

# Yong-jin Wang

## List of Publications by Year in descending order

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125  
papers

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331670

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127  
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127  
docs citations

127  
times ranked

1110  
citing authors

#	ARTICLE	IF	CITATIONS
1	Miniaturized III-Nitride Asymmetric Optical Link for the Monitoring of Vascular Heart Rate and Cardiac-Related Pulse Activity. <i>Advanced Engineering Materials</i> , 2022, 24, 2100829.	3.5	7
2	Photon-counting schemes for MIMO underwater wireless optical communication with arrayed PMTs. <i>Applied Optics</i> , 2022, 61, 403.	1.8	5
3	Monolithically Integrated UV Photoelectric Switch Based on GaN-on-Silicon Platform. <i>IEEE Electron Device Letters</i> , 2022, 43, 244-247.	3.9	5
4	Unidirectional single-mode lasing realization and temperature-induced mode switching in asymmetric GaN coupled cavities. <i>Nanoscale</i> , 2022, 14, 1921-1928.	5.6	5
5	Monolithically Integrated Sensing, Communication, and Energy Harvester. <i>Energy Technology</i> , 2022, 10, .	3.8	3
6	Incident-angle-insensitive toroidal metamaterial. <i>Optics Express</i> , 2022, 30, 8510.	3.4	2
7	Research Progress of Gallium Nitride Microdisk Cavity Laser. <i>Frontiers in Materials</i> , 2022, 9, .	2.4	4
8	Experimental Demonstration and Theoretical Analysis of Simultaneous Emission-Detection Phenomenon. <i>ACS Omega</i> , 2022, 7, 14017-14021.	3.5	8
9	580-nm-thick vertical-structure light-emitting diode for visible light communication. <i>Applied Physics Letters</i> , 2022, 120, .	3.3	4
10	Coexistence of light emission and detection in a III-nitride quantum well diode. <i>Optics Letters</i> , 2022, 47, 2614.	3.3	9
11	Effective integration of a MOSFET phototransistor to a GaN LED for UV sensing. <i>Optics Letters</i> , 2022, 47, 3572.	3.3	1
12	Wireless light energy harvesting and communication in a waterproof GaN optoelectronic system. , 2022, 1, .		9
13	Asymmetric optical links using monolithic III-nitride diodes. <i>Optics Letters</i> , 2021, 46, 376.	3.3	10
14	Effective Modulation of GaN-on-Si LED via Indigenous MOSFET Engineering. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 5640-5644.	3.0	4
15	Monolithically integrated voltage-controlled MOSFET-LED device based on a GaN-on-silicon LED epitaxial wafer. <i>Optics Letters</i> , 2021, 46, 745.	3.3	4
16	AlInGaAs Multiple Quantum Well-Integrated Device with Multifunction Light Emission/Detection and Electro-Optic Modulation in the Near-Infrared Range. <i>ACS Omega</i> , 2021, 6, 8687-8692.	3.5	4
17	Simultaneous transmission, detection, and energy harvesting. <i>Optics Letters</i> , 2021, 46, 2075.	3.3	7
18	Simultaneous Illumination-Imaging. <i>Advanced Materials Technologies</i> , 2021, 6, 2100227.	5.8	12

#	ARTICLE	IF	CITATIONS
19	Uniting a III-Nitride Transmitter, Waveguide, Modulator, and Receiver on a Single Chip. <i>Advanced Engineering Materials</i> , 2021, 23, 2100582.	3.5	10
20	Single-photon detection for MIMO underwater wireless optical communication enabled by arrayed LEDs and SiPMs. <i>Optics Express</i> , 2021, 29, 25922.	3.4	25
21	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
22	Reflection-type photoplethysmography pulse sensor based on an integrated optoelectronic chip with a ring structure. <i>Biomedical Optics Express</i> , 2021, 12, 6277.	2.9	6
23	Uniting GaN Electronics and Photonics on A Single Chip. <i>Journal of Lightwave Technology</i> , 2021, 39, 6269-6275.	4.6	15
24	Sparse-aperture photonics-integrated interferometer (SPIN) imaging system: structural design and imaging quality analysis. <i>Optics Express</i> , 2021, 29, 39256.	3.4	1
25	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
26	Floating GaN whispering gallery mode micro-ring lasing with Burstein-Moss effect. <i>AIP Advances</i> , 2020, 10, .	1.3	7
27	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
28	Perovskite light-emitting/detecting bifunctional fibres for wearable LiFi communication. <i>Light: Science and Applications</i> , 2020, 9, 163.	16.6	81
29	GaN micro-chimney cavity laser. <i>Optics Communications</i> , 2020, 474, 126054.	2.1	6
30	A Real-Time, Full-Duplex System for Underwater Wireless Optical Communication: Hardware Structure and Optical Link Model. <i>IEEE Access</i> , 2020, 8, 109372-109387.	4.2	33
31	Light-responsive vertical-structure light-emitting diode. <i>Semiconductor Science and Technology</i> , 2020, 35, 045025.	2.0	0
32	Whispering-Gallery Mode Lasing in a Floating GaN Microdisk with a Vertical Slit. <i>Scientific Reports</i> , 2020, 10, 253.	3.3	22
33	Toroidal dipole resonance in an asymmetric double-disk metamaterial. <i>Optics Express</i> , 2020, 28, 38076.	3.4	7
34	Single-chip imaging system that simultaneously transmits light. <i>Applied Physics Express</i> , 2020, 13, 101002.	2.4	3
35	Simultaneous emission-detection operation of vertical-structure LED. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 030903.	1.5	1
36	Converging lasing from floating GaN Penrose microcavity. <i>Europhysics Letters</i> , 2019, 127, 24001.	2.0	3

