

Yong-jin Wang

List of Publications by Year in descending order

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125
papers

1,573
citations

331670

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414414

32
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127
all docs

127
docs citations

127
times ranked

1110
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite light-emitting/detecting bifunctional fibres for wearable LiFi communication. Light: Science and Applications, 2020, 9, 163.	16.6	81
2	Study of HfO ₂ thin films prepared by electron beam evaporation. Applied Surface Science, 2004, 228, 93-99.	6.1	75
3	On-chip photonic system using suspended <i>p-n</i> junction InGaN/GaN multiple quantum wells device and multiple waveguides. Applied Physics Letters, 2016, 108, .	3.3	62
4	Full-duplex light communication with a monolithic multicomponent system. Light: Science and Applications, 2018, 7, 83.	16.6	59
5	On-Chip Integration of GaN-Based Laser, Modulator, and Photodetector Grown on Si. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-5.	2.9	55
6	On-chip integration of suspended InGaN/GaN multiple-quantum-well devices with versatile functionalities. Optics Express, 2016, 24, 6004.	3.4	54
7	Noninvasive Imaging Method of Microwave Near Field Based on Solid-State Quantum Sensing. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2276-2283.	4.6	34
8	Simultaneous light emission and detection of InGaN/GaN multiple quantum well diodes for in-plane visible light communication. Optics Communications, 2017, 387, 440-445.	2.1	33
9	Single-mode ultraviolet whispering gallery mode lasing from a floating GaN microdisk. Optics Letters, 2018, 43, 647.	3.3	33
10	A Real-Time, Full-Duplex System for Underwater Wireless Optical Communication: Hardware Structure and Optical Link Model. IEEE Access, 2020, 8, 109372-109387.	4.2	33
11	Transferrable monolithic III-nitride photonic circuit for multifunctional optoelectronics. Applied Physics Letters, 2017, 111, .	3.3	32
12	Fabrication and characterization of nanoscale resonant gratings on thin silicon membrane. Optics Express, 2009, 17, 4938.	3.4	27
13	High efficiency membrane light emitting diode fabricated by back wafer thinning technique. Applied Physics Letters, 2014, 105, .	3.3	26
14	Simultaneous dual-functioning InGaN/GaN multiple-quantum-well diode for transferrable optoelectronics. Optical Materials, 2017, 72, 20-24.	3.6	26
15	A New Asymptotic Analysis Technique for Diversity Reception Over Correlated Lognormal Fading Channels. IEEE Transactions on Communications, 2018, 66, 845-861.	7.8	26
16	Unidirectional ultraviolet whispering gallery mode lasing from floating asymmetric circle GaN microdisk. Applied Physics Letters, 2017, 111, .	3.3	25
17	A fiber based diamond RF B-field sensor and characterization of a small helical antenna. Applied Physics Letters, 2018, 113, .	3.3	25
18	Single-photon detection for MIMO underwater wireless optical communication enabled by arrayed LEDs and SiPMs. Optics Express, 2021, 29, 25922.	3.4	25

