

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.

82 papers	1,552 citations	18 h-index	38 g-index
93 ext. papers	1,810 ext. citations	3.9 avg, IF	4.35 L-index

#	Paper	IF	Citations
82	Compact GaN-based optical inclinometer.. <i>Optics Letters</i> , <b>2022</b> , 47, 1238-1241	3	
81	Optimization of the dynamic light source considering human age effect on visual and non-visual performances. <i>Optics and Laser Technology</i> , <b>2022</b> , 145, 107463	4.2	3
80	Investigation of Modulation Bandwidth of InGaN Green Micro-LEDs by Varying Quantum Barrier Thickness. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-8	2.9	4
79	A Data-Mining-Assisted Design of Structural Colors on Diamond Metasurfaces. <i>Advanced Photonics Research</i> , <b>2022</b> , 3, 2270008	1.9	
78	The In-Plane-Two-Folders Symmetric a-Plane AlN Epitaxy on r-Plane Sapphire Substrate. <i>Symmetry</i> , <b>2022</b> , 14, 573	2.7	0
77	1.7-kV Vertical GaN-on-GaN Schottky Barrier Diodes With Helium-Implanted Edge Termination. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 1938-1944	2.9	2
76	AlGaIn/GaN Heterostructure Schottky Barrier Diodes with Graded Barrier Layer. <i>Advances in Condensed Matter Physics</i> , <b>2022</b> , 2022, 1-7	1	
75	Deep ultraviolet micro-LEDs exhibiting high output power and high modulation bandwidth simultaneously.. <i>Advanced Materials</i> , <b>2022</b> , e2109765	24	8
74	Ultra-thin AlGaIn/GaN HFET with a high breakdown voltage on sapphire substrates. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 252101	3.4	1
73	Performance improvement of InGaIn LEDs by using strain compensated last quantum barrier and electron blocking layer. <i>Optik</i> , <b>2021</b> , 248, 168216	2.5	0
72	High-Performance MoS Photodetectors Prepared Using a Patterned Gallium Nitride Substrate. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 15820-15826	9.5	11
71	Investigation on many-body effects in micro-LEDs under ultra-high injection levels. <i>Optics Express</i> , <b>2021</b> , 29, 13219-13230	3.3	2
70	Fabrication of 2-Inch Free-Standing GaN Substrate on Sapphire With a Combined Buffer Layer by HVPE. <i>Frontiers in Chemistry</i> , <b>2021</b> , 9, 671720	5	0
69	Structure and luminescence of a-plane GaN on r-plane sapphire substrate modified by Si implantation*. <i>Chinese Physics B</i> , <b>2021</b> , 30, 056104	1.2	
68	Silicon nitride stress liner impacts on MoS2 photodetectors. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 183106.5	6.5	0
67	The effects of dynamic daylight-like light on the rhythm, cognition, and mood of irregular shift workers in closed environment. <i>Scientific Reports</i> , <b>2021</b> , 11, 13059	4.9	3
66	The Effect of Nanometer-Scale V-Pit Layer on the Carrier Recombination Mechanisms and Efficiency Droop of GaN-Based Green Light-Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2021</b> , 218, 2100070	1.6	0

65	Low blue light hazard for tunable white light emitting diode with high color fidelity and circadian performances. <i>Optics and Laser Technology</i> , <b>2021</b> , 135, 106709	4.2	6
64	Enhanced light extraction efficiency of an LED package by a surface-mounted amorphous photonic structure. <i>Optics Express</i> , <b>2021</b> , 29, 31594-31606	3.3	1
63	Multi-channel AlGaN/GaN Schottky barrier diodes with a half through-hole. <i>Materials Science in Semiconductor Processing</i> , <b>2021</b> , 133, 105934	4.3	0
62	Four-inch high quality crack-free AlN layer grown on a high-temperature annealed AlN template by MOCVD. <i>Journal of Semiconductors</i> , <b>2021</b> , 42, 122804	2.3	4
61	A Novel Nanorod Self-Assembled WOODS Spherical Structure: Preparation and Flexible Gas Sensor. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2020</b> , 20, 4746-4752	1.3	1
60	Study on Electron-Induced Surface Plasmon Coupling with Quantum Well Using a Perturbation Method. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	2
59	3D-Ising critical behavior in antiperovskite-type ferromagneticlike Mn <sub>3</sub> GaN. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 073903	2.5	
58	A review of key technologies for epitaxy and chip process of micro light-emitting diodes in display application. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2020</b> , 69, 198501	0.6	1
57	Fabrication of a thermostable Ga-face GaN template on a molybdenum substrate via layer transfer. <i>Optical Materials Express</i> , <b>2020</b> , 10, 2447	2.6	0
56	Investigation on entraining and enhancing human circadian rhythm in closed environments using daylight-like LED mixed lighting. <i>Science of the Total Environment</i> , <b>2020</b> , 732, 139334	10.2	11
55	Compact GaN-Based Photonic Chip for In Situ Real-Time Monitoring of Low Water Content in Ethanol. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 3502-3507	4	
54	Operating behavior of micro-LEDs on a GaN substrate at ultrahigh injection current densities. <i>Optics Express</i> , <b>2019</b> , 27, A1146-A1155	3.3	11
53	Tunable LED Lighting With Five Channels of RGCWW for High Circadian and Visual Performances. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-12	1.8	12
52	Investigation on strain relaxation distribution in GaN-based LEDs by Kelvin probe force microscopy and micro-photoluminescence. <i>Optics Express</i> , <b>2018</b> , 26, 5265-5274	3.3	11
51	Effect of dipole polarization orientation on surface plasmon coupling with green emitting quantum wells by cathodoluminescence. <i>RSC Advances</i> , <b>2018</b> , 8, 16370-16377	3.7	1
50	The influence of V/III ratio on GaN grown on patterned sapphire substrate with low temperature AlN buffer layer by hydride vapor phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2018</b> , 500, 85-90	1.6	3
49	Improving device performance of perovskite solar cells by micro/nanoscale composite mesoporous TiO <sub>2</sub> . <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 02CE01	1.4	1
48	Polarization-resolved electroluminescence study of InGaN/GaN dot-in-a-wire light-emitting diodes grown by molecular beam epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2015</b> , 212, 941-946	1.6	9

