Yong Huang

List of Publications by Year
in descending order

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92 papers	1,677 citations	304743 22 h-index	330143 37 g-index
93 all docs	93 docs citations	93 times ranked	1846 citing authors

#	Article	IF	Citations
1	Doubleâ€Defense Design of Superâ€Antiâ€Fouling Membranes for Oil/Water Emulsion Separation. Advanced Functional Materials, 2022, 32, .	14.9	129
2	Photonic crystal nanobeam lasers. Applied Physics Letters, 2010, 97, .	3.3	105
3	One-Pot Selective Epitaxial Growth of Large WS₂/MoS₂ Lateral and Vertical Heterostructures. Journal of the American Chemical Society, 2020, 142, 16276-16284.	13.7	88
4	Design of Quasiâ€MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2022, 34, e2105541.	21.0	87
5	An Efficiency of 16.46% and a T₈₀ Lifetime of Over 4000 h for the PM6:Y6 Inverted Organic Solar Cells Enabled by Surface Acid Treatment of the Zinc Oxide Electron Transporting Layer. ACS Applied Materials & Interfaces, 2021, 13, 17869-17881.	8.0	80
6	Insights into Bimetallic Oxide Synergy during Carbon Dioxide Hydrogenation to Methanol and Dimethyl Ether over GaZrO_x Oxide Catalysts. ACS Catalysis, 2021, 11, 4704-4711.	11.2	60
7	Insights into the Dual Role of Lithium Difluoro(oxalato)borate Additive in Improving the Electrochemical Performance of NMC811		Graphite Cells. ACS Applied Energy Materials, 2020, 3, 695-704.	5.1	54
8	Synergetic effects of electrochemical oxidation of Spiro-OMeTAD and Li⁺ ion migration for improving the performance of nâ€“iâ€“p type perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 7575-7585.	10.3	50
9	High-precision determination of lattice constants and structural characterization of InN thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 275-279.	2.1	44
10	Widely tunable mid-infrared quantum cascade lasers using sampled grating reflectors. Optics Express, 2012, 20, 23339.	3.4	42
11	Oxygenâ€Assisted Cathodic Deposition of Zeolitic Imidazolate Frameworks with Controlled Thickness. Angewandte Chemie - International Edition, 2019, 58, 1123-1128.	13.8	40
12	Ultrahigh Responsivity of Ternary Sbâ€“Biâ€“Se Nanowire Photodetectors. Advanced Functional Materials, 2014, 24, 3581-3586.	14.9	37
13	Amorphous thermal stability of Al-doped Sb2Te3 films for phase-change memory application. Applied Physics Letters, 2013, 103, .	3.3	35
14	Low-temperature growth of InN by MOCVD and its characterization. Journal of Crystal Growth, 2005, 276, 13-18.	1.5	32
15	Lateral phase separation in AlGaN grown on GaN with a high-temperature AlN interlayer. Applied Physics Letters, 2005, 87, 121914.	3.3	32
16	Compositional instability in strained InGaN epitaxial layers induced by kinetic effects. Journal of Applied Physics, 2011, 110, .	2.5	32
17	Epitaxial growth and characterization of InAs/GaSb and InAs/InAsSb type-II superlattices on GaSb substrates by metalorganic chemical vapor deposition for long wavelength infrared photodetectors. Journal of Crystal Growth, 2011, 314, 92-96.	1.5	30
18	Transistor laser with emission wavelength at 1544nm. Applied Physics Letters, 2008, 93, 021111.	3.3	29

