Shengjun Zhou

List of Publications by Year
in descending order

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88 papers	1,959 citations	279487 23 h-index	276539 41 g-index
95 all docs	95 docs citations	95 times ranked	1105 citing authors

#	Article	IF	Citations
1	Polarized laser-induced plasmonic welding of copper-gold heterogeneous nanojunction for glucose sensor. Optics and Lasers in Engineering, 2022, 151, 106904.	2.0	1
2	Polarization-doped quantum wells with graded Al-composition for highly efficient deep ultraviolet light-emitting diodes. Superlattices and Microstructures, 2022, 163, 107150.	1.4	5
3	Application of patterned sapphire substrate for III-nitride light-emitting diodes. Nanoscale, 2022, 14, 4887-4907.	2.8	56
4	InGaN quantum well with gradually varying indium content for high-efficiency GaN-based green light-emitting diodes. Optics Letters, 2022, 47, 1291.	1.7	49
5	Performance enhancement of ultraviolet light-emitting diodes by manipulating Al composition of InGaN/AlGaN superlattice strain release layer. Journal of Applied Physics, 2022, 131, .	1.1	2
6	Atomistic Insights into Aluminum Doping Effect on Surface Roughness of Deposited Ultra-Thin Silver Films. Nanomaterials, 2021, 11, 158.	1.9	6
7	Understanding the plasmon-enhanced photothermal effect of a polarized laser on metal nanowires. Applied Optics, 2021, 60, 2783.	0.9	1
8	Rational construction of staggered InGaN quantum wells for efficient yellow light-emitting diodes. Applied Physics Letters, 2021, 118, .	1.5	67
9	Strain management and AlN crystal quality improvement with an alternating V/III ratio AlN superlattice. Applied Physics Letters, 2021, 118, .	1.5	19
10	High-performance AlGaN-based deep ultraviolet light-emitting diodes with different types of InAlGaN/AlGaN electron blocking layer. Japanese Journal of Applied Physics, 2021, 60, 092001.	0.8	10
11	Toward efficient long-wavelength III-nitride emitters using a hybrid nucleation layer. Optics Express, 2021, 29, 27404.	1.7	5
12	Stacked GaN/AlN last quantum barrier for high-efficiency InGaN-based green light-emitting diodes. Optics Letters, 2021, 46, 4593.	1.7	12
13	High efficiency electron-blocking-layer-free deep ultraviolet LEDs with graded Al-content AlGaN insertion layer. Superlattices and Microstructures, 2021, 158, 107020.	1.4	12
14	Rational Superlattice Electron Blocking Layer Design for Boosting the Quantum Efficiency of 371 nm Ultraviolet Light-Emitting Diodes. IEEE Transactions on Electron Devices, 2021, 68, 6255-6261.	1.6	6
15	Welding deformations of welded joints between 1D Ag nanowire connectors and 3D substrates: a molecular dynamics study. Japanese Journal of Applied Physics, 2021, 60, 015004.	0.8	2
16	Enhanced Optoelectronic Performance of Yellow Light-Emitting Diodes Grown on InGaN/GaN Pre-Well Structure. Nanomaterials, 2021, 11, 3231.	1.9	12
17	Enhanced performance of GaN-based visible flip-chip mini-LEDs with highly reflective full-angle distributed Bragg reflectors. Optics Express, 2021, 29, 42276.	1.7	9
18	Boosted ultraviolet electroluminescence of InGaN/AlGaN quantum structures grown on high-index contrast patterned sapphire with silica array. Nano Energy, 2020, 69, 104427.	8.2	150

