

# Guanghai Ren

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

1,648  
citations

318942

23  
h-index

340414

39  
g-index

82  
all docs

82  
docs citations

82  
times ranked

1745  
citing authors

#	ARTICLE	IF	CITATIONS
1	A room temperature all-optical sensor based on two-dimensional SnS <sub>2</sub> for highly sensitive and reversible NO <sub>2</sub> sensing. <i>Journal of Hazardous Materials</i> , 2022, 426, 127813.	6.5	25
2	Fano Resonance in Directly Coupled Microresonators and Its High-Sensitivity Refractometric Sensing. <i>IEEE Photonics Technology Letters</i> , 2022, 34, 575-578.	1.3	2
3	Highly Sensitive Optical Fiber Plasmonic Sensors by Integrating Hydrogen Doped Molybdenum Oxide. <i>IEEE Sensors Journal</i> , 2022, 22, 7734-7742.	2.4	3
4	Ultra-compact wideband filter with sidelobe suppression based on double modulated grating-assisted microring resonator. , 2022, 1, 623.		2
5	Reversible Room Temperature H <sub>2</sub> Gas Sensing Based on Self-Assembled Cobalt Oxysulfide. <i>Sensors</i> , 2022, 22, 303.	2.1	15
6	Mode and Polarization Division Multiplexing Based on Silicon Nitride Loaded Lithium Niobate on Insulator Platform. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	42
7	Integrated Subwavelength Gratings on a Lithium Niobate on Insulator Platform for Mode and Polarization Manipulation. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	16
8	Plasmonic metal oxides and their biological applications. <i>Materials Horizons</i> , 2022, 9, 2288-2324.	6.4	7
9	Self-calibrating programmable photonic integrated circuits. <i>Nature Photonics</i> , 2022, 16, 595-602.	15.6	59
10	Monolithic Photonic Integrated Circuit Based on Silicon Nitride and Lithium Niobate on Insulator Hybrid Platform. <i>Advanced Photonics Research</i> , 2022, 3, .	1.7	8
11	Tunable Optical Properties of 2D Materials and Their Applications. <i>Advanced Optical Materials</i> , 2021, 9, 2001313.	3.6	100
12	Integrated non-blocking optical router harnessing wavelength- and mode-selective property for photonic networks-on-chip. <i>Optics Express</i> , 2021, 29, 1251.	1.7	4
13	Efficient second harmonic generation in lithium niobate on insulator waveguides and its pitfalls. <i>JPhys Photonics</i> , 2021, 3, 012008.	2.2	14
14	Hexagonal metal oxide monolayers derived from the metal-gas interface. <i>Nature Materials</i> , 2021, 20, 1073-1078.	13.3	88
15	A high-performance visible-light-driven all-optical switch enabled by ultra-thin gallium sulfide. <i>Journal of Materials Chemistry C</i> , 2021, 9, 3115-3121.	2.7	12
16	Circulator-Free Brillouin Photonic Planar Circuit. <i>Laser and Photonics Reviews</i> , 2021, 15, 2000481.	4.4	10
17	Free-standing ultra-thin Janus indium oxysulfide for ultrasensitive visible-light-driven optoelectronic chemical sensing. <i>Nano Today</i> , 2021, 37, 101096.	6.2	38
18	Integrated photonic high extinction short and long pass filters based on lateral leakage. <i>Optics Express</i> , 2021, 29, 18905-18914.	1.7	2

