

Jianping Liu

List of Publications by Year in descending order

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papers

766
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687363

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38
all docs

38
docs citations

38
times ranked

1004
citing authors

#	ARTICLE	IF	CITATIONS
1	Room-temperature continuous-wave electrically injected InGaN-based laser directly grown on Si. Nature Photonics, 2016, 10, 595-599.	31.4	191
2	Room-temperature continuous-wave electrically pumped InGaN/GaN quantum well blue laser diode directly grown on Si. Light: Science and Applications, 2018, 7, 13.	16.6	101
3	Detection of a Superconducting Phase in a Two-Atom Layer of Hexagonal Ga Film Grown on Semiconducting GaN(0001). Physical Review Letters, 2015, 114, 107003.	7.8	81
4	GaN in different dimensionalities: Properties, synthesis, and applications. Materials Science and Engineering Reports, 2019, 138, 60-84.	31.8	39
5	Room-Temperature Electrically Injected AlGaN-Based near-Ultraviolet Laser Grown on Si. ACS Photonics, 2018, 5, 699-704.	6.6	37
6	Green laser diodes with low threshold current density via interface engineering of InGaN/GaN quantum well active region. Optics Express, 2017, 25, 415.	3.4	34
7	High-power hybrid GaN-based green laser diodes with ITO cladding layer. Photonics Research, 2020, 8, 279.	7.0	33
8	Design and growth of GaN-based blue and green laser diodes. Science China Materials, 2020, 63, 1348-1363.	6.3	32
9	Hillock formation and suppression on c-plane homoepitaxial GaN Layers grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2013, 371, 7-10.	1.5	23
10	GaN-Based Blue Laser Diodes With 2.2 W of Light Output Power Under Continuous-Wave Operation. IEEE Photonics Technology Letters, 2017, 29, 2203-2206.	2.5	22
11	Injection current dependences of electroluminescence transition energy in InGaN/GaN multiple quantum wells light emitting diodes under pulsed current conditions. Journal of Applied Physics, 2015, 118, 033101.	2.5	17
12	Significant increase of quantum efficiency of green InGaN quantum well by realizing step-flow growth. Applied Physics Letters, 2017, 111, 112102.	3.3	15
13	Investigation of InGaN/GaN laser degradation based on luminescence properties. Journal of Applied Physics, 2016, 119, .	2.5	14
14	On-chip Hyperuniform Lasers for Controllable Transitions in Disordered Systems. Laser and Photonics Reviews, 2020, 14, 1800296.	8.7	10
15	Performance comparison of front- and back-illuminated modes of the AlGaN-based p-i-n solar-blind ultraviolet photodetectors. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, 031204.	1.2	9
16	Direct periodic patterning of GaN-based light-emitting diodes by three-beam interference laser ablation. Applied Physics Letters, 2014, 104, 141105.	3.3	9
17	Green laser diodes with low operation voltage obtained by suppressing carbon impurity in AlGaN: Mg cladding layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 245-247.	0.8	9
18	Suppression of substrate mode in GaN-based green laser diodes. Optics Express, 2020, 28, 15497.	3.4	9

#	ARTICLE	IF	CITATIONS
19	Utilization of polarization-inverted AlInGaN or relatively thinner AlGaIn electron blocking layer in InGaIn-based blue-violet laser diodes. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 011209.	1.2	8
20	Green Vertical-Cavity Surface-Emitting Lasers Based on Combination of Blue-Emitting Quantum Wells and Cavity-Enhanced Recombination. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 4401-4406.	3.0	8
21	Effects of Lateral Optical Confinement In GaN VCSELs With Double Dielectric DBRs. <i>IEEE Photonics Journal</i> , 2020, 12, 1-8.	2.0	8
22	Greatly suppressed potential inhomogeneity and performance improvement of c-plane InGaIn green laser diodes. <i>Science China Materials</i> , 2022, 65, 543-546.	6.3	8
23	Asymmetrical quantum well degradation of InGaIn/GaN blue laser diodes characterized by photoluminescence. <i>Applied Physics Letters</i> , 2017, 111, 212102.	3.3	7
24	Enhanced temperature characteristic of InGaIn/GaN laser diodes with uniform multiple quantum wells. <i>Semiconductor Science and Technology</i> , 2015, 30, 125015.	2.0	6
25	Multiwavelength GaIn-Based Surface-Emitting Lasers and Their Design Principles. <i>Annalen Der Physik</i> , 2020, 532, 1900308.	2.4	5
26	Effect of Graded-Indium-Content Superlattice on the Optical and Structural Properties of Yellow-Emitting InGaIn/GaN Quantum Wells. <i>Materials</i> , 2021, 14, 1877.	2.9	5
27	Characteristics of InGaIn-based superluminescent diodes with one-sided oblique cavity facet. <i>Science Bulletin</i> , 2014, 59, 1903-1906.	1.7	4
28	Influence of residual carbon impurities in i-GaN layer on the performance of GaIn-based p-i-n photodetectors. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016, 34, 011204.	1.2	4
29	Optimization of the cavity facet coating in high power GaIn-based semiconductor laser diodes. <i>Science China Technological Sciences</i> , 2012, 55, 883-887.	4.0	3
30	Catastrophic Degradation of InGaIn/GaN Blue Laser Diodes. <i>IEEE Transactions on Device and Materials Reliability</i> , 2016, 16, 638-641.	2.0	3
31	Carrier recombination dynamics in green InGaIn-LEDs with quantum-dot-like structures. <i>Journal of Materials Science</i> , 2021, 56, 1481-1491.	3.7	3
32	Growth Behaviors of GaIn on Stripes of Patterned c-Plane GaIn Substrate. <i>Nanomaterials</i> , 2022, 12, 478.	4.1	3
33	The Significant Effect of Carbon and Oxygen Contaminants at Pd/p-GaN Interface on Its Ohmic Contact Characteristics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000603.	1.8	2
34	Investigation of breakdown mechanism during field emission process of AlN thin film microscopic cold cathode. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016, 34, 012201.	1.2	1
35	Polarization relaxation in InGaIn/(In)GaIn multiple quantum wells. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCB12.	1.5	1
36	High power GaIn-based blue superluminescent diodes with low spectral modulation. <i>AIP Advances</i> , 2021, 11, .	1.3	1

#	ARTICLE	IF	CITATIONS
37	Room temperature continuous wave lasing of GaN-based green vertical-cavity surface-emitting lasers. , 2019, , .		1
38	Strain-Related Degradation of GaN-Based Blue Laser Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-5.	2.9	0