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19	Length effects on tensile behavior of Au-Ag heterostructured nanowires with the load on different ends: A molecular dynamics study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126929.	0.9	4
20	Optical Characterization of GaN-Based Vertical Blue Light-Emitting Diodes on P-Type Silicon Substrate. Crystals, 2020, 10, 621.	1.0	4
21	Growth of high-quality AlN films on sapphire substrate by introducing voids through growth-mode modification. Applied Surface Science, 2020, 518, 146218.	3.1	43
22	Light Extraction Efficiency Optimization of AlGaN-Based Deep-Ultraviolet Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2020, 9, 046002.	0.9	13
23	Scattering force and heating effect in laser-induced plasmonic welding of silver nanowire junctions. Applied Optics, 2020, 59, 2186.	0.9	5
24	Strategically constructed patterned sapphire with silica array to boost substrate performance in GaN-based flip-chip visible light-emitting diodes. Optics Express, 2020, 28, 38444.	1.7	12
25	Atomic-scale structural evolution and welding deformations of laser welded joints in Ag nanowire connectors on homogeneous substrates. Japanese Journal of Applied Physics, 2020, 59, 115002.	0.8	3
26	High-Power GaN-Based Vertical Light-Emitting Diodes on 4-Inch Silicon Substrate. Nanomaterials, 2019, 9, 1178.	1.9	12
27	High-Performance Green Flip-Chip LEDs with Double-Layer Electrode and Hybrid Reflector. ECS Journal of Solid State Science and Technology, 2019, 8, Q153-Q157.	0.9	5
28	Insights Into the Influence of Sidewall Morphology on the Light Extraction Efficiency of Mini-LEDs. IEEE Photonics Journal, 2019, 11, 1-7.	1.0	8
29	Fabrication of Dynamic Holograms on Polymer Surface by Direct Laser Writing for High-Security Anti-Counterfeit Applications. IEEE Access, 2019, 7, 142926-142933.	2.6	8
30	Enhanced Light Extraction of Flip-Chip Mini-LEDs with Prism-Structured Sidewall. Nanomaterials, 2019, 9, 319.	1.9	39
31	Effect of strain relaxation on performance of InGaN/GaN green LEDs grown on 4-inch sapphire substrate with sputtered AlN nucleation layer. Scientific Reports, 2019, 9, 3447.	1.6	42
32	Revealing the Role of Sidewall Orientation in Wet Chemical Etching of GaN-Based Ultraviolet Light-Emitting Diodes. Nanomaterials, 2019, 9, 365.	1.9	16
33	Improvement in Light Output of Ultraviolet Light-Emitting Diodes with Patterned Double-Layer ITO by Laser Direct Writing. Nanomaterials, 2019, 9, 203.	1.9	18
34	Heteroepitaxial Growth of High-Quality and Crack-Free AlN Film on Sapphire Substrate with Nanometer-Scale-Thick AlN Nucleation Layer for AlGaN-Based Deep Ultraviolet Light-Emitting Diodes. Nanomaterials, 2019, 9, 1634.	1.9	12
35	Light Extraction Analysis of AlGaInP Based Red and GaN Based Blue/Green Flip-Chip Micro-LEDs Using the Monte Carlo Ray Tracing Method. Micromachines, 2019, 10, 860.	1.4	15
36	High-efficiency GaN-based LED with patterned SiO2 current blocking layer deposited on patterned ITO. Optics and Laser Technology, 2019, 109, 627-632.	2.2	17