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19	InAs/GaSb type-II superlattice structures and photodiodes grown by metalorganic chemical vapor deposition. Applied Physics Letters, 2010, 96, 251107.	3.3	26
20	Structural and optical characterization of type-II InAs/InAs1â^'xSbx superlattices grown by metalorganic chemical vapor deposition. Applied Physics Letters, 2011, 99, .	3.3	25
21	Optimization of growth conditions for InGaAs/InAlAs/InP quantum cascade lasers by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2011, 316, 75-80.	1.5	24
22	High-Performance Long-Wavelength InAs/GaSb Superlattice Detectors Grown by MOCVD. IEEE Photonics Technology Letters, 2019, 31, 185-188.	2.5	24
23	Immobilized Precursor Particle Driven Growth of Centimeter-Sized MoTe₂ Monolayer. Journal of the American Chemical Society, 2021, 143, 13314-13324.	13.7	24
24	Photonic crystal disk lasers. Optics Letters, 2011, 36, 2704.	3.3	23
25	High-Performance Mid-Wavelength InAs/GaSb Superlattice Infrared Detectors Grown by Production-Scale Metalorganic Chemical Vapor Deposition. IEEE Journal of Quantum Electronics, 2017, 53, 1-5.	1.9	23
26	Revealing the Mechanism behind the Catastrophic Failure of nâ€iâ€p Type Perovskite Solar Cells under Operating Conditions and How to Suppress It. Advanced Functional Materials, 2021, 31, 2103820.	14.9	22
27	Growth of GaN on ZnO for solid state lighting applications. , 2006, , .		21
28	Bandgap and band offsets determination of semiconductor heterostructures using three-terminal ballistic carrier spectroscopy. Applied Physics Letters, 2009, 95, .	3.3	21
29	Exploring the optimum growth conditions for InAs/GaSb and GaAs/GaSb superlattices on InAs substrates by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2018, 502, 71-75.	1.5	21
30	Room temperature all-solid-state lithium batteries based on a soluble organic cage ionic conductor. Nature Communications, 2022, 13, 2031.	12.8	19
31	Strain-balanced InAs/GaSb type-II superlattice structures and photodiodes grown on InAs substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 2011, 99, .	3.3	18
32	Gratings with an aperiodic basis: single-mode emission in multi-wavelength lasers. New Journal of Physics, 2011, 13, 113023.	2.9	18
33	Bi doping modulating structure and phase-change properties of GeTe nanowires. Applied Physics Letters, 2013, 102, .	3.3	18
34	Realization of IIIâ€“V Semiconductor Periodic Nanostructures by Laser Direct Writing Technique. Nanoscale Research Letters, 2017, 12, 12.	5.7	17
35	Precise determination of surface band bending in Ga-polar n-GaN films by angular dependent X-Ray photoemission spectroscopy. Scientific Reports, 2019, 9, 16969.	3.3	17
36	InP/InAlGaAs light-emitting transistors and transistor lasers with a carbon-doped base layer. Journal of Applied Physics, 2011, 109, 063106.	2.5	15

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37	Spatial distribution of deep level defects in crack-free AlGaN grown on GaN with a high-temperature AlN interlayer. Journal of Applied Physics, 2006, 100, 123101.	2.5	14
38	InAlGaAsâˆ•InP light-emitting transistors operating near 1.55Î¼m. Journal of Applied Physics, 2008, 103, 114505.	2.5	13
39	Nonâ€Uniform Chemical Corrosion of Metal Electrode of pâ€“iâ€“n Type of Perovskite Solar Cells Caused by the Diffusion of CH₃NH₃I. Energy Technology, 2020, 8, 2000250.	3.8	13
40	Mechanism about improvement of NiSi thermal stability for Ni/Pt/Si(1 1 1) bi-layered system. Applied Surface Science, 2003, 207, 139-143.	6.1	12
41	Effects of grain size on the mosaic tilt and twist in InN films grown on GaN by metal-organic chemical vapor deposition. Applied Physics Letters, 2006, 89, 092114.	3.3	12
42	Design, Growth, Fabrication and Characterization of High-Band Gap InGaN/GaN Solar Cells. , 2006, , .		12
43	Optimization of Long-Wavelength InAs/GaSb Superlattice Photodiodes With Al-Free Barriers. IEEE Photonics Technology Letters, 2020, 32, 19-22.	2.5	12
44	Study on the thermal stability of InN by in-situ laser reflectance system. Journal of Crystal Growth, 2005, 281, 310-317.	1.5	11
45	Surface and Subsurface Structures of the Ptâ€“Fe Surface Alloy on Pt(111). Journal of Physical Chemistry C, 2019, 123, 17225-17231.	3.1	10
46	Demonstration of a Dual-Band InAs/GaSb Type-II Superlattice Infrared Detector Based on a Single Heterojunction Diode. IEEE Journal of Quantum Electronics, 2020, 56, 1-6.	1.9	10
47	Accurate surface band bending determination on Ga-polar n-type GaN films by fitting x-ray valence band photoemission spectrum. AIP Advances, 2019, 9, .	1.3	9
48	Wafer-scale epitaxial single-crystalline Ni(111) films on sapphires for graphene growth. Journal of Materials Science, 2021, 56, 3220-3229.	3.7	9
49	Evolution of mosaic structure in InN grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2006, 293, 269-272.	1.5	8
50	Control of Zn diffusion in InP/InAlGaAs-based heterojunction bipolar transistors and light emitting transistors. Journal of Crystal Growth, 2008, 310, 4345-4350.	1.5	8
51	Simultaneous Improvement of the Longâ€Term and Thermal Stability of the Perovskite Solar Cells Using 2,3,4,5,6â€Pentafluorobenzoyl Chloride (PFBC)â€Capped ZnO Nanoparticles Buffer Layer. Solar Rrl, 2020, 4, 2000289.	5.8	8
52	Long-Wavelength InAs/GaSb Superlattice Detectors With Low Dark Current Density Grown by MOCVD. IEEE Photonics Technology Letters, 2021, 33, 429-432.	2.5	8
53	Growth and characterization of InGaAs/InAsSb superlattices by metal-organic chemical vapor deposition for mid-wavelength infrared photodetectors. Superlattices and Microstructures, 2020, 146, 106655.	3.1	7
54	Epitaxial Structure Design of a Long-Wavelength InAlGaAs/InP Transistor Laser. IEEE Journal of Quantum Electronics, 2011, 47, 642-650.	1.9	6

