

# Hong Chen

## List of Publications by Year in descending order

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52  
papers

922  
citations

516710

16  
h-index

454955

30  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1185  
citing authors

#	ARTICLE	IF	CITATIONS
1	N-polar GaN Film Epitaxy on Sapphire Substrate without Intentional Nitridation. <i>Materials</i> , 2022, 15, 3005.	2.9	2
2	High performance visible-SWIR flexible photodetector based on large-area InGaAs/InP PIN structure. <i>Scientific Reports</i> , 2022, 12, 7681.	3.3	14
3	Defect effect on the performance of nonpolar GaN-based ultraviolet photodetectors. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	37
4	Influence of Sb <sub>2</sub> soaking on strained InAs <sub>0.8</sub> Sb <sub>0.2</sub> /Al <sub>0.2</sub> Ga <sub>0.8</sub> Sb multiple quantum well interfaces. <i>AIP Advances</i> , 2021, 11, 075004.	1.3	1
5	Improving the Performance of Solar Cells Under Non-Perpendicular Incidence by Photonic Crystal. <i>IEEE Photonics Journal</i> , 2021, 13, 1-4.	2.0	1
6	Monolithic light emitting device and light detecting device fabricated with a commercial LED wafer. <i>Optical and Quantum Electronics</i> , 2020, 52, 1.	3.3	0
7	A method to extend wavelength into middle-wavelength infrared based on InAsSb/(Al)GaSb interband transition quantum well infrared photodetector*. <i>Chinese Physics B</i> , 2020, 29, 038504.	1.4	4
8	Luminescence study in InGaAs/AlGaAs multi-quantum-well light emitting diode with p <sup>+</sup> n junction engineering. <i>Journal of Applied Physics</i> , 2020, 127, 085706.	2.5	5
9	Improvement in the crystal quality of non-polar a-plane GaN directly grown on an SiO <sub>2</sub> stripe-patterned r-plane sapphire substrate. <i>CrystEngComm</i> , 2019, 21, 5124-5128.	2.6	2
10	Visualizing carrier transitions between localization states in a InGaN yellow-green light-emitting-diode structure. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	14
11	Improved crystal quality of non-polar a-plane GaN epi-layers directly grown on optimized hole-array patterned r-sapphire substrates. <i>CrystEngComm</i> , 2019, 21, 2747-2753.	2.6	8
12	Characterization of periodicity fluctuations in InGaN/GaN MQWs by the kinematical simulation of X-ray diffraction. <i>Applied Physics Express</i> , 2019, 12, 045502.	2.4	7
13	Effect of SU-8 Passivation Layer Induced Stress on the Performance of GaSb Diode. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 1060-1063.	2.5	3
14	The enhanced photo absorption and carrier transportation of InGaN/GaN Quantum Wells for photodiode detector applications. <i>Scientific Reports</i> , 2017, 7, 43357.	3.3	28
15	Piezo-Phototronic Effect in a Quantum Well Structure. <i>ACS Nano</i> , 2016, 10, 5145-5152.	14.6	63
16	Improved optical and electrical performances of GaN-based light emitting diodes with nano truncated cone SiO <sub>2</sub> passivation layer. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	3.3	17
17	Investigations of atomic configurations of 60° basal dislocations in wurtzite GaN film by high-resolution transmission electron microscopy. <i>Philosophical Magazine Letters</i> , 2016, 96, 148-156.	1.2	4
18	Fabrication of metal nano-wires by laser interference lithography using a tri-layer resist process. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	3.3	3