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37	Plasmonic hotspot in toroidal metamaterial. <i>Materials Research Express</i> , 2019, 6, 115807.	1.6	1
38	Outage Probability Bounds of EGC Over Dual-Branch Non-Identically Distributed Independent Lognormal Fading Channels With Optimized Parameters. <i>IEEE Transactions on Vehicular Technology</i> , 2019, 68, 8232-8237.	6.3	8
39	On-chip multicomponent system made with vertical structure quantum well diode. <i>Semiconductor Science and Technology</i> , 2019, 34, 065017.	2.0	15
40	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
41	GaN-on-Si resonant-cavity light-emitting diode incorporating top and bottom dielectric distributed Bragg reflectors. <i>Applied Physics Express</i> , 2019, 12, 032004.	2.4	13
42	Optimal Optical Omnidirectional Angle-of-Arrival Estimator With Complementary Photodiodes. <i>Journal of Lightwave Technology</i> , 2019, 37, 2932-2945.	4.6	23
43	Integrated photonics chip with InGaN/GaN light-emitting diode and bended waveguide for visible-light communications. <i>Optics and Laser Technology</i> , 2019, 114, 103-109.	4.6	12
44	A 225-nm-thick vertical-structure light-emitting diode inhibiting confined waveguide mode. <i>Applied Physics Express</i> , 2019, 12, 046503.	2.4	0
45	Optical Sensing of Broadband RF Magnetic Field Using a Micrometer-Sized Diamond. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-4.	2.1	6
46	286 nm monolithic multicomponent system. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 010909.	1.5	3
47	Spatial full-duplex light communication achieved with a monolithic non-suspended multicomponent system. <i>Optics Express</i> , 2019, 27, 3379.	3.4	6
48	Multifunctional TiO <sub>2</sub> /ormosils organic-inorganic hybrid films derived by a sol-gel process for photonics and UV nanoimprint applications. <i>Optical Materials Express</i> , 2019, 9, 304.	3.0	9
49	Spatial Audio Acquisition Using a Dual-Functioning MQW-Diode With a Three-Stage Amplifier Circuit. <i>IEEE Access</i> , 2018, 6, 8954-8958.	4.2	10
50	A New Asymptotic Analysis Technique for Diversity Receptions Over Correlated Lognormal Fading Channels. <i>IEEE Transactions on Communications</i> , 2018, 66, 845-861.	7.8	26
51	Membrane-type polarization-controlled color filters on silicon substrate. <i>Optics and Laser Technology</i> , 2018, 105, 4-9.	4.6	1
52	Monolithic photonic integrated circuit with a GaN-based bent waveguide. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 065003.	2.6	3
53	Transferrable monolithic multicomponent system for near-ultraviolet optoelectronics. <i>Applied Physics Express</i> , 2018, 11, 051201.	2.4	10
54	Membrane Light-Emitting Diode Flow Sensor. <i>Advanced Materials Technologies</i> , 2018, 3, 1700285.	5.8	7