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19	Demonstration of various optical directed logic operations by using an integrated photonic circuit. Optics Letters, 2021, 46, 2457.	1.7	4
20	Hybrid and heterogeneous photonic integration. APL Photonics, 2021, 6, .	3.0	59
21	Single-step etched grating couplers for silicon nitride loaded lithium niobate on insulator platform. APL Photonics, 2021, 6, 086108.	3.0	24
22	Angstrom-scale-porous plasmonic molybdenum oxide for ultrasensitive optical chemical sensing. Sensors and Actuators B: Chemical, 2021, 349, 130740.	4.0	7
23	On-Chip Non-Blocking Optical Mode Exchanger for Mode-Division Multiplexing Interconnection Networks. Journal of Lightwave Technology, 2021, 39, 6563-6571.	2.7	4
24	High-speed electro-optic modulator based on silicon nitride loaded lithium niobate on an insulator platform. Optics Letters, 2021, 46, 5986.	1.7	33
25	Ordered-vacancy-enabled indium sulphide printed in wafer-scale with enhanced electron mobility. Materials Horizons, 2020, 7, 827-834.	6.4	27
26	Multi-Channel Parallel Silicon Mode-Order Converter for Multimode On-Chip Optical Switching. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-6.	1.9	10
27	Machine Learning-Enabled Smart Sensor Systems. Advanced Intelligent Systems, 2020, 2, 2000063.	3.3	83
28	Optical frequency comb generation with low temperature reactive sputtered silicon nitride waveguides. APL Photonics, 2020, 5, .	3.0	14
29	A Flexible and Reconfigurable Optical Add-Drop Multiplexer for Mode Division Multiplexing Systems. IEEE Photonics Technology Letters, 2020, 32, 1515-1518.	1.3	9
30	On-chip switchable and reconfigurable optical mode exchange device using cascaded three-waveguide-coupling switches. Optics Express, 2020, 28, 9552.	1.7	13
31	On-chip biochemical sensor using wide Gaussian beams in silicon waveguide-integrated plasmonic crystal. Optics Letters, 2020, 45, 2283.	1.7	6
32	Recent advances on hybrid integration of 2D materials on integrated optics platforms. Nanophotonics, 2020, 9, 2191-2214.	2.9	31
33	On-chip scalable mode-selective converter based on asymmetrical micro-racetrack resonators. Nanophotonics, 2020, 9, 1447-1455.	2.9	3
34	Interrogation of photonic biosensors using dual optical frequency combs. , 2020, , .		0
35	Coupled Ridge Resonator Filter Design using Microwave Engineering Filter Synthesis. , 2020, , .		0
36	Optical frequency comb generation using low stress reactive sputtered silicon nitride waveguides. , 2020, , .		0

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37	Semiconductor-Free Field-Emission Nanoelectronics: Application in Air-Channel Transistors. , 2019, , .		1
38	Integration of Brillouin and passive circuits for enhanced radio-frequency photonic filtering. APL Photonics, 2019, 4, .	3.0	37
39	Low Stress, Anomalous Dispersive Silicon Nitride Waveguides Fabricated by Reactive Sputtering. , 2019, , .		0
40	Design Algorithm for Adiabatic Photonic Components using a Constant Coupling Approach. , 2019, , .		0
41	2D Plasmonic Tungsten Oxide Enabled Ultrasensitive Fiber Optics Gas Sensor. Advanced Optical Materials, 2019, 7, 1901383.	3.6	57
42	Ridge Resonance in Silicon Photonics Harnessing Bound States in the Continuum. Laser and Photonics Reviews, 2019, 13, 1900035.	4.4	40
43	An Ultrasensitive Silicon Photonic Ion Sensor Enabled by 2D Plasmonic Molybdenum Oxide. Small, 2019, 15, e1805251.	5.2	31
44	A Novel 2D Plasmonic MoO <sub>3</sub> Driven pH Sensor on Silicon Photonics Platform. , 2019, , .		0
45	On-chip correlation-based Brillouin sensing: design, experiment, and simulation. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 146.	0.9	23
46	Optical frequency comb based system for photonic refractive index sensor interrogation. Optics Express, 2019, 27, 21532.	1.7	18
47	Microwave engineering filter synthesis technique for coupled ridge resonator filters. Optics Express, 2019, 27, 34370.	1.7	14
48	Low loss CMOS-compatible silicon nitride photonics utilizing reactive sputtered thin films. Optics Express, 2019, 27, 37795.	1.7	39
49	Independently tunable double Fano resonances based on waveguide-coupled cavities. Optics Letters, 2019, 44, 3154.	1.7	15
50	New Resonance Behavior based on Bound States in the Continuum in a Silicon Photonic Waveguide Platform. , 2019, , .		0
51	On-Chip Backward Inter-modal Brillouin Scattering. , 2019, , .		2
52	Asymmetric transmission of light in hybrid waveguide-integrated plasmonic crystals on a silicon-on-insulator platform. Optics Letters, 2019, 44, 5378.	1.7	0
53	Integrating Brillouin processing with functional circuits for enhanced RF photonic processing. , 2018, , .		1
54	Metal-Free Air Transistors: Semiconductor-Free Field-Emission Air-Channel Nanoelectronics. Nano Letters, 2018, 18, 7478-7484.	4.5	76