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37	High quality GaN buffer layer by isoelectronic doping and its application to 365â€¯nm InGaN/AlGaN ultraviolet light-emitting diodes. Applied Surface Science, 2019, 471, 231-238.	3.1	76
38	Highly efficient GaN-based high-power flip-chip light-emitting diodes. Optics Express, 2019, 27, A669.	1.7	176
39	High-power and reliable GaN-based vertical light-emitting diodes on 4-inch silicon substrate. Optics Express, 2019, 27, A1506.	1.7	21
40	Nanoscale Ni/Au wire grids as transparent conductive electrodes in ultraviolet light-emitting diodes by laser direct writing. Optics and Laser Technology, 2018, 104, 112-117.	2.2	23
41	Reverse leakage current characteristics of InGaN/GaN multiple quantum well ultraviolet/blue/green light-emitting diodes. Japanese Journal of Applied Physics, 2018, 57, 051003.	0.8	22
42	Comparative experimental and simulation studies of high-power AlGaN-based 353 nm ultraviolet flip-chip and top-emitting LEDs. Japanese Journal of Applied Physics, 2018, 57, 031001.	0.8	15
43	A Comparative Study of GaNâ€Based Direct Current and Alternating Current High Voltage Lightâ€Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700554.	0.8	5
44	Effect of Dielectric Distributed Bragg Reflector on Electrical and Optical Properties of GaN-Based Flip-Chip Light-Emitting Diodes. Micromachines, 2018, 9, 650.	1.4	16
45	The effect of nanometre-scale V-pits on electronic and optical properties and efficiency droop of GaN-based green light-emitting diodes. Scientific Reports, 2018, 8, 11053.	1.6	64
46	An InGaN/GaN Superlattice to Enhance the Performance of Green LEDs: Exploring the Role of V-Pits. Nanomaterials, 2018, 8, 450.	1.9	26
47	Comparative Study of Highly Reflective ITO/DBR and Ni/Ag ohmic Contacts for GaN-Based Flip-Chip Light-Emitting Diodes. ECS Journal of Solid State Science and Technology, 2018, 7, Q116-Q122.	0.9	9
48	Influence of V-shaped Pits on Hole Current Distribution in GaN-based Green LED. Chinese Journal of Luminescence, 2018, 39, 674-680.	0.2	1
49	Effect of Vâ€pits embedded InGaN/GaN superlattices on optical and electrical properties of GaNâ€based green lightâ€emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600782.	0.8	28
50	GaN-based flip-chip LEDs with highly reflective ITO/DBR p-type and via hole-based n-type contacts for enhanced current spreading and light extraction. Optics and Laser Technology, 2017, 92, 95-100.	2.2	38
51	Improvement of luster consistency between the p-Pad and the n-Pad of GaN-based light-emitting diodes via the under-etching process. Journal of the Korean Physical Society, 2017, 70, 765-770.	0.3	2
52	Effects of GaN/AlGaN/Sputtered AlN nucleation layers on performance of GaN-based ultraviolet light-emitting diodes. Scientific Reports, 2017, 7, 44627.	1.6	92
53	Comparative study of GaN-based ultraviolet LEDs grown on different-sized patterned sapphire substrates with sputtered AlN nucleation layer. Japanese Journal of Applied Physics, 2017, 56, 111001.	0.8	37
54	Effect of ring-shaped SiO2 current blocking layer thickness on the external quantum efficiency of high power light-emitting diodes. Optics and Laser Technology, 2017, 97, 137-143.	2.2	4

