche phototransistors. Applied Physics Express, 2015, 8, 032101.	1.1	20
65	High-Performance Color-Converted Full-Color Micro-LED Arrays. Applied Sciences (Switzerland), 2020, 10, 2112.	1.3	20
66	GaN full-vertical p-i-n rectifiers employing AlGaN:Si conducting buffer layers on n-SiC substrates. Applied Physics Letters, 2006, 88, 193503.	1.5	19
67	The effect of InGaN underlayers on the electronic and optical properties of InGaN/GaN quantum wells. Applied Physics Letters, 2013, 102, .	1.5	19
68	High current gain InGaN/GaN HBTs with 300Â°C operating temperature. Electronics Letters, 2006, 42, 661.	0.5	18
69	Effect of Silicon Doping in the Quantum-Well Barriers on the Electrical and Optical Properties of Visible Green Light-Emitting Diodes. IEEE Photonics Technology Letters, 2008, 20, 1769-1771.	1.3	18
70	Strain-balanced InAs/GaSb type-II superlattice structures and photodiodes grown on InAs substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 2011, 99, .	1.5	18
71	Gratings with an aperiodic basis: single-mode emission in multi-wavelength lasers. New Journal of Physics, 2011, 13, 113023.	1.2	18
72	Working toward high-power GaN/InGaN heterojunction bipolar transistors. Semiconductor Science and Technology, 2013, 28, 074025.	1.0	17

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73	High-power flexible AlGaN/GaN heterostructure field-effect transistors with suppression of negative differential conductance. Applied Physics Letters, 2017, 111, .	1.5	17
74	Output characteristics of thin-film flexible piezoelectric generators: A numerical and experimental investigation. Applied Energy, 2019, 255, 113856.	5.1	16
75	Modulation of high current gain (Î²>49) light-emitting InGaNâˆ•GaN heterojunction bipolar transistors. Applied Physics Letters, 2007, 91, 232114.	1.5	15
76	Design Strategies for InGaN-Based Green Lasers. IEEE Journal of Quantum Electronics, 2010, 46, 238-245.	1.0	15
77	Focus Issue: Optics in LEDs for Lighting. Optics Express, 2011, 19, A897.	1.7	15
78	InP/InAlGaAs light-emitting transistors and transistor lasers with a carbon-doped base layer. Journal of Applied Physics, 2011, 109, 063106.	1.1	15
79	Using Mosaicity to Tune Thermal Transport in Polycrystalline Aluminum Nitride Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 20085-20094.	4.0	15
80	Effects of grain boundaries on conversion efficiencies of single-crystal-like GaAs thin-film solar cells on flexible metal tapes. Solar Energy Materials and Solar Cells, 2019, 199, 122-128.	3.0	15
81	Long-wavelength VCSELs at Honeywell. , 2003, 4994, 222.		14
82	Visible Light-Emitting Diodes With Thin-Film-Flip- Chip-Based Wafer-Level Chip-Scale Package Technology Using Anisotropic Conductive Film Bonding. IEEE Electron Device Letters, 2015, 36, 702-704.	2.2	14
83	Visible Flip-Chip Light-Emitting Diodes on Flexible Ceramic Substrate With Improved Thermal Management. IEEE Electron Device Letters, 2016, 37, 615-617.	2.2	14
84	Atomic-Layer Deposition of Single-Crystalline BeO Epitaxially Grown on GaN Substrates. ACS Applied Materials & Interfaces, 2017, 9, 41973-41979.	4.0	14
85	Atomic-layer deposition of crystalline BeO on SiC. Applied Surface Science, 2019, 469, 634-640.	3.1	14
86	Low on-resistance GaN pin rectifiers grown on 6H-SiC substrates. Electronics Letters, 2007, 43, 366.	0.5	13
87	InAlGaAsâˆ•InP light-emitting transistors operating near 1.55Î¼m. Journal of Applied Physics, 2008, 103, 114505.	1.1	13
88	Carrier transport mechanism of low resistance Ti/Al/Au ohmic contacts to AlInN/GaN heterostructures. Applied Physics Letters, 2013, 102, .	1.5	13
89	Optically pumped AlGaN quantumâ€well lasers at subâ€250 nm grown by MOCVD on AlN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 258-260.	0.8	13
90	Numerical Simulation for Operation of Flexible Thin-Film Transistors With Bending. IEEE Electron Device Letters, 2017, 38, 217-220.	2.2	13