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55	Brillouin spectroscopy of a hybrid silicon-chalcogenide waveguide with geometrical variations. Optics Letters, 2018, 43, 3493.	1.7	13
56	On-chip reconfigurable and scalable optical mode multiplexer/demultiplexer based on three-waveguide-coupling structure. Optics Express, 2018, 26, 22366.	1.7	29
57	Distributed SBS Sensing in a Silicon-Chalcogenide Platform. , 2018, , .		0
58	Silicon photonics with hybrid integrated 2D MoO <sub>3</sub> : plasmonic pH driven sensing and reconfigurability. , 2018, , .		0
59	Spectrum reshaping of micro-ring resonator via an integrated Fabry-Perot cavity. , 2018, , .		0
60	Micro-ring resonator quality factor enhancement via an integrated Fabry-Perot cavity. APL Photonics, 2017, 2, .	3.0	65
61	Experimental demonstration of two-dimensional hybrid waveguide-integrated plasmonic crystals on silicon-on-insulator platform. APL Photonics, 2017, 2, 071302.	3.0	2
62	Metal-Loaded Dielectric Resonator Metasurfaces for Radiative Cooling. Advanced Optical Materials, 2017, 5, 1700460.	3.6	177
63	Micro-ring resonator quality factor and extinction ratio enhancement via integrated Fabry-Perot cavity. , 2017, , .		1
64	Compact Brillouin devices through hybrid integration on silicon. Optica, 2017, 4, 847.	4.8	135
65	Brillouin lasing in a hybrid silicon chip. , 2017, , .		0
66	On-chip FP-cavity-assisted microring resonator with enhanced quality factor. , 2017, , .		0
67	Hybrid Waveguide-integrated Plasmonic Crystals on Silicon-on-Insulator Platform. , 2016, , .		0
68	Net Brillouin gain of 18.5 dB in a hybrid silicon chip. , 2016, , .		5
69	Nonlinear Loss Engineering in a Silicon-Chalcogenide Hybrid Optical Waveguide. , 2016, , .		0
70	Sub-micron domain engineering in lithium niobate by laser light irradiation of patterned chromium. , 2015, , .		0
71	Precise, reproducible nano-domain engineering in lithium niobate crystals. Applied Physics Letters, 2015, 107, .	1.5	19
72	Gaussian Beams Manipulation on a SOI Chip. , 2014, , .		0

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73	Toward experimental realization of hybrid waveguide-integrated plasmonic crystals on silicon-on-insulator platform. , 2014, , .		0
74	Gaussian Beams on a Silicon-on-Insulator Chip Using Integrated Optical Lenses. IEEE Photonics Technology Letters, 2014, 26, 1438-1441.	1.3	14
75	On-chip collimated planar &#x2018;Free Space&#x2019; Gaussian beams utilising optical lenses on a silicon on insulator chip. , 2013, , .		0
76	Study on inverse taper based mode transformer for low loss coupling between silicon wire waveguide and lensed fiber. Optics Communications, 2011, 284, 4782-4788.	1.0	43
77	Design and analysis of a cascaded microring resonator-based thermo-optical tunable filter with ultralarge free spectrum range and low power consumption. Optical Engineering, 2011, 50, 074601.	0.5	12
78	Triplexer Chips for FTTH. Guangzi Xuebao/Acta Photonica Sinica, 2011, 40, 169-173.	0.1	0
79	On-Chip All-Optical Passive 3.55 Gbit/s NRZ-to-PRZ Format Conversion Using a High-Q Silicon-Based Microring Resonator. Chinese Physics Letters, 2010, 27, 104203.	1.3	3
80	Arbitrary access to optical carriers in silicon photonic mode/wavelength hybrid division multiplexing circuits. Optics Letters, 0, , .	1.7	2