Tong Wang

List of Publications by Year
in descending order

67 papers	1,048 citations	394421 19 h-index	477307 29 g-index
68 all docs	68 docs citations	68 times ranked	1244 citing authors

#	Article	IF	Citations
1	Electron-beam-induced segregation in InGaN/GaN multiple-quantum wells. Applied Physics Letters, 2003, 83, 1965-1967.	3.3	70
2	Characterization of InGaN-based nanorod light emitting diodes with different indium compositions. Journal of Applied Physics, 2012, 111, .	2.5	61
3	Optically pumped ultraviolet lasing from nitride nanopillars at room temperature. Applied Physics Letters, 2010, 96, .	3.3	51
4	Room temperature continuousâ€“wave green lasing from an InGaN microdisk on silicon. Scientific Reports, 2014, 4, 7250.	3.3	48
5	Room temperature plasmonic lasing in a continuous wave operation mode from an InGaN/GaN single nanorod with a low threshold. Scientific Reports, 2015, 4, 5014.	3.3	42
6	Growth and optical investigation of self-assembled InGaN quantum dots on a GaN surface using a high temperature AlN buffer. Journal of Applied Physics, 2008, 103, 123522.	2.5	41
7	Optically pumped whispering-gallery mode lasing from 2-Î¼m GaN micro-disks pivoted on Si. Applied Physics Letters, 2014, 104, .	3.3	40
8	The origin of the high ideality factor in AlGaN-based quantum well ultraviolet light emitting diodes. Physica Status Solidi (B): Basic Research, 2010, 247, 1761-1763.	1.5	30
9	Greatly enhanced performance of InGaN/GaN nanorod light emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 477-480.	1.8	29
10	Polarisation-controlled single photon emission at high temperatures from InGaN quantum dots. Nanoscale, 2017, 9, 9421-9427.	5.6	29
11	Origin of the red luminescence in Mg-doped GaN. Applied Physics Letters, 2006, 89, 022107.	3.3	28
12	Optical properties of AlGaNâ•GaN multiple quantum well structure by using a high-temperature AlN buffer on sapphire substrate. Journal of Applied Physics, 2006, 99, 023513.	2.5	27
13	Ultrafast, Polarized, Single-Photon Emission from m-Plane InGaN Quantum Dots on GaN Nanowires. Nano Letters, 2016, 16, 7779-7785.	9.1	26
14	Quantum Transport in Two-Dimensional WS₂ with High-Efficiency Carrier Injection through Indium Alloy Contacts. ACS Nano, 2020, 14, 13700-13708.	14.6	26
15	Optical and microstructural study of a single layer of InGaN quantum dots. Journal of Applied Physics, 2009, 105, 053505.	2.5	25
16	Efficiency enhancement of InGaN/GaN solar cells with nanostructures. Applied Physics Letters, 2014, 104, .	3.3	23
17	Structureâ€“Activity Correlations for BrÃ¸nsted Acid, Lewis Acid, and Photocatalyzed Reactions of Exfoliated Crystalline Niobium Oxides. ChemCatChem, 2017, 9, 144-154.	3.7	22
18	Influence of annealing temperature on optical properties of InGaN quantum dot based light emitting diodes. Applied Physics Letters, 2008, 93, .	3.3	21

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19	GaN hybrid microcavities in the strong coupling regime grown by metal-organic chemical vapor deposition on sapphire substrates. Journal of Applied Physics, 2007, 101, 093110.	2.5	20
20	Monolithically multi-color lasing from an InGaN microdisk on a Si substrate. Scientific Reports, 2017, 7, 10086.	3.3	20
21	Overgrowth and strain investigation of (11â€“20) non-polar GaN on patterned templates on sapphire. Scientific Reports, 2018, 8, 9898.	3.3	20
22	Gateâ€Defined Quantum Confinement in CVD 2D WS₂. Advanced Materials, 2022, 34, e2103907.	21.0	18
23	Mechanisms of dislocation reduction in an Al0.98Ga0.02N layer grown using a porous AlN buffer. Applied Physics Letters, 2006, 89, 131925.	3.3	17
24	Influence of the GaN barrier thickness on the optical properties of InGaN/GaN multilayer quantum dot heterostructures. Applied Physics Letters, 2010, 96, 251904.	3.3	17
25	Two coexisting mechanisms of dislocation reduction in an AlGaN layer grown using a thin GaN interlayer. Applied Physics Letters, 2007, 91, 131903.	3.3	16
26	Lattice resolved annular dark-field scanning transmission electron microscopy of (Al,Âln)GaN/GaN layers for measuring segregation with sub-monolayer precision. Journal of Materials Science, 2013, 48, 2883-2892.	3.7	16
27	Theoretical and experimental analysis of radiative recombination lifetimes in nonpolar InGaN/GaN quantum dots. Physica Status Solidi (B): Basic Research, 2017, 254, 1600675.	1.5	16
28	Efficient reduction of defects in (11<u>2</u>0) non-polar and (11<u>2</u>2) semi-polar GaN grown on nanorod templates. Applied Physics Letters, 2013, 102, .	3.3	15
29	Investigations on Electrode-Less Wet Etching of GaN Using Continuous Ultraviolet Illumination. Journal of Electronic Materials, 2007, 36, 397-402.	2.2	14
30	Determining GaN Nanowire Polarity and its Influence on Light Emission in the Scanning Electron Microscope. Nano Letters, 2019, 19, 3863-3870.	9.1	14
31	Monolithically integrated white light LEDs on (11â€“22) semi-polar GaN templates. Scientific Reports, 2019, 9, 1383.	3.3	14
32	Cathodoluminescence studies of chevron features in semi-polar (112Â¯2) InGaN/GaN multiple quantum well structures. Journal of Applied Physics, 2018, 123, .	2.5	12
33	The role of vacancies in the red luminescence from Mg-doped GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1919-1922.	0.8	11
34	Influence of crystal quality of underlying GaN buffer on the formation and optical properties of InGaN/GaN quantum dots. Applied Physics Letters, 2009, 95, 101909.	3.3	11
35	Deterministic optical polarisation in nitride quantum dots at thermoelectrically cooled temperatures. Scientific Reports, 2017, 7, 12067.	3.3	11
36	Direct generation of linearly polarized single photons with a deterministic axis in quantum dots. Nanophotonics, 2017, 6, 1175-1183.	6.0	11