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19	Simultaneous Light-Emitting Light-Detecting Functionality of InGaN/GaN Multiple Quantum Well Diodes. <i>IEEE Electron Device Letters</i> , 2017, 38, 1684-1687.	3.9	23
20	Optimal Optical Omnidirectional Angle-of-Arrival Estimator With Complementary Photodiodes. <i>Journal of Lightwave Technology</i> , 2019, 37, 2932-2945.	4.6	23
21	Characteristics of GaN-based LED fabricated on a GaN-on-silicon platform. <i>Applied Physics Express</i> , 2014, 7, 082102.	2.4	22
22	Integrated p-n junction InGaN/GaN multiple-quantum-well devices with diverse functionalities. <i>Applied Physics Express</i> , 2016, 9, 052204.	2.4	22
23	Whispering-Gallery Mode Lasing in a Floating GaN Microdisk with a Vertical Slit. <i>Scientific Reports</i> , 2020, 10, 253.	3.3	22
24	Surface-normal emission from subwavelength GaN membrane grating. <i>Optics Express</i> , 2014, 22, 667.	3.4	20
25	Suspended p-n Junction InGaN/GaN Multiple-Quantum-Well Device With Selectable Functionality. <i>IEEE Photonics Journal</i> , 2015, 7, 1-7.	2.0	20
26	Angular-dependent polarization-insensitive filter fashioned with zero-contrast grating. <i>Optics Express</i> , 2015, 23, 15235.	3.4	19
27	Suspended GaN-based nanostructure for integrated optics. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	18
28	Using Diamond Quantum Magnetometer to Characterize Near-Field Distribution of Patch Antenna. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2019, 67, 2451-2460.	4.6	18
29	Monolithic III-nitride photonic integration toward multifunctional devices. <i>Optics Letters</i> , 2017, 42, 4853.	3.3	17
30	Multiline resonant filters fashioned with different periodic subwavelength gratings. <i>Optics Letters</i> , 2014, 39, 6660.	3.3	16
31	Multi-dimensional spatial light communication made with on-chip InGaN photonic integration. <i>Optical Materials</i> , 2017, 66, 659-663.	3.6	16
32	Freestanding HfO ₂ grating fabricated by fast atom beam etching. <i>Nanoscale Research Letters</i> , 2011, 6, 367.	5.7	15
33	Suspended membrane GaN gratings for refractive index sensing. <i>Applied Physics Express</i> , 2014, 7, 052201.	2.4	15
34	GaN directional couplers for on-chip optical interconnect. <i>Semiconductor Science and Technology</i> , 2017, 32, 045001.	2.0	15
35	On-chip multicomponent system made with vertical structure quantum well diode. <i>Semiconductor Science and Technology</i> , 2019, 34, 065017.	2.0	15
36	An Enhancement Mode MOSFET Based on GaN-on-Silicon Platform for Monolithic OEIC. <i>IEEE Electron Device Letters</i> , 2020, 41, 76-79.	3.9	15

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37	Uniting GaN Electronics and Photonics on A Single Chip. Journal of Lightwave Technology, 2021, 39, 6269-6275.	4.6	15
38	Comb-drive GaN micro-mirror on a GaN-on-silicon platform. Journal of Micromechanics and Microengineering, 2011, 21, 035012.	2.6	14
39	Guided-Mode Resonant HfO_2 Grating at Visible Wavelength Range. IEEE Photonics Journal, 2014, 6, 1-7.	2.0	14
40	Light Induced Synaptic Transistor With Dual Operation Modes. IEEE Electron Device Letters, 2016, 37, 1434-1437.	3.9	14
41	Monolithic III-nitride photonic circuit towards on-chip optical interconnection. Applied Physics Express, 2018, 11, 122201.	2.4	14
42	Low-Complexity Path Planning Algorithm for Unmanned Aerial Vehicles in Complicated Scenarios. IEEE Access, 2018, 6, 57049-57055.	4.2	13
43	GaN-on-Si resonant-cavity light-emitting diode incorporating top and bottom dielectric distributed Bragg reflectors. Applied Physics Express, 2019, 12, 032004.	2.4	13
44	Monolithic integration of a suspended light-emitting diode with a Y-branch structure. Applied Physics Express, 2016, 9, 032202.	2.4	12
45	Tandem dual-functioning multiple-quantum-well diodes for a self-powered light source. Optics Letters, 2018, 43, 3710.	3.3	12
46	Integrated photonics chip with InGaN/GaN light-emitting diode and bended waveguide for visible-light communications. Optics and Laser Technology, 2019, 114, 103-109.	4.6	12
47	Simultaneous Illumination-Imaging. Advanced Materials Technologies, 2021, 6, 2100227.	5.8	12
48	Circular GaN Membrane Gratings. IEEE Photonics Technology Letters, 2014, 26, 915-918.	2.5	11
49	Membrane guided-mode resonant color filters exhibiting adjustable spectral response. Optics Communications, 2015, 342, 129-135.	2.1	11
50	Experimental observation of lateral emission in freestanding GaN-based membrane devices. Optics Letters, 2014, 39, 4931.	3.3	10
51	Spatial Audio Acquisition Using a Dual-Functioning MQW-Diode With a Three-Stage Amplifier Circuit. IEEE Access, 2018, 6, 8954-8958.	4.2	10
52	Transferrable monolithic multicomponent system for near-ultraviolet optoelectronics. Applied Physics Express, 2018, 11, 051201.	2.4	10
53	Asymmetric optical links using monolithic III-nitride diodes. Optics Letters, 2021, 46, 376.	3.3	10
54	Uniting a III-nitride Transmitter, Waveguide, Modulator, and Receiver on a Single Chip. Advanced Engineering Materials, 2021, 23, 2100582.	3.5	10