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91	Growth of InGaN HBTs by MOCVD. Journal of Electronic Materials, 2006, 35, 695-700.	1.0	12
92	Hydrogen-related, deeply bound excitons in Mg-doped GaN films. Applied Physics Letters, 2013, 103, 082103.	1.5	12
93	Temperature-Dependent Resonance Energy Transfer from Semiconductor Quantum Wells to Graphene. Nano Letters, 2015, 15, 896-902.	4.5	12
94	Domain epitaxy of crystalline BeO films on GaN and ZnO substrates. Journal of the American Ceramic Society, 2019, 102, 3745-3752.	1.9	12
95	Characteristics of Green Light-Emitting Diodes Using an InGaN:Mg/GaN:Mg Superlattice as p-Type Hole Injection and Contact Layers. Journal of Electronic Materials, 2008, 37, 558-563.	1.0	11
96	Surface Leakage in GaN/InGaN Double Heterojunction Bipolar Transistors. IEEE Electron Device Letters, 2009, 30, 1119-1121.	2.2	11
97	Thin-Film-Flip-Chip LEDs Grown on Si Substrate Using Wafer-Level Chip-Scale Package. IEEE Photonics Technology Letters, 2016, 28, 1956-1959.	1.3	11
98	Flexible deep-ultraviolet light-emitting diodes for significant improvement of quantum efficiencies by external bending. Journal Physics D: Applied Physics, 2018, 51, 105105.	1.3	11
99	Impact of Plasma Electron Flux on Plasma Damageâ€Free Sputtering of Ultrathin Tinâ€Doped Indium Oxide Contact Layer on pâ€GaN for InGaN/GaN Lightâ€Emitting Diodes. Advanced Science, 2018, 5, 1700637.	5.6	11
100	Metal organic chemical vapor deposition of metaphorphic InAsâ€“GaSb superlattices on (001) GaAs substrates for mid-IR photodetector applications. Journal of Crystal Growth, 2006, 287, 545-549.	0.7	10
101	Digitally alloyed modulated precursor flow epitaxial growth of AlxGa1â^'xN layers with AlN and AlyGa1â^'yN monolayers. Journal of Crystal Growth, 2009, 311, 3252-3256.	0.7	10
102	Output power enhancement in AlGaN/GaN heterostructure field-effect transistors with multilevel metallization. Applied Physics Express, 2017, 10, 016502.	1.1	10
103	Highâ€efficiency singleâ€junction pâ€iâ€n GaAs solar cell on rollâ€toâ€roll epiâ€ready flexible metal foils for lowâ€cost photovoltaics. Progress in Photovoltaics: Research and Applications, 2020, 28, 1107-1119.	4.4	10
104	GaN/InGaN heterojunction bipolar transistors with ultraâ€high d.c. power density (>3â€‰MW/cm²). Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 497-500.	0.8	9
105	Direct periodic patterning of GaN-based light-emitting diodes by three-beam interference laser ablation. Applied Physics Letters, 2014, 104, 141105.	1.5	9
106	Inverse-Tapered p-Waveguide for Vertical Hole Transport in High-[Al] AlGaN Emitters. IEEE Photonics Technology Letters, 2015, 27, 1768-1771.	1.3	9
107	BAlN for III-nitride UV light-emitting diodes: undoped electron blocking layer. Journal Physics D: Applied Physics, 2021, 54, 175104.	1.3	9
108	Growth and characterizations of InP self-assembled quantum dots embedded in InAlP grown on GaAs substrates. Journal of Electronic Materials, 2001, 30, 471-476.	1.0	8

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109	Device operation of InGaN heterojunction bipolar transistors with a graded emitter-base design. Applied Physics Letters, 2006, 88, 183501.	1.5	8
110	Epitaxial Growth and Device Design Optimization of Full-Vertical GaN p-i-n Rectifiers. Journal of Electronic Materials, 2007, 36, 353-358.	1.0	8
111	GaN ultraviolet avalanche photodiodes fabricated on freeâ€standing bulk GaN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2290-2292.	0.8	8
112	Control of Zn diffusion in InP/InAlGaAs-based heterojunction bipolar transistors and light emitting transistors. Journal of Crystal Growth, 2008, 310, 4345-4350.	0.7	8
113	Modulated precursor flow epitaxial growth of ternary AlGaN by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2008, 310, 4880-4884.	0.7	8
114	Green lightâ€emitting diodes with pâ€InGaN:Mg grown on c â€plane sapphire and GaN substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 750-753.	0.8	8