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37	Carrier capture times in InGaN/GaN multiple quantum wells. Physica Status Solidi (B): Basic Research, 2003, 240, 364-367.	1.5	10
38	Polarized white light from hybrid organic/III-nitrides grating structures. Scientific Reports, 2017, 7, 39677.	3.3	10
39	Compositional analysis of AlInGaN quaternary layers grown by metalorganic vapour phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2478-2481.	0.8	9
40	Characterization of gate recessed GaN/AlGaN/GaN high electron mobility transistors fabricated using a SiCl4/SF6 dry etch recipe. Journal of Applied Physics, 2010, 108, 013711.	2.5	9
41	AlGaN-based Bragg mirrors and hybrid microcavities for the ultra-violet spectral region. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 813-816.	0.8	8
42	Optical and polarization properties of nonpolar InGaN-based light-emitting diodes grown on micro-rod templates. Scientific Reports, 2019, 9, 9770.	3.3	8
43	Crack formation and development in AlGaN/GaN structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2055-2058.	0.8	7
44	Optical investigation of semi-polar (11-22) AlxGa1-xN with high Al composition. Applied Physics Letters, 2017, 110, .	3.3	7
45	Highly polarized electrically driven single-photon emission from a non-polar InGaN quantum dot. Applied Physics Letters, 2017, 111, .	3.3	7
46	The influence of acceptor anneal temperature on the performance of InGaN/GaN quantum well light-emitting diodes. Journal of Applied Physics, 2006, 99, 024507.	2.5	6
47	Monolithic multiple colour emission from InGaN grown on patterned non-polar GaN. Scientific Reports, 2019, 9, 986.	3.3	6
48	Characterisation of ultra-shallow junctions using advanced SIMS, SRP and HRTEM techniques. , 0, , .		5
49	Highâ€temperature performance of nonâ€polar (11â€“20) InGaN quantum dots grown by a quasiâ€twoâ€temperature method. Physica Status Solidi (B): Basic Research, 2017, 254, 1600724.	1.5	5
50	Temperature-dependent fine structure splitting in InGaN quantum dots. Applied Physics Letters, 2017, 111, .	3.3	4
51	Ultra-Energy-Efficient Photoelectrode Using Microstriped GaN on Si. ACS Photonics, 2019, 6, 1302-1306.	6.6	4
52	Optical polarization properties of (11â€“22) semi-polar InGaN LEDs with a wide spectral range. Scientific Reports, 2020, 10, 7191.	3.3	4
53	Influence of an InGaN superlattice pre-layer on the performance of semi-polar (11â€“22) green LEDs grown on silicon. Scientific Reports, 2020, 10, 12650.	3.3	4
54	Effects of depletion on the emission from individual InGaN dots. Applied Physics Letters, 2006, 88, 122115.	3.3	3

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55	Greatly improved crystal quality of non-polar GaN grown on a-plane GaN nano-rod template obtained using self-organised nano-masks. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 564-567.	0.8	3
56	Investigation of the optical properties of InGaN/GaN nanorods with different indium composition. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 620-623.	0.8	3
57	Study of highâ€quality (11â¯22) semiâ€polar GaN grown on nanorod templates. Physica Status Solidi (B): Basic Research, 2015, 252, 1079-1083.	1.5	3
58	Effect of an ITO current spreading layer on the performance of InGaN MQW solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 297-300.	0.8	3
59	Confocal photoluminescence investigation to identify basal stacking faultâ€™s role in the optical properties of semi-polar InGaN/GaN lighting emitting diodes. Scientific Reports, 2019, 9, 9735.	3.3	3
60	Improved AlN buffer layer technologies for UV-LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 120-124.	0.8	1
61	Optical gain in AlGaN/AlGaN multiple quantum wells grown on high temperature AlN multiple buffers. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2056-2058.	0.8	1
62	Non-polar nitride single-photon sources. Journal of Optics (United Kingdom), 2020, 22, 073001.	2.2	1
63	The magnesium acceptor states in GaN: an investigation by optically-detected magnetic resonance. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1892-1896.	0.8	0
64	MOCVD growth and optical study of InGaN quantum dots and their emitters on a high quality GaN layer grown using a high temperature AlN as buffer. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S582-S585.	0.8	0
65	Semi-polar InGaN/GaN based long emission wavelength emitter for lighting and displays. , 2016, , .		0
66	Development of III-nitride nanostructures for low threshold lasing and semipolar GaN towards Yellow/Orange lasing. , 2016, , .		0
67	Nitride Single Photon Sources. , 2018, , .		0