Jianhong Yang

List of Publications by Year in Descending Order

73 papers	802 citations	12 h-index	26 g-index
77 ext. papers	1,006 ext. citations	3.3 avg, IF	3.84 L-index

#	Paper	IF	Citations
73	Strain modulation of electronic and optical properties of monolayer MoSi2N4. *Physica E: Low-Dimensional Systems and Nanostructures*, **2022**, 135, 114964	3	6
72	Ultra-compact Sb2S3-Silicon Hybrid Integrated Arbitrarily Cascaded Tunable Mode Converter. *IEEE Photonics Journal*, **2022**, 1-1	1.8	0
71	Mode and Polarization-Division Multiplexing Based on Silicon Nitride Loaded Lithium Niobate on Insulator Platform. *Laser and Photonics Reviews*, **2022**, 16, 2100529	8.3	12
70	Dipole-regulated bandgap and high electron mobility for bilayer Janus MoSiGeN4. *Applied Physics Letters*, **2022**, 120, 213101	3.4	0
69	Valence band offset of ReS2/BN heterojunction measured by X-ray photoelectron spectroscopy. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2021**, 392, 127142	2.3	3
68	A Gradient-Oriented Binary Search Method for Photonic Device Design. *Journal of Lightwave Technology*, **2021**, 39, 2407-2412	4	3
67	Demonstration of various optical directed logic operations by using an integrated photonic circuit. *Optics Letters*, **2021**, 46, 2457-2460	3	1
66	Ultraviolet-electrical erasing response characteristics of Ag@SiO2 core-shell functional floating gate organic memory. *Organic Electronics*, **2021**, 93, 106149	3.5	3
65	Determination of band alignment in two-dimensional h-BN/WS2 van der waals heterojunction by X-ray photoelectron spectroscopy. *Journal of Alloys and Compounds*, **2021**, 854, 157301	5.7	1
64	High sensitivity temperature sensor based on a PDMS-assisted bow-shaped fiber structure. *Optics Communications*, **2021**, 481, 126536	2	5
63	Integrated non-blocking optical router harnessing wavelength- and mode-selective property for photonic networks-on-chip. *Optics Express*, **2021**, 29, 1251-1264	3.3	1
62	Single-step etched grating couplers for silicon nitride loaded lithium niobate on insulator platform. *APL Photonics*, **2021**, 6, 086108	5.2	5
61	Influence of AlGaN back-barrier on irradiation tolerance of AlGaN/AlN/GaN HEMTs. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2021**, 410, 127527	2.3	4
60	On-Chip Non-Blocking Optical Mode Exchanger for Mode-Division Multiplexing Interconnection Networks. *Journal of Lightwave Technology*, **2021**, 1-1	4	
59	Organic Field-Effect Transistor Memory Device Based on an Integrated Carbon Quantum Dots/Polyvinyl Pyrrolidone Hybrid Nanolayer. *Electronics (Switzerland)*, **2020**, 9, 753	2.6	1
58	Theoretical Study on InAlAs/InGaAs Single-Photon Avalanche Detectors with Self-Feedback. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 2000053	1.6	
57	Mode-Oriented Permutation Cipher Encryption and Passive Signal Switching Based on Multiobjective Optimized Silicon Subwavelength Metastructures. *ACS Photonics*, **2020**, 7, 2163-2172	6.3	4