115	GaN/InGaN Heterojunction Bipolar Transistors With $f_{T} > hbox{5} hbox{GHz}$. IEEE Electron Device Letters, 2011, 32, 1065-1067.	2.2	8
116	Performance characteristics of InAlGaN laser diodes depending on electron blocking layer and waveguiding layer design grown by metalorganic chemical vapordeposition. Journal of Crystal Growth, 2011, 315, 272-277.	0.7	8
117	Polarization Matching in AlGaN-Based Multiple-Quantum-Well Deep Ultraviolet Laser Diodes on AlN Substrates Using Quaternary AlInGaN Barriers. Journal of Lightwave Technology, 2012, 30, 3017-3025.	2.7	8
118	Lattice vibration modes in type-II superlattice InAs/GaSb with no-common-atom interface and overlapping vibration spectra. Physical Review B, 2015, 91, .	1.1	8
119	Polarization modulation effect of BeO on AlGaN/GaN high-electron-mobility transistors. Applied Physics Letters, 2019, 115, .	1.5	8
120	Surface treatment on the growth surface of semiâ€insulating GaN bulk substrate for IIIâ€nitride heterostructure fieldâ€effect transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1849-1851.	0.8	7
121	Electrical Characteristics of Metal Contacts to Laser-Irradiated N-Polar n-Type GaN. IEEE Electron Device Letters, 2009, 30, 319-321.	2.2	7
122	III-N High-Power Bipolar Transistors. ECS Transactions, 2013, 58, 261-267.	0.3	7
123	Stimulated emission at 257â€‰nm from optically-pumped AlGaN/AlN heterostructure on AlN substrate. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1768-1770.	0.8	7
124	Flexible AlGaInN/GaN Heterostructures for High-Hole-Mobility Transistors. IEEE Electron Device Letters, 2017, 38, 1086-1089.	2.2	7
125	Defect reduction by liquid phase epitaxy of germanium on single-crystalline-like germanium templates on flexible, low-cost metal substrates. CrystEngComm, 2018, 20, 6573-6579.	1.3	7
126	Modulation of the two-dimensional electron gas channel in flexible AlGaN/GaN high-electron-mobility transistors by mechanical bending. Applied Physics Letters, 2020, 116, .	1.5	7

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127	Surface morphology control of green LEDs with p-InGaN layers grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2008, 310, 5166-5169.	0.7	6
128	Erratic dislocations within funnel defects in AlN templates for AlGaN epitaxial layer growth. Applied Physics Letters, 2009, 94, 171912.	1.5	6
129	The structural quality of AlxGa1â^'xN epitaxial layers grown by digitally alloyed modulated precursor epitaxy determined by transmission electron microscopy. Applied Physics Letters, 2009, 94, .	1.5	6
130	Epitaxial Structure Design of a Long-Wavelength InAlGaAs/InP Transistor Laser. IEEE Journal of Quantum Electronics, 2011, 47, 642-650.	1.0	6
131	Double-waveguide quantum cascade laser. Applied Physics Letters, 2012, 100, 033502.	1.5	6
132	Functional hybrid indium-tin-oxide transparent conductive electrodes for light-emitters. Journal of Alloys and Compounds, 2017, 724, 813-819.	2.8	6
133	Mass Transfer of Microscale Light-Emitting Diodes to Unusual Substrates by Spontaneously Formed Vertical Tethers During Chemical Lift-Off. Applied Sciences (Switzerland), 2019, 9, 4243.	1.3	6
134	Flexible single-crystalline GaN substrate by direct deposition of III-N thin films on polycrystalline metal tape. Journal of Materials Chemistry C, 2021, 9, 2243-2251.	2.7	6
135	Actual temperatures of growing surfaces of III-nitride-based materials depending on substrates and forced convection conditions in metal organic chemical vapor deposition. Journal of Applied Physics, 2009, 106, 073512.	1.1	5
136	Effect of Growth Temperature on the Electron-Blocking Performance of InAlN Layers in Green Emitting Diodes. Applied Physics Express, 2010, 3, 031003.	1.1	5
137	Growth and characterization of NpN heterojunction bipolar transistors with In0.03Ga0.97N and In0.05Ga0.95N bases. Journal of Crystal Growth, 2011, 315, 278-282.	0.7	5