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55	Double-waveguide quantum cascade laser. Applied Physics Letters, 2012, 100, 033502.	3.3	6
56	Ion Sputter Induced Interfacial Reaction in Prototypical Metal-GaN System. Scientific Reports, 2018, 8, 8521.	3.3	6
57	Planar mid-infrared InAsSb photodetector grown on GaAs substrates by MOCVD. Applied Physics Express, 2019, 12, 122009.	2.4	6
58	MOCVD growth of InAs/GaSb type-II superlattices on InAs substrates for short wavelength infrared detection. Infrared Physics and Technology, 2020, 105, 103209.	2.9	6
59	Demonstration of MOCVD-Grown Long-Wavelength Infrared InAs/GaSb Superlattice Focal Plane Array. IEEE Access, 2021, 9, 60689-60694.	4.2	6
60	Growth and characterization of <inline-formula><math display="inline" overflow="scroll"><mrow><msub><mrow><mi>In</mi></mrow><mrow><mi>x</mi></mrow></msub><msub><mrow><mi>Ga</mi></mrow><mrow><mi mathvariant="normal">N</mi></mrow></msub></math></inline-formula> alloys by metalorganic chemical vapor deposition for solar cell applications. Journal of Photonics for Energy, 2012, 2, 028501.	1.3	5
61	Design of InP-based metamorphic high-efficiency five-junction solar cells for concentrated photovoltaics. Semiconductor Science and Technology, 2015, 30, 105031.	2.0	5
62	Thermal Stability Study of GaP/Highâ€k Dielectrics Interfaces. Advanced Materials Interfaces, 2017, 4, 1700609.	3.7	5
63	Ultra-Shallow Doping B, Mg, Ni, Cu, Mn, Cr and Fe into SiC with Very High Surface Concentrations Based on Plasma Stimulated Room-Temperature Diffusion. Journal of Materials Engineering and Performance, 2019, 28, 162-168.	2.5	5
64	Influence of Growth Conditions on Phase Separation of InGaN Bulk Material Grown by MOCVD. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	4
65	Metal-organic chemical vapour deposition growth of InAs/GaSb type-II superlattice photodiodes. Electronics Letters, 2010, 46, 1151.	1.0	4
66	Incorporation of indium and gallium in atomic layer epitaxy of InGaAs on InP substrates. Journal of Crystal Growth, 2011, 321, 60-64.	1.5	4
67	InAs/GaSb superlattice photodetector with cutoff wavelength around 12 Î¼m based on an Al-free nBn structure grown by MOCVD. Semiconductor Science and Technology, 2019, 34, 065013.	2.0	4
68	Oxygenâ€Assisted Cathodic Deposition of Zeolitic Imidazolate Frameworks with Controlled Thickness. Angewandte Chemie, 2019, 131, 1135-1140.	2.0	4
69	Oxygen Adsorption Induced Superconductivity in Ultrathin FeTe Film on SrTiO3(001). Materials, 2021, 14, 4584.	2.9	4
70	Growth and characterization of In[sub x]Ga[sub 1â^'x]N alloys by metalorganic chemical vapor deposition for solar cell applications. Journal of Photonics for Energy, 2012, 2, 017001.	1.3	4
71	High Operating Temperature InAs/GaSb Superlattice Based Mid Wavelength Infrared Photodetectors Grown by MOCVD. Photonics, 2021, 8, 564.	2.0	4
72	Depth dependence of structural quality in InN grown by metalorganic chemical vapor deposition. Materials Letters, 2007, 61, 516-519.	2.6	3