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55	Numerical and experimental investigation of GaN-based flip-chip light-emitting diodes with highly reflective Ag/TiW and ITO/DBR Ohmic contacts. Optics Express, 2017, 25, 26615.	1.7	72
56	Reflectance bandwidth and efficiency improvement of light-emitting diodes with double-distributed Bragg reflector. Applied Optics, 2017, 56, 4375.	2.1	32
57	Numerical simulation and experimental investigation of GaN-based flip-chip LEDs and top-emitting LEDs. Applied Optics, 2017, 56, 9502.	0.9	18
58	Effect of high-temperature/current stress on the forward tunneling current of InGaN/GaN high-power blue-light-emitting diodes. Japanese Journal of Applied Physics, 2017, 56, 081001.	0.8	9
59	Effect of Interdigitated SiO2 Current Blocking Layer on External Quantum Efficiency of High Power LEDs. Chinese Journal of Luminescence, 2017, 38, 786-792.	0.2	2
60	Highly efficient and reliable high power InGaN/GaN LEDs with 3D patterned stepâ€like ITO and wavy sidewalls. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1181-1186.	0.8	20
61	Temperature monitoring of phosphor/silicone mixture in multichip-on board packaged light-emitting diodes with Bragg grating-based sensor. , 2016, , .		0
62	High power InGaN/GaN flip-chip LEDs with via-hole-based two-level metallization electrodes. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3150-3156.	0.8	22
63	Effect of reverse leakage current on the reliability of InGaN/GaN high power LEDs. , 2016, , .		2
64	Effect of profile and size of isolation trench on the optical and electrical performance of GaN-based high-voltage LEDs. Applied Surface Science, 2016, 366, 299-303.	3.1	8
65	Highly efficient and reliable high power LEDs with patterned sapphire substrate and strip-shaped distributed current blocking layer. Applied Surface Science, 2015, 355, 1013-1019.	3.1	72
66	Enhanced luminous efficiency of phosphor-converted LEDs by using back reflector to increase reflectivity for yellow light. Applied Optics, 2014, 53, 8104.	2.1	13
67	Improved light output power of LEDs with embedded air voids structure and SiO2 current blocking layer. Applied Surface Science, 2014, 305, 252-258.	3.1	20
68	Enhancement in light output power of LEDs with reflective current blocking layer and backside hybrid reflector. Science China Technological Sciences, 2013, 56, 1544-1549.	2.0	3
69	Novel design and reliability assessment of a 3D DRAM stacking based on Cu-Sn micro-bump bonding and TSV interconnection technology. , 2013, , .		2
70	Effects of ITO Pattern on the Electrical and Optical Characteristics of LEDs. ECS Journal of Solid State Science and Technology, 2013, 2, R24-R28.	0.9	3
71	High power GaN-based LEDs with low optical loss electrode structure. Optics and Laser Technology, 2013, 54, 321-325.	2.2	21
72	Enhancement in light extraction of LEDs with SiO2 current blocking layer deposited on naturally textured p-GaN surface. Optics and Laser Technology, 2013, 47, 127-130.	2.2	15

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73	Effects of current crowding on light extraction efficiency of conventional GaN-based light-emitting diodes. Optics Express, 2013, 21, 25381.	1.7	28
74	Integrated wafer thinning process with TSV electroplating for 3D stacking. , 2012, , .		3
75	Improved light extraction efficiency of GaN-based LEDs with patterned sapphire substrate and patterned ITO. Optics and Laser Technology, 2012, 44, 2302-2305.	2.2	42
76	In situ measurement and binning system of LED for improved color consistency. , 2011, , .		0
77	Several co-design issues using DfX for solid state lighting. , 2011, , .		0
78	Optimized ICP etching process for fabrication of oblique GaN sidewall and its application in LED. Applied Physics A: Materials Science and Processing, 2011, 105, 369-377.	1.1	20
79	Dynamic junction temperature measurement for high power light emitting diodes. Review of Scientific Instruments, 2011, 82, 084904.	0.6	34
80	Integrated process for silicon wafer thinning. , 2011, , .		9
81	Expert advisor for integrated virtual manufacturing and reliability for TSV/SiP based modules. , 2011, , .		1
82	A novel design of handling system for silicon wafer thinning. , 2011, , .		5
83	Dry etching characteristics of GaN using Cl2/BCl3 inductively coupled plasmas. Applied Surface Science, 2010, 257, 905-910.	3.1	48
84	Evaluation of GaN-based blue light emitting diodes based on temperature/humidity accelerated tests. , 2010, , .		3
85	Through silicon via-hole-based thin-film light emitting diodes. , 2010, , .		1
86	Transient measurement of light-emitting diode characteristic parameters for production lines. Review of Scientific Instruments, 2009, 80, 095102.	0.6	20
87	Study on sapphire removal for thin-film LEDs fabrication using CMP and dry etching. Applied Surface Science, 2009, 255, 9469-9473.	3.1	53
88	Integration of GaN thin film and dissimilar substrate material by Au-Sn wafer bonding and CMP. , 2009, , .		0