138	Effect of Group-III precursors on unintentional gallium incorporation during epitaxial growth of InAlN layers by metalorganic chemical vapor deposition. Journal of Applied Physics, 2015, 118, .	1.1	5
139	Electrical and optical properties of sub-10â€‰nm nickel silicide films for silicon solar cells. Journal Physics D: Applied Physics, 2017, 50, 035102.	1.3	5
140	Deep-Trap States of GaN-Based Light Emitting Diodes Analyzed by Space Charge Limited Conduction Model. Journal of Nanoscience and Nanotechnology, 2017, 17, 7339-7343.	0.9	5
141	Improved Light Output Power of 16â€‰Ã—â€‰16 Pixelated Micro-LEDs for Headlights by Enhancing the Reflectivity and Coverage of the p -Electrode. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700571.	0.8	5
142	Biosensors: High Durable, Biocompatible, and Flexible Piezoelectric Pulse Sensor Using Singleâ€Crystalline IIIâ€N Thin Film (Adv. Funct. Mater. 37/2019). Advanced Functional Materials, 2019, 29, 1970258.	7.8	5
143	Significant improvement of conversion efficiency by passivation of low-angle grain boundaries in flexible low-cost single-crystal-like GaAs thin-film solar cells directly deposited on metal tape. Solar Energy Materials and Solar Cells, 2022, 243, 111791.	3.0	5
144	High-performance GaN and Al x Ga 1-x N ultraviolet avalanche photodiodes grown by MOCVD on bulk III-N substrates. , 2007, 6739, 361.		4

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145	Traveling dipole domains in AlGaN/GaN heterostructures and the direct generation of millimeterâ€wave oscillations. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2285-2287.	0.8	4
146	Incorporation of indium and gallium in atomic layer epitaxy of InGaAs on InP substrates. Journal of Crystal Growth, 2011, 321, 60-64.	0.7	4
147	Manipulation on the optical properties of InGaN/GaN light emitting diodes by adopting InN layer. Journal of Crystal Growth, 2013, 370, 109-113.	0.7	4
148	Theoretical analysis of strategies for improving pâ€type conductivity in wurtzite IIIâ€nitride devices for highâ€power optoâ€and microelectronic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 828-831.	0.8	4
149	Effect of SiO2 hexagonal pattern on the crystal and optical properties of epitaxial lateral overgrown semipolar (11-22) GaN film. Microelectronic Engineering, 2017, 168, 32-36.	1.1	4
150	Passivation Studies on Single-Junction GaAs Thin Film Solar Cells on Flexible Metal Tapes for Low-Cost Photovoltaics. ACS Applied Energy Materials, 2019, 2, 3114-3119.	2.5	4
151	Performance improvement of InGaN-based laser diodes by epitaxial layer structure design. Proceedings of SPIE, 2010, , .	0.8	3
152	Optical Properties of Strain-balanced InAsâ•InAs[sub 1-x]Sb[sub x] Type-II Superlattices. , 2011, , .		3
153	High-performance GaN/InGaN double heterojunction bipolar transistors with power density >240 kW/cm2. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2451-2453.	0.8	3
154	PERFORMANCE ENHANCEMENT OF InGaN-BASED LASER DIODES USING A STEP-GRADED Al_{x}Ga_{1-x}N ELECTRON BLOCKING LAYER. International Journal of High Speed Electronics and Systems, 2011, 20, 515-520.	0.3	3
155	Mode switching in a multi-wavelength distributed feedback quantum cascade laser using an external micro-cavity. Applied Physics Letters, 2014, 104, 051102.	1.5	3
156	Effect of latticeâ€matched InAlGaN electronâ€blocking layer on hole transport and distribution in InGaN/GaN multiple quantum wells of visible lightâ€emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1296-1301.	0.8	3
157	Temperatureâ€dependent thermal conductivity of flexible yttriaâ€stabilized zirconia substrate via 3Ï‰ technique. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700069.	0.8	3
158	Significant texture improvement in single-crystalline-like materials on low-cost flexible metal foils through growth of silver thin films. Journal of Applied Crystallography, 2019, 52, 898-902.	1.9	3
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