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73	Optical Properties of Strain-balanced InAsâˆ•InAs[sub 1-x]Sb[sub x] Type-II Superlattices. , 2011, , .		3
74	Mode switching in a multi-wavelength distributed feedback quantum cascade laser using an external micro-cavity. Applied Physics Letters, 2014, 104, 051102.	3.3	3
75	Characterization of InAs/GaSb superlattices grown by MOCVD with atomic resolution. Journal of Applied Physics, 2020, 127, 045305.	2.5	3
76	In situ isotope study of indium diffusion in InP/Al2O3 stacks. Applied Physics Letters, 2022, 120, .	3.3	3
77	Doping-dependent device functionality of InP/InAlGaAs long-wavelength light-emitting transistors. Applied Physics Letters, 2011, 99, 103502.	3.3	2
78	Long-Wavelength InAs/GaSb Superlattice Detectors on InAs Substrates With n-on-p Polarity. IEEE Journal of Quantum Electronics, 2020, 56, 1-6.	1.9	2
79	Largeâ€scale quantification of aluminum in Al x Ga 1â€x N alloys by ToFâ€SIMS: The benefit of secondary cluster ions. Surface and Interface Analysis, 2020, 52, 311-317.	1.8	2
80	The Significant Effect of Carbon and Oxygen Contaminants at Pd/pâ€GaN Interface on Its Ohmic Contact Characteristics. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000603.	1.8	2
81	Influence of cracks generation on the structural and optical properties of GaN/Al0.55Ga0.45N multiple quantum wells. Applied Surface Science, 2006, 252, 3043-3050.	6.1	1
82	Device performance of light emitting transistors with C-doped and Zn-doped base layers. , 2009, , .		1
83	High-Quality InSb Grown on Semi-Insulting GaAs Substrates by Metalorganic Chemical Vapor Deposition for Hall Sensor Application. Chinese Physics Letters, 2019, 36, 017302.	3.3	1
84	Short-wavelength infrared InAs/GaSb superlattice hole avalanche photodiode. Chinese Physics B, 2020, 29, 117301.	1.4	1
85	Growth, coalescence, and etching of two-dimensional overlayers on metals modulated by near-surface Ar nanobubbles. Nano Research, 0, , 1.	10.4	1
86	An Ammonization-Based Transformation of Hexagonal Boron Nitride on Ir(111) from Surface to Near-Surface Regions. Journal of Physical Chemistry C, 2021, 125, 23929-23936.	3.1	1
87	High-operating-temperature MWIR photodetector based on a InAs/GaSb superlattice grown by MOCVD. Journal of Semiconductors, 2022, 43, 012303.	3.7	1
88	Long-wavelength InAs/GaSb superlattice double heterojunction infrared detectors using InPSb/InAs superlattice hole barrier. Semiconductor Science and Technology, 0, , .	2.0	1
89	Mid-Infrared InAs/GaSb Superlattice Planar Photodiodes Fabricated by Metalâ€“Organic Chemical Vapor Deposition. Chinese Physics Letters, 2020, 37, 068501.	3.3	0
90	Vertical monolithic integration of quantum cascade lasers for high-power broadband applications. , 2012, , .		0

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91	Evaluation of lateral diffusion length in InAs/GaSb superlattice detectors grown by MOCVD. Electronics Letters, 2020, 56, 785-787.	1.0	0
92	Design of Quasiâ€MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for Highâ€Performance Lithiumâ€“Sulfur Batteries (Adv. Mater. 2/2022). Advanced Materials, 2022, 34, .	21.0	0