47	Ultralow-threshold electrically injected AlGaIn nanowire ultraviolet lasers on Si operating at low temperature. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 140-4	28.7	210
46	The Influence of InGaIn Interlayer on the Performance of InGaIn/GaN Quantum-Well-Based LEDs at High Injections. <i>Chinese Physics Letters</i> , <b>2015</b> , 32, 027802	1.8	
45	High-power phosphor-free InGaIn/AlGaIn dot-in-a-wire core-shell white light-emitting diodes <b>2015</b> ,		1
44	Impact of nanowire geometry on the carrier transport in GaIn/InGaIn axial nanowire light-emitting diodes. <i>Journal of Engineering</i> , <b>2015</b> , 2015, 299-301	0.7	1
43	Engineering the carrier dynamics of InGaIn nanowire white light-emitting diodes by distributed p-AlGaIn electron blocking layers. <i>Scientific Reports</i> , <b>2015</b> , 5, 7744	4.9	74
42	Aluminum nitride nanowire light emitting diodes: Breaking the fundamental bottleneck of deep ultraviolet light sources. <i>Scientific Reports</i> , <b>2015</b> , 5, 8332	4.9	148
41	Phosphor-Free InGaIn/GaN Dot-in-a-Wire White Light-Emitting Diodes on Copper Substrates. <i>Journal of Electronic Materials</i> , <b>2014</b> , 43, 868-872	1.9	15
40	Tuning the surface Fermi level on p-type gallium nitride nanowires for efficient overall water splitting. <i>Nature Communications</i> , <b>2014</b> , 5, 3825	17.4	191
39	. <i>IEEE Journal of Quantum Electronics</i> , <b>2014</b> , 50, 483-490	2	29
38	p-Type dopant incorporation and surface charge properties of catalyst-free GaN nanowires revealed by micro-Raman scattering and X-ray photoelectron spectroscopy. <i>Nanoscale</i> , <b>2014</b> , 6, 9970-6	7.7	21
37	(Invited) High Power Phosphor-Free InGaIn/GaN/AlGaIn Core-Shell Nanowire White Light Emitting Diodes on Si Substrates. <i>ECS Transactions</i> , <b>2014</b> , 61, 9-15	1	9
36	Axial GaN Nanowire-Based LEDs <b>2014</b> , 105-134		
35	Impact of Surface Recombination on the Performance of Phosphor-Free InGaIn/GaN Nanowire White Light Emitting Diodes <b>2014</b> ,		2
34	Optical properties of strain-free AlN nanowires grown by molecular beam epitaxy on Si substrates. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 223107	3.4	35
33	Growth of large-scale vertically aligned GaN nanowires and their heterostructures with high uniformity on SiO(x) by catalyst-free molecular beam epitaxy. <i>Nanoscale</i> , <b>2013</b> , 5, 5283-7	7.7	75
32	Breaking the carrier injection bottleneck of phosphor-free nanowire white light-emitting diodes. <i>Nano Letters</i> , <b>2013</b> , 13, 5437-42	11.5	117
31	Highly efficient, spectrally pure 340 nm ultraviolet emission from Al <sub>x</sub> Ga <sub>1-x</sub> In nanowire based light emitting diodes. <i>Nanotechnology</i> , <b>2013</b> , 24, 345201	3.4	48
30	A diode-pumped 1.5 W waveguide laser mode-locked at 6.8 GHz by a quantum dot SESAM. <i>Laser Physics Letters</i> , <b>2013</b> , 10, 105803	1.5	11