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55	Spatiotemporal summation and correlation mimicked in a four-emitter light-induced artificial synapse. Scientific Reports, 2018, 8, 2159.	3.3	4
56	Spatiotemporal Summation of a Triple-Terminal Light-Induced Artificial Synapse. IEEE Journal of the Electron Devices Society, 2018, 6, 376-381.	2.1	1
57	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
58	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
59	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
60	Monolithic III-nitride photonic circuit towards on-chip optical interconnection. Applied Physics Express, 2018, 11, 122201.	2.4	14
61	Full-duplex light communication with a monolithic multicomponent system. Light: Science and Applications, 2018, 7, 83.	16.6	59
62	Low-Complexity Path Planning Algorithm for Unmanned Aerial Vehicles in Complicated Scenarios. IEEE Access, 2018, 6, 57049-57055.	4.2	13
63	Asymptotic Outage Probability of Dual-Branch Equal-Gain Combining over Correlated, Non-Identically Distributed Lognormal Fading Channels. , 2018, , .		3
64	A fiber based diamond RF B-field sensor and characterization of a small helical antenna. Applied Physics Letters, 2018, 113, .	3.3	25
65	InGaN/GaN micro mirror with electrostatic comb drive actuation integrated on a patterned silicon-on-insulator wafer. Optics Express, 2018, 26, 7672.	3.4	3
66	Single-mode ultraviolet whispering gallery mode lasing from a floating GaN microdisk. Optics Letters, 2018, 43, 647.	3.3	33
67	Spectral responses of linear grating filters under full-conical incidence. Optics Letters, 2018, 43, 391.	3.3	7
68	On-chip multicomponent system made with an InGaN directional coupler. Optics Letters, 2018, 43, 1874.	3.3	6
69	Tandem dual-functioning multiple-quantum-well diodes for a self-powered light source. Optics Letters, 2018, 43, 3710.	3.3	12
70	Enhanced temperature and light stability of amorphous indium-gallium-zinc oxide thin film transistors by interface nitrogen doping. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, .	1.2	3
71	GaN photonics: simultaneous emission-detection phenomenon of multiple quantum well diode. , 2018, , .		6
72	Polarization-insensitive one-dimensional guided-mode resonance filter operating at conical mounting. Optics Letters, 2018, 43, 5226.	3.3	3

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73	GaN directional couplers for on-chip optical interconnect. Semiconductor Science and Technology, 2017, 32, 045001.	2.0	15
74	InGaN directional coupler made with a one-step etching technique. Semiconductor Science and Technology, 2017, 32, 065002.	2.0	3
75	Simultaneous dual-functioning InGaN/GaN multiple-quantum-well diode for transferrable optoelectronics. Optical Materials, 2017, 72, 20-24.	3.6	26
76	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
77	On-Chip Integration Operating Under the Extraordinary Light Detection Mode of an InGaN/GaN Diode. IEEE Photonics Technology Letters, 2017, 29, 446-449.	2.5	2
78	Multi-dimensional spatial light communication made with on-chip InGaN photonic integration. Optical Materials, 2017, 66, 659-663.	3.6	16
79	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
80	Membrane-type photonic integration of InGaN/GaN multiple-quantum-well diodes and waveguide. Optical Materials, 2017, 64, 160-165.	3.6	5
81	Saturation Behavior for a Comb-Like Light-Induced Synaptic Transistor. IEEE Electron Device Letters, 2017, 38, 71-74.	3.9	9
82	Light coupling for on-chip optical interconnects. Optics and Laser Technology, 2017, 97, 154-160.	4.6	9
83	Spatial signal correlation from an III-nitride synaptic device. Superlattices and Microstructures, 2017, 110, 296-304.	3.1	1
84	In-plane visible light communication made with InGaN turning mirror. Optics Communications, 2017, 403, 347-351.	2.1	0
85	Unidirectional ultraviolet whispering gallery mode lasing from floating asymmetric circle GaN microdisk. Applied Physics Letters, 2017, 111, .	3.3	25
86	On-chip optical interconnect using visible light. Frontiers of Information Technology and Electronic Engineering, 2017, 18, 1288-1294.	2.6	5
87	Suspended p-n junction InGaN/GaN multiple quantum wells device with bottom silver reflector. Optics Communications, 2017, 395, 82-87.	2.1	1
88	Transferrable monolithic III-nitride photonic circuit for multifunctional optoelectronics. Applied Physics Letters, 2017, 111, .	3.3	32
89	Simultaneous Light-Emitting Light-Detecting Functionality of InGaN/GaN Multiple Quantum Well Diodes. IEEE Electron Device Letters, 2017, 38, 1684-1687.	3.9	23
90	Ultracompact Multilayer Fabry-Perot Filter Deposited in a Micropit. Journal of Lightwave Technology, 2017, 35, 4973-4979.	4.6	6