56	Broadband Nonvolatile Tunable Mode-Order Converter Based on Silicon and Optical Phase Change Materials Hybrid Meta-Structure. *Journal of Lightwave Technology*, **2020**, 38, 1874-1879	4	3
55	Ultra-compact reflective mode converter based on a silicon subwavelength structure. *Applied Optics*, **2020**, 59, 2754-2758	1.7	7
54	On-chip switchable and reconfigurable optical mode exchange device using cascaded three-waveguide-coupling switches. *Optics Express*, **2020**, 28, 9552-9562	3.3	7
53	All-Optical Tunable Whispering Gallery Modes in a Polymer Bottle Micro-Resonator. *IEEE Photonics Technology Letters*, **2020**, 1-1	2.2	2
52	On-chip scalable mode-selective converter based on asymmetrical micro-racetrack resonators. *Nanophotonics*, **2020**, 9, 1447-1455	6.3	1
51	Properties of monolayer black phosphorus affected by uniaxial strain. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 117, 113834	3	1
50	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	3.8	5
49	Tuning the mechanical and electronic properties and carrier mobility of phosphorene via family atom doping: a first-principles study. *Journal of Materials Chemistry C*, **2020**, 8, 14902-14909	7.1	6
48	Band alignment of two-dimensional h-BN/MoS2 van der Waals heterojunction measured by X-ray photoelectron spectroscopy. *Journal of Alloys and Compounds*, **2020**, 834, 155108	5.7	12
47	Ultra-compact switchable mode converter based on silicon and optical phase change material hybrid metastructure. *Optics Communications*, **2020**, 473, 125889	2	3
46	PDMS-Assisted Microfiber M-Z Interferometer With a Knot Resonator for Temperature Sensing. *IEEE Photonics Technology Letters*, **2019**, 31, 337-340	2.2	21
45	Independently tunable double Fano resonances based on waveguide-coupled cavities. *Optics Letters*, **2019**, 44, 3154-3157	3	8
44	Ultra-compact dual-polarization silicon mode-order converter. *Optics Letters*, **2019**, 44, 4179-4182	3	18
43	Modeling a novel InP/InGaAs avalanche photodiode structure: Reducing the excess noise factor. *Optics Communications*, **2019**, 435, 374-377	2	3
42	Reconfigurable On-Chip Mode Exchange for Mode-Division Multiplexing Optical Networks. *Journal of Lightwave Technology*, **2019**, 37, 1008-1013	4	12
41	Demonstration of a Microfiber-Based Add□Drop Filter Using One Tapered Fiber. *IEEE Photonics Journal*, **2018**, 10, 1-6	1.8	1
40	Experimental demonstration of an optical Feynman gate for reversible logic operation using silicon micro-ring resonators. *Nanophotonics*, **2018**, 7, 333-337	6.3	18
39	Graphene-assisted all-optical tunable Mach□ehnder interferometer based on microfiber. *Optics Communications*, **2018**, 428, 77-83	2	7

38	Demonstration of an optical directed half-subtracter using integrated silicon photonic circuits. *Applied Optics*, **2018**, 57, 2564-2569	1.7	3
37	On-chip reconfigurable and scalable optical mode multiplexer/demultiplexer based on three-waveguide-coupling structure. *Optics Express*, **2018**, 26, 22366-22377	3.3	18
36	On-chip optical parity checker using silicon photonic integrated circuits. *Nanophotonics*, **2018**, 7, 1939-1948	6.3	8
35	Experimental realization of a CMOS-compatible optical directed priority encoder using cascaded micro-ring resonators. *Nanophotonics*, **2018**, 7, 727-733	6.3	5
34	Experimental realization of an optical digital comparator using silicon microring resonators. *Nanophotonics*, **2018**, 7, 669-675	6.3	5
33	Demonstration of a Silicon Photonic Circuit for Half-Add Operations Using Cascaded Microring Resonators. *IEEE Photonics Journal*, **2017**, 9, 1-9	1.8	1
32	Tunable Fano resonance in mutually coupled micro-ring resonators. *Applied Physics Letters*, **2017**, 111, 091901	3.4	10
31	Experimental demonstration of a reconfigurable electro-optic directed logic circuit using cascaded carrier-injection micro-ring resonators. *Scientific Reports*, **2017**, 7, 6410	4.9	12
30	p-n junction theory in view of excess majority carriers. *Europhysics Letters*, **2017**, 120, 28004	1.6	1
29	Tunable Fano resonances based on microring resonator with feedback coupled waveguide. *Optics Express*, **2016**, 24, 20187-95	3.3	43
28	Simulation and Demonstration of Directed XOR/XNOR Logic Gates Using Two Cascaded Microring Resonators. *IEEE Photonics Journal*, **2016**, 8, 1-11	1.8	3
27	Reconfigurable Electro-optic Logic Circuits Using Microring Resonator-Based Optical Switch Array. *IEEE Photonics Journal*, **2016**, 8, 1-8	1.8	7
26	High sensitivity biosensors based on germanium nanowires fabricated by Ge condensation technique. *Materials Letters*, **2016**, 172, 142-145	3.3	5
25	Controllable decay in an optical waveguide system. *AIP Advances*, **2016**, 6, 095212	1.5	
24	Two-dimensional electron gas (2DEG) mobility affected by the in mole fraction fluctuation in InxAl1−xN/GaN heterostructures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 83, 207-210	3	2
23	A theory study of the multiplication characteristics of InP/InGaAs avalanche photodiodes with double multiplication layers and double charge layers. *Optics Communications*, **2016**, 374, 114-118	2	4
22	Ge-on-insulator wafer with ultralow defect density fabricated by direct condensation of SiGe-on-insulator structure. *Applied Surface Science*, **2015**, 356, 1052-1057	6.7	3
21	Electro-optic directed XOR logic circuits based on parallel-cascaded micro-ring resonators. *Optics Express*, **2015**, 23, 26342-55	3.3	10