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55	A 30 Mbps in-plane full-duplex light communication using a monolithic GaN photonic circuit. Semiconductor Science and Technology, 2017, 32, 075002.	2.0	9
56	Saturation Behavior for a Comb-Like Light-Induced Synaptic Transistor. IEEE Electron Device Letters, 2017, 38, 71-74.	3.9	9
57	Light coupling for on-chip optical interconnects. Optics and Laser Technology, 2017, 97, 154-160.	4.6	9
58	Multifunctional TiO ₂ /ormosils organic-inorganic hybrid films derived by a sol-gel process for photonics and UV nanoimprint applications. Optical Materials Express, 2019, 9, 304.	3.0	9
59	Coexistence of light emission and detection in a III-nitride quantum well diode. Optics Letters, 2022, 47, 2614.	3.3	9
60	Wireless light energy harvesting and communication in a waterproof GaN optoelectronic system. , 2022, 1, .		9
61	Monolithic beam splitter in silicon-on-insulator. Optics Express, 2004, 12, 5154.	3.4	8
62	Population structure of the blood clam (<i>Tegillarca granosa</i>) in China based on microsatellite markers. Genetics and Molecular Research, 2013, 12, 892-900.	0.2	8
63	Outage Probability Bounds of EGC Over Dual-Branch Non-Identically Distributed Independent Lognormal Fading Channels With Optimized Parameters. IEEE Transactions on Vehicular Technology, 2019, 68, 8232-8237.	6.3	8
64	Experimental Demonstration and Theoretical Analysis of Simultaneous Emission—Detection Phenomenon. ACS Omega, 2022, 7, 14017-14021.	3.5	8
65	Membrane Light-Emitting Diode Flow Sensor. Advanced Materials Technologies, 2018, 3, 1700285.	5.8	7
66	Spectral responses of linear grating filters under full-conical incidence. Optics Letters, 2018, 43, 391.	3.3	7
67	Floating GaN whispering gallery mode micro-ring lasing with Burstein—Moss effect. AIP Advances, 2020, 10, .	1.3	7
68	Simultaneous transmission, detection, and energy harvesting. Optics Letters, 2021, 46, 2075.	3.3	7
69	Miniaturized III—Nitride Asymmetric Optical Link for the Monitoring of Vascular Heart Rate and Cardiac—Related Pulse Activity. Advanced Engineering Materials, 2022, 24, 2100829.	3.5	7
70	Toroidal dipole resonance in an asymmetric double-disk metamaterial. Optics Express, 2020, 28, 38076.	3.4	7
71	Ultracompact Multilayer Fabry—Perot Filter Deposited in a Micropit. Journal of Lightwave Technology, 2017, 35, 4973-4979.	4.6	6
72	On-chip multicomponent system made with an InGaN directional coupler. Optics Letters, 2018, 43, 1874.	3.3	6