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91	Monolithic III-nitride photonic integration toward multifunctional devices. <i>Optics Letters</i> , 2017, 42, 4853.	3.3	17
92	Suspended waveguide photodetector featuring p-n junction InGaN/GaN multiple quantum wells. <i>Optical Materials Express</i> , 2016, 6, 2366.	3.0	3
93	On-chip photonic system using suspended p-n junction InGaN/GaN multiple quantum wells device and multiple waveguides. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	62
94	Monolithic integration of a suspended light-emitting diode with a Y-branch structure. <i>Applied Physics Express</i> , 2016, 9, 032202.	2.4	12
95	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
96	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
97	Light Induced Synaptic Transistor With Dual Operation Modes. <i>IEEE Electron Device Letters</i> , 2016, 37, 1434-1437.	3.9	14
98	Integrated p-n junction InGaN/GaN multiple-quantum-well devices with diverse functionalities. <i>Applied Physics Express</i> , 2016, 9, 052204.	2.4	22
99	On-chip integration for in-plane video transmission using visible light. , 2016, , .		3
100	Suspended GaN-based nanostructure for integrated optics. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	2.2	18
101	On-chip integration of suspended InGaN/GaN multiple-quantum-well devices with versatile functionalities. <i>Optics Express</i> , 2016, 24, 6004.	3.4	54
102	Karyotype analysis and ribosomal gene localization of spotted knifejaw <i>Oplegnathus punctatus</i> . <i>Genetics and Molecular Research</i> , 2016, 15, .	0.2	5
103	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
104	Membrane guided-mode resonant color filters exhibiting adjustable spectral response. <i>Optics Communications</i> , 2015, 342, 129-135.	2.1	11
105	Angular-dependent polarization-insensitive filter fashioned with zero-contrast grating. <i>Optics Express</i> , 2015, 23, 15235.	3.4	19
106	Subwavelength gratings on a free-standing HfO <sub>2</sub> membrane for out-of-plane coupling of visible light. <i>Applied Physics B: Lasers and Optics</i> , 2015, 121, 353-361.	2.2	0
107	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
108	Guided-Mode Resonant $\text{HfO}_2$ Grating at Visible Wavelength Range. <i>IEEE Photonics Journal</i> , 2014, 6, 1-7.	2.0	14

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109	Multiline resonant filters fashioned with different periodic subwavelength gratings. Optics Letters, 2014, 39, 6660.	3.3	16
110	Experimental observation of lateral emission in freestanding GaN-based membrane devices. Optics Letters, 2014, 39, 4931.	3.3	10
111	Surface-normal emission from subwavelength GaN membrane grating. Optics Express, 2014, 22, 667.	3.4	20
112	High efficiency membrane light emitting diode fabricated by back wafer thinning technique. Applied Physics Letters, 2014, 105, .	3.3	26
113	Suspended membrane GaN gratings for refractive index sensing. Applied Physics Express, 2014, 7, 052201.	2.4	15
114	Guided-Mode Resonances in GaN Membrane Grating. IEEE Photonics Journal, 2014, 6, 1-7.	2.0	2
115	Suspended HfO <sub>2</sub> photonic crystal slab on III-nitride/Si platform. Applied Physics A: Materials Science and Processing, 2014, 115, 1409-1413.	2.3	2
116	Circular GaN Membrane Gratings. IEEE Photonics Technology Letters, 2014, 26, 915-918.	2.5	11
117	Characteristics of GaN-based LED fabricated on a GaN-on-silicon platform. Applied Physics Express, 2014, 7, 082102.	2.4	22
118	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
119	III-nitride grown on freestanding GaN nanostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 554-557.	0.8	2
120	InGaN/GaN quantum wells grown on freestanding HfO <sub>2</sub> photonic crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 601-604.	0.8	0
121	Comb-drive GaN micro-mirror on a GaN-on-silicon platform. Journal of Micromechanics and Microengineering, 2011, 21, 035012.	2.6	14
122	Freestanding HfO <sub>2</sub> grating fabricated by fast atom beam etching. Nanoscale Research Letters, 2011, 6, 367.	5.7	15
123	Fabrication and characterization of nanoscale resonant gratings on thin silicon membrane. Optics Express, 2009, 17, 4938.	3.4	27
124	Study of HfO <sub>2</sub> thin films prepared by electron beam evaporation. Applied Surface Science, 2004, 228, 93-99.	6.1	75
125	Monolithic beam splitter in silicon-on-insulator. Optics Express, 2004, 12, 5154.	3.4	8