#	ARTICLE	IF	CITATIONS
19	Realization of high-luminous-efficiency InGaN light-emitting diodes in the "green gap" range. Scientific Reports, 2015, 5, 10883.	3.3	96
20	Investigation of temperature-dependent photoluminescence in multi-quantum wells. Scientific Reports, 2015, 5, 12718.	3.3	67
21	Piezo-Phototronic Effect Controlled Dual-Channel Visible light Communication (PVLC) Using InGaN/GaN Multiquantum Well Nanopillars. Small, 2015, 11, 6071-6077.	10.0	38
22	Low-Dimensional Semiconductor Structures for Optoelectronic Applications. Advances in Condensed Matter Physics, 2015, 2015, 1-2.	1.1	1
23	Efficiency enhancement of InGaN/GaN multiple quantum wells with graphene layer. Applied Physics A: Materials Science and Processing, 2015, 119, 1209-1213.	2.3	0
24	A novel method to reduce the period limitation in laser interference lithography. Optical and Quantum Electronics, 2015, 47, 2331-2338.	3.3	1
25	A study of 2DEG properties in AlGaIn/GaN heterostructure using GaN/AlN superlattice as barrier layers grown by MOCVD. Applied Physics A: Materials Science and Processing, 2015, 118, 1453-1457.	2.3	5
26	Indium segregation measured in InGaIn quantum well layer. Scientific Reports, 2015, 4, 6734.	3.3	18
27	Improvement on InGaIn-based light emitting diodes using "GaIn layer grown at low temperature in full N <sub>2</sub> environment. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1175-1178.	1.8	3
28	Fabrication of large-area nano-scale patterned sapphire substrate with laser interference lithography. Optoelectronics Letters, 2014, 10, 51-54.	0.8	7
29	Improvement of light power and efficiency droop in GaN-based LEDs using graded InGaIn hole reservoir layer. Applied Physics A: Materials Science and Processing, 2014, 114, 1055-1059.	2.3	8
30	Suppressing the spread length of threading dislocations in AlSb/GaSb superlattice grown on (001) InP substrate. Applied Physics A: Materials Science and Processing, 2014, 115, 1239-1243.	2.3	2
31	Effect of Stair-Case Electron Blocking Layer on the Performance of Blue InGaIn Based LEDs. Journal of Display Technology, 2014, 10, 146-150.	1.2	5
32	MBE growth of high absorption mid-IR type-II InAs/GaSb superlattices. Science Bulletin, 2014, 59, 2383-2386.	1.7	0
33	Temperature-dependent photoluminescence in light-emitting diodes. Scientific Reports, 2014, 4, 6131.	3.3	122
34	A novel wavelength-adjusting method in InGaIn-based light-emitting diodes. Scientific Reports, 2013, 3, 3389.	3.3	56
35	Influence of the channel electric field distribution on the polarization Coulomb field scattering in AlGaIn/AlN/GaN heterostructure field-effect transistors. AIP Advances, 2013, 3, 092115.	1.3	4
36	Influence of the side-Ohmic contact processing on the polarization Coulomb field scattering in AlGaIn/AlN/GaN heterostructure field-effect transistors. Applied Physics Letters, 2012, 101, .	3.3	39

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37	The photocurrent of resonant tunneling diode controlled by the charging effects of quantum dots. , 2012, , .		1
38	Micro-Raman spectroscopy observation of field-induced strain relaxation in AlGaIn/GaN heterojunction field-effect transistors. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1174-1178.	1.8	5
39	Extraction of AlGaIn/GaN heterostructure Schottky diode barrier heights from forward current-voltage characteristics. Journal of Applied Physics, 2011, 109, .	2.5	59
40	Recent progress of GaN growth on maskless chemical-etched grooved sapphire substrate. Energy and Environmental Science, 2011, 4, 2625.	30.8	7
41	Temperature dependence of photoluminescence from self-organized Ge quantum dots with large size and low density. Science China: Physics, Mechanics and Astronomy, 2011, 54, 245-248.	5.1	3
42	The influence of pressure on the growth of a-plane GaN on r-plane sapphire substrates by MOCVD. Science China: Physics, Mechanics and Astronomy, 2011, 54, 446-449.	5.1	1
43	The impact of nanoporous SiN <sub>x</sub> interlayer growth position on high-quality GaN epitaxial films. Science Bulletin, 2011, 56, 2739-2743.	1.7	2
44	Polarization Coulomb field scattering in AlGaIn/AlN/GaN heterostructure field-effect transistors. Applied Physics Letters, 2011, 98, .	3.3	77
45	Evaluating AlGaIn/AlN/GaN heterostructure Schottky barrier heights with flat-band voltage from forward current-voltage characteristics. Applied Physics Letters, 2011, 99, .	3.3	28
46	Characterization of different-Al-content AlGaIn/GaN heterostructures on sapphire. Science China: Physics, Mechanics and Astronomy, 2010, 53, 49-53.	5.1	5
47	Recent progress in single chip white light-emitting diodes with the InGaIn underlying layer. Science China: Physics, Mechanics and Astronomy, 2010, 53, 445-448.	5.1	1
48	Threading dislocation density comparison between GaN grown on the patterned and conventional sapphire substrate by high resolution X-ray diffraction. Science China: Physics, Mechanics and Astronomy, 2010, 53, 465-468.	5.1	17
49	Experimental observation of isotropic in-plane spin splitting in GaN/AlGaIn two-dimensional electron gas. Applied Physics Letters, 2007, 91, 252105.	3.3	2
50	Effect of Mg and C contents in MgCNi <sub>3</sub> , and structure and superconductivity of MgCNi <sub>3-x</sub> -Co <sub>x</sub> . Science in China Series A: Mathematics, 2001, 44, 1205-1208.	0.5	3
51	Ag/Si multilayers with nanometer sized particles of silver during annealing process. Science in China Series A: Mathematics, 1998, 41, 989-994.	0.5	0
52	Crystallographic and microstructural studies of BaTiO <sub>3</sub> thin films grown on SrTiO <sub>3</sub> by laser molecular beam epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 275-278.	2.1	23