Taiping Lu

List of Publications by Year
in descending order

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39 papers	749 citations	566801 15 h-index	525886 27 g-index
39 all docs	39 docs citations	39 times ranked	994 citing authors

#	Article	IF	Citations
1	The formation of island-shaped morphology on the surface of InGaN/GaN QWs and the enhancement of carrier localization effect caused by high-density V-shaped pits. Materials Science in Semiconductor Processing, 2021, 131, 105848.	1.9	4
2	Improving the internal quantum efficiency of QD/QW hybrid structures by increasing the GaN barrier thickness. RSC Advances, 2020, 10, 41443-41452.	1.7	2
3	Realization of Ultrahigh Quality InGaN Platelets to be Used as Relaxed Templates for Red Micro-LEDs. ACS Applied Materials & Interfaces, 2020, 12, 17845-17851.	4.0	24
4	Facile Preparation of Stable Solid-State Carbon Quantum Dots with Multi-Peak Emission. Nanomaterials, 2020, 10, 303.	1.9	23
5	InGaN Platelets: Synthesis and Applications toward Green and Red Light-Emitting Diodes. Nano Letters, 2019, 19, 2832-2839.	4.5	34
6	Effect of GaN Barrier Layer Thickness on Morphology and Optical Properties of Multilayer InGaN Quantum Dots. , 2018, , .		0
7	Effect of small flow hydrogen treatment at the upper well/barrier interface on the properties of InGaN/GaN multiple quantum wells. Superlattices and Microstructures, 2017, 107, 293-298.	1.4	6
8	Surface Morphology Evolution Mechanisms of InGaN/GaN Multiple Quantum Wells with Mixture N2/H2-Grown GaN Barrier. Nanoscale Research Letters, 2017, 12, 354.	3.1	13
9	Effect of hydrogen treatment temperature on the properties of InGaN/GaN multiple quantum wells. Nanoscale Research Letters, 2017, 12, 321.	3.1	20
10	Advantages of InGaN/GaN multiple quantum wells with two-step grown low temperature GaN cap layers. Superlattices and Microstructures, 2017, 111, 960-965.	1.4	3
11	Origin of huge photoluminescence efficiency improvement in InGaN/GaN multiple quantum wells with low-temperature GaN cap layer grown in N₂/H₂mixture gas. Applied Physics Express, 2017, 10, 061004.	1.1	13
12	Effect of light Si doping on the properties of GaN. Physica B: Condensed Matter, 2016, 485, 1-5.	1.3	1
13	Effect of potential barrier height on the carrier transport in InGaAs/GaAsP multi-quantum wells and photoelectric properties of laser diode. Physical Chemistry Chemical Physics, 2016, 18, 6901-6912.	1.3	15
14	Influence of substrate misorientation on the photoluminescence and structural properties of InGaAs/GaAsP multiple quantum wells. Nanoscale, 2016, 8, 6043-6056.	2.8	17
15	Realization of high-luminous-efficiency InGaN light-emitting diodes in the â€œgreen gapâ€•range. Scientific Reports, 2015, 5, 10883.	1.6	96
16	Investigation of temperature-dependent photoluminescence in multi-quantum wells. Scientific Reports, 2015, 5, 12718.	1.6	67
17	The evolution of a GaN/sapphire interface with different nucleation layer thickness during two-step growth and its influence on the bulk GaN crystal quality. RSC Advances, 2015, 5, 51201-51207.	1.7	23
18	A study of 2DEG properties in AlGaN/GaN heterostructure using GaN/AlN superlattice as barrier layers grown by MOCVD. Applied Physics A: Materials Science and Processing, 2015, 118, 1453-1457.	1.1	5

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19	Effect of interface nucleation time of the GaN nucleation layer on the crystal quality of GaN film. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 127305.	0.2	2
20	Improved Photoluminescence in InGaN/GaN Strained Quantum Wells. Chinese Physics Letters, 2014, 31, 076101.	1.3	4
21	Enhancing the quantum efficiency of InGaN yellow-green light-emitting diodes by growth interruption. Applied Physics Letters, 2014, 105, .	1.5	41
22	Modulating emission intensity of GaN-based green light emitting diodes on c-plane sapphire. Applied Physics Letters, 2014, 104, .	1.5	8
23	Improvement of light power and efficiency droop in GaN-based LEDs using graded InGaN hole reservoir layer. Applied Physics A: Materials Science and Processing, 2014, 114, 1055-1059.	1.1	8
24	Effect of Stair-Case Electron Blocking Layer on the Performance of Blue InGaN Based LEDs. Journal of Display Technology, 2014, 10, 146-150.	1.3	5
25	Temperature-dependent photoluminescence in light-emitting diodes. Scientific Reports, 2014, 4, 6131.	1.6	122
26	The Influence of Graded AlGaN Buffer Thickness for Crack-Free GaN on Si(111) Substrates by using MOCVD. Chinese Physics Letters, 2013, 30, 028101.	1.3	8
27	Investigation of GaN-based light-emitting diodes using a p-GaN/i-InGaN short-period superlattice structure as last quantum barrier. Science China Technological Sciences, 2013, 56, 98-102.	2.0	7
28	Effect of In x Ga 1â˜' x N â€œcontinuously graded" buffer layer on InGaN epilayer grown by metalorganic chemical vapor deposition. Chinese Physics B, 2013, 22, 106106.	0.7	0
29	Influence of Si doping on the structural and optical properties of InGaN epilayers. Chinese Physics B, 2013, 22, 106803.	0.7	1
30	Efficiency enhancement of InGaN based blue light emitting diodes with InGaN/GaN multilayer barriers. Chinese Physics B, 2012, 21, 118502.	0.7	12
31	Advantages of GaN based light-emitting diodes with a p-InGaN hole reservoir layer. Applied Physics Letters, 2012, 100, .	1.5	74
32	Simulation study of blue InGaN multiple quantum well light-emitting diodes with different hole injection layers. Chinese Physics B, 2012, 21, 068506.	0.7	17
33	Enhanced Performance of Blue Light-Emitting Diodes With InGaN/GaN Superlattice as Hole Gathering Layer. IEEE Photonics Technology Letters, 2012, 24, 1239-1241.	1.3	21
34	Advantage of dual wavelength light-emitting diodes with dip-shaped quantum wells. Science Bulletin, 2012, 57, 2562-2566.	1.7	1
35	Study of Blue InGaN Multiple Quantum wells Light-emitting Diodes with P-type Quantum Barriers. , 2012, , .		0
36	Effect of the thickness of undoped GaN interlayers between multiple quantum wells and the p-doped layer on the performance of GaN light-emitting diodes. Optics Express, 2011, 19, 18319.	1.7	11

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37	Influence of the Quality of AlN Buffer Layer on the Quality of GaN Epitaxial Layer on Silicon Substrate. Advanced Materials Research, 2011, 306-307, 201-205.	0.3	0
38	Blue InGaN light-emitting diodes with dip-shaped quantum wells. Chinese Physics B, 2011, 20, 108504.	0.7	17
39	The advantage of blue InGaN multiple quantum wells light-emitting diodes with p-AlInN electron blocking layer. Chinese Physics B, 2011, 20, 098503.	0.7	24