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73	Optical Sensing of Broadband RF Magnetic Field Using a Micrometer-Sized Diamond. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	6
74	GaN micro-chimney cavity laser. Optics Communications, 2020, 474, 126054.	2.1	6
75	Reflection-type photoplethysmography pulse sensor based on an integrated optoelectronic chip with a ring structure. Biomedical Optics Express, 2021, 12, 6277.	2.9	6
76	GaN photonics: simultaneous emission-detection phenomenon of multiple quantum well diode. , 2018, , .		6
77	Spatial full-duplex light communication achieved with a monolithic non-suspended multicomponent system. Optics Express, 2019, 27, 3379.	3.4	6
78	Membrane-type photonic integration of InGaN/GaN multiple-quantum-well diodes and waveguide. Optical Materials, 2017, 64, 160-165.	3.6	5
79	On-chip optical interconnect using visible light. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 1288-1294.	2.6	5
80	Spatiotemporal Summation and Recognition Effects for a Dual-Emitter Light-Induced Neuromorphic Device. IEEE Transactions on Electron Devices, 2018, 65, 308-313.	3.0	5
81	Karyotype analysis and ribosomal gene localization of spotted knifejaw Oplegnathus punctatus. Genetics and Molecular Research, 2016, 15, .	0.2	5
82	Photon-counting schemes for MIMO underwater wireless optical communication with arrayed PMTs. Applied Optics, 2022, 61, 403.	1.8	5
83	Monolithically Integrated UV Photoelectric Switch Based on GaN-on-Silicon Platform. IEEE Electron Device Letters, 2022, 43, 244-247.	3.9	5
84	Unidirectional single-mode lasing realization and temperature-induced mode switching in asymmetric GaN coupled cavities. Nanoscale, 2022, 14, 1921-1928.	5.6	5
85	Spatiotemporal summation and correlation mimicked in a four-emitter light-induced artificial synapse. Scientific Reports, 2018, 8, 2159.	3.3	4
86	Effective Modulation of GaN-on-Si LED via Indigenous MOSFET Engineering. IEEE Transactions on Electron Devices, 2021, 68, 5640-5644.	3.0	4
87	Monolithically integrated voltage-controlled MOSFET-LED device based on a GaN-on-silicon LED epitaxial wafer. Optics Letters, 2021, 46, 745.	3.3	4
88	AlInGaAs Multiple Quantum Well-Integrated Device with Multifunction Light Emission/Detection and Electro-Optic Modulation in the Near-Infrared Range. ACS Omega, 2021, 6, 8687-8692.	3.5	4
89	Research Progress of Gallium Nitride Microdisk Cavity Laser. Frontiers in Materials, 2022, 9, .	2.4	4
90	580-nm-thick vertical-structure light-emitting diode for visible light communication. Applied Physics Letters, 2022, 120, .	3.3	4

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91	Suspended waveguide photodetector featuring p-n junction InGaN/GaN multiple quantum wells. <i>Optical Materials Express</i> , 2016, 6, 2366.	3.0	3
92	Fabrication of suspended light-emitting diode and waveguide on a single chip. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	3
93	On-chip integration for in-plane video transmission using visible light. , 2016, , .		3
94	InGaN directional coupler made with a one-step etching technique. <i>Semiconductor Science and Technology</i> , 2017, 32, 065002.	2.0	3
95	Monolithic photonic integrated circuit with a GaN-based bent waveguide. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 065003.	2.6	3
96	Asymptotic Outage Probability of Dual-Branch Equal-Gain Combining over Correlated, Non-Identically Distributed Lognormal Fading Channels. , 2018, , .		3
97	InGaN/GaN micro mirror with electrostatic comb drive actuation integrated on a patterned silicon-on-insulator wafer. <i>Optics Express</i> , 2018, 26, 7672.	3.4	3
98	Enhanced temperature and light stability of amorphous indium-gallium-zinc oxide thin film transistors by interface nitrogen doping. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2018, 36, .	1.2	3
99	Converging lasing from floating GaN Penrose microcavity. <i>Europhysics Letters</i> , 2019, 127, 24001.	2.0	3
100	286 nm monolithic multicomponent system. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 010909.	1.5	3
101	Polarization-insensitive one-dimensional guided-mode resonance filter operating at conical mounting. <i>Optics Letters</i> , 2018, 43, 5226.	3.3	3
102	Single-chip imaging system that simultaneously transmits light. <i>Applied Physics Express</i> , 2020, 13, 101002.	2.4	3
103	Monolithically Integrated Sensing, Communication, and Energy Harvester. <i>Energy Technology</i> , 2022, 10, .	3.8	3
104	III-nitride grown on freestanding GaN nanostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 554-557.	0.8	2
105	Fabrication of freestanding nanoscale gratings on silicon-on-insulator wafer. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 2101-2105.	2.3	2
106	Guided-Mode Resonances in GaN Membrane Grating. <i>IEEE Photonics Journal</i> , 2014, 6, 1-7.	2.0	2
107	Suspended HfO ₂ photonic crystal slab on III-nitride/Si platform. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 115, 1409-1413.	2.3	2
108	On-Chip Integration Operating Under the Extraordinary Light Detection Mode of an InGaN/GaN Diode. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 446-449.	2.5	2