29	On the efficiency droop of top-down etched InGaN/GaN nanorod light emitting diodes under optical pumping. <i>AIP Advances</i> , <b>2013</b> , 3, 082103	1.5	13
28	1.55 $\mu\text{m}$ InAs/GaAs quantum dots and high repetition rate quantum dot SESAM mode-locked laser. <i>Scientific Reports</i> , <b>2012</b> , 2, 477	4.9	52
27	Observation of phonon sideband emission in intrinsic InN nanowires: a photoluminescence and micro-Raman scattering study. <i>Nanotechnology</i> , <b>2012</b> , 23, 415706	3.4	11
26	Greatly enhanced performance of InGaN/GaN nanorod light emitting diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2012</b> , 209, 477-480	1.6	25
25	Investigation of the optical properties of InGaN/GaN nanorods with different indium composition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 620-623		3
24	High efficiency ultraviolet emission from Al <sub>x</sub> Ga <sub>1-x</sub> N core-shell nanowire heterostructures grown on Si (111) by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 043115	3.4	36
23	Characterization of InGaN-based nanorod light emitting diodes with different indium compositions. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 113103	2.5	51
22	10 GHz Pulse Repetition Rate ERGO Laser Modelocked by a 1550 nm InAs/GaAs Quantum-Dot SESAM <b>2012</b> ,		1
21	Influence of strain relaxation on the optical properties of InGaN/GaN multiple quantum well nanorods. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 395102	3	60
20	Enhanced internal quantum efficiency of an InGaN/GaN quantum well as a function of silver thickness due to surface plasmon coupling. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2176-2178		1
19	Influence of crystal quality of underlying GaN buffer on the formation and optical properties of InGaN/GaN quantum dots. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 101909	3.4	10
18	Stimulated emission at 340 nm from AlGaIn multiple quantum well grown using high temperature AlN buffer technologies on sapphire. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 161904	3.4	13
17	Optical and microstructural study of a single layer of InGaIn quantum dots. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 053505	2.5	23
16	MOCVD growth and optical study of InGaIn quantum dots and their emitters on a high quality GaIn layer grown using a high temperature AlN as buffer. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S582-S585		
15	Optical and microstructural studies of InGaIn/GaN quantum dot ensembles. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 111903	3.4	6
14	Growth and optical investigation of self-assembled InGaIn quantum dots on a GaIn surface using a high temperature AlN buffer. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 123522	2.5	38
13	The 310-40 nm ultraviolet light emitting diodes grown using a thin GaIn interlayer on a high temperature AlN buffer. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 094003	3	6
12	Influence of annealing temperature on optical properties of InGaIn quantum dot based light emitting diodes. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 081915	3.4	17

- 11 Generation of misfit dislocations in highly mismatched GaN/AlN layers. *Surface Science*, **2008**, 602, 2643-2646 14
- 10 Optical Properties of InGaN Quantum Dots With and Without a GaN Capping Layer. *Springer Proceedings in Physics*, **2008**, 21-24 0.2
- 9 Two coexisting mechanisms of dislocation reduction in an AlGaIn layer grown using a thin GaN interlayer. *Applied Physics Letters*, **2007**, 91, 131903 3.4 16
- 8 The influence of a capping layer on optical properties of self-assembled InGaIn quantum dots. *Journal of Applied Physics*, **2007**, 101, 113520-113520 2.5 12
- 7 Greatly improved performance of 340nm light emitting diodes using a very thin GaN interlayer on a high temperature AlN buffer layer. *Applied Physics Letters*, **2006**, 89, 081126 3.4 30
- 6 Microstructure evolution of oxidized Ni/Au ohmic contacts to p-GaN studied by X-ray diffraction. *Materials Science in Semiconductor Processing*, **2005**, 8, 515-519 4.3 5
- 5 Effects of the artificial Ga-nitride/air periodic nanostructures on current injected GaN-based light emitters. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2858-2861 5
- 4 The Ga-Nitride/air Two-Dimensional Photonic Quasi-crystals Fabricated on GaN-based Light Emitters. *Materials Research Society Symposia Proceedings*, **2004**, 831, 597 1
- 3 A Data-Mining-Assisted Design of Structural Colors on Diamond Metasurfaces. *Advanced Photonics Research*, 2100292 1.9 3
- 2 Improvement of Radiative Recombination Rate and Efficiency Droop of InGaIn Light Emitting Diodes with In-Component-Graded InGaIn Barrier. *Physica Status Solidi (A) Applications and Materials Science*, 2100351 1.6 2
- 1 Utilization of far-red LED to minimize blue light hazard for dynamic semiconductor lighting. *LEUKOS - Journal of Illuminating Engineering Society of North America*, 1-18 3.5 1