20	The design and implementation of wireless temperature and humidity control system based on nRF905 **2015**,		3
19	Theoretical studies of the capacitance-voltage characteristics of metal-ferroelectric-GaN structures. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2012**, 25, 96-101	1	1
18	Potential barrier height dependence on biased voltages of static induction thyristors **2012**,		1
17	Strong single-ion anisotropy and anisotropic interactions of magnetic adatoms induced by topological surface states. *Physical Review B*, **2012**, 85,	3.3	19
16	Strong Dzyaloshinskii-Moriya interaction and origin of ferroelectricity in Cu2OSeO3. *Physical Review Letters*, **2012**, 109, 107203	7.4	95
15	Transfer characteristics in a GaN MFSFET: comparison with a conventional GaN MOSFET. *International Journal of Electronics*, **2012**, 99, 987-993	1.2	
14	Improving the electrical performance of resistive switching memory using doping technology. *Science Bulletin*, **2012**, 57, 1235-1240		22
13	Analysis of dark current dependent upon threading dislocations in Ge/Si heterojunction photodetectors. *Microelectronics International*, **2012**, 29, 136-140	0.8	5
12	Design and numerical simulation of a humidity sensor based on CMOS fabrication technology. *Physics Procedia*, **2011**, 18, 31-39		
11	Dry electrode for the measurement of biopotential signals. *Science China Information Sciences*, **2011**, 54, 2435-2442	3.4	25
10	Investigation of resistive switching in Cu-doped HfO2 thin film for multilevel non-volatile memory applications. *Nanotechnology*, **2010**, 21, 045202	3.4	228
9	Highly Stable Radiation-Hardened Resistive-Switching Memory. *IEEE Electron Device Letters*, **2010**, 31, 1470-1472	4.4	49
8	A novel CuxSiyO resistive memory in logic technology with excellent data retention and resistance distribution for embedded applications **2010**,		12
7	An Improved Helical Resonator Design for Rubidium Atomic Frequency Standards. *IEEE Transactions on Instrumentation and Measurement*, **2010**, 59, 1678-1685	5.2	4
6	Study on Effects of Different Metallic Vane-Loaded Helix Slow-Wave Structures in Traveling-Wave Tubes. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2009**, 30, 611-621	2.2	2
5	A novel buried-gate static induction transistor with diffused source region. *Semiconductor Science and Technology*, **2004**, 19, 152-156	1.8	7
4	Electrically-induced dipole domain in the junction-barrier structure under the high-level injection condition. *Semiconductor Science and Technology*, **2003**, 18, L31-L34	1.8	
3	An analytical model for the saturation characteristics of bipolar-mode static induction transistors. *Solid-State Electronics*, **1999**, 43, 823-827	1.7	2

2	Analysis of Improved 2D Electron Gas Mobility in InAlN/AlN/InGaN High-Electron-Mobility Transistors with GaN Interlayer. *Physica Status Solidi - Rapid Research Letters*,2100573	2.5	0
1	Integrated Subwavelength Gratings on a Lithium Niobate on Insulator Platform for Mode and Polarization Manipulation. *Laser and Photonics Reviews*,2200130	8.3	3