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109	Incident-angle-insensitive toroidal metamaterial. <i>Optics Express</i> , 2022, 30, 8510.	3.4	2
110	Improved characteristics of suspended membrane GaN light-emitting diodes on a silicon platform with reflective mirror. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	1
111	Spatial signal correlation from an III-nitride synaptic device. <i>Superlattices and Microstructures</i> , 2017, 110, 296-304.	3.1	1
112	Suspended p-n junction InGaN/GaN multiple quantum wells device with bottom silver reflector. <i>Optics Communications</i> , 2017, 395, 82-87.	2.1	1
113	Membrane-type polarization-controlled color filters on silicon substrate. <i>Optics and Laser Technology</i> , 2018, 105, 4-9.	4.6	1
114	Spatiotemporal Summation of a Triple-Terminal Light-Induced Artificial Synapse. <i>IEEE Journal of the Electron Devices Society</i> , 2018, 6, 376-381.	2.1	1
115	Plasmonic hotspot in toroidal metamaterial. <i>Materials Research Express</i> , 2019, 6, 115807.	1.6	1
116	Realization of both enhancement and depletion mode MOSFETs on GaN-on-Si LED epitaxial wafer. <i>Semiconductor Science and Technology</i> , 2020, 35, 10LT04.	2.0	1
117	AlInGaAs MQW Transceiver with Electro-optic Modulation Characteristics for Free-Space Optical Communication and Sensing. <i>ACS Omega</i> , 2021, 6, 23614-23620.	3.5	1
118	Sparse-aperture photonics-integrated interferometer (SPIN) imaging system: structural design and imaging quality analysis. <i>Optics Express</i> , 2021, 29, 39256.	3.4	1
119	Simultaneous emission-detection operation of vertical-structure LED. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 030903.	1.5	1
120	Effective integration of a MOSFET phototransistor to a GaN LED for UV sensing. <i>Optics Letters</i> , 2022, 47, 3572.	3.3	1
121	InGaN/GaN quantum wells grown on freestanding HfO ₂ photonic crystals. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 601-604.	0.8	0
122	Subwavelength gratings on a free-standing HfO ₂ membrane for out-of-plane coupling of visible light. <i>Applied Physics B: Lasers and Optics</i> , 2015, 121, 353-361.	2.2	0
123	In-plane visible light communication made with InGaN turning mirror. <i>Optics Communications</i> , 2017, 403, 347-351.	2.1	0
124	A 225-nm-thick vertical-structure light-emitting diode inhibiting confined waveguide mode. <i>Applied Physics Express</i> , 2019, 12, 046503.	2.4	0
125	Light-responsive vertical-structure light-emitting diode. <i>Semiconductor Science and Technology</i> , 2020, 35, 045025.	2.0	0