

# Yumin Liu

## List of Publications by Year in descending order

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76  
papers

2,262  
citations

304602

22  
h-index

223716

46  
g-index

78  
all docs

78  
docs citations

78  
times ranked

2681  
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrared Plasmonic Refractive Index Sensor with Ultra-High Figure of Merit Based on the Optimized All-Metal Grating. <i>Nanoscale Research Letters</i> , 2017, 12, 1.	3.1	626
2	The sensing characteristics of plasmonic waveguide with a ring resonator. <i>Optics Express</i> , 2014, 22, 7669.	1.7	178
3	The design of ultra-broadband selective near-perfect absorber based on photonic structures to achieve near-ideal daytime radiative cooling. <i>Materials and Design</i> , 2018, 139, 104-111.	3.3	163
4	Numerical study of an ultra-broadband near-perfect solar absorber in the visible and near-infrared region. <i>Optics Letters</i> , 2017, 42, 450.	1.7	120
5	Design of a Tunable Ultra-Broadband Terahertz Absorber Based on Multiple Layers of Graphene Ribbons. <i>Nanoscale Research Letters</i> , 2018, 13, 143.	3.1	98
6	Toward a Mechanistic Understanding of Vertical Growth of van der Waals Stacked 2D Materials: A Multiscale Model and Experiments. <i>ACS Nano</i> , 2017, 11, 12780-12788.	7.3	89
7	Ultra-narrow Band Perfect Absorber and Its Application as Plasmonic Sensor in the Visible Region. <i>Nanoscale Research Letters</i> , 2017, 12, 427.	3.1	84
8	A nanometric temperature sensor based on plasmonic waveguide with an ethanol-sealed rectangular cavity. <i>Optics Communications</i> , 2015, 339, 1-6.	1.0	69
9	Infrared Perfect Ultra-narrow Band Absorber as Plasmonic Sensor. <i>Nanoscale Research Letters</i> , 2016, 11, 483.	3.1	61
10	The sensing characteristics of plasmonic waveguide with a single defect. <i>Optics Communications</i> , 2014, 323, 44-48.	1.0	53
11	Plasmonic metamaterial for electromagnetically induced transparency analogue and ultra-high figure of merit sensor. <i>Scientific Reports</i> , 2017, 7, 45210.	1.6	53
12	First-principles study of square phase MX <sub>2</sub> and Janus MXY (M=Mo, W; X, Y=S, Se, Te) transition metal dichalcogenide monolayers under biaxial strain. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019, 110, 134-139.	1.3	50
13	Efficient Polarization Beam Splitter Based on All-Dielectric Metasurface in Visible Region. <i>Nanoscale Research Letters</i> , 2019, 14, 34.	3.1	38
14	Plexcitonic Optical Chirality: Strong Exciton-Plasmon Coupling in Chiral J-Aggregate-Metal Nanoparticle Complexes. <i>ACS Nano</i> , 2021, 15, 2292-2300.	7.3	38
15	Numerical study of a wide-angle polarization-independent ultra-broadband efficient selective metamaterial absorber for near-ideal solar thermal energy conversion. <i>RSC Advances</i> , 2018, 8, 21054-21064.	1.7	35
16	Numerical Study of the Wide-Angle Polarization-Independent Ultra-Broadband Efficient Selective Solar Absorber in the Entire Solar Spectrum. <i>Solar Rrl</i> , 2017, 1, 1700049.	3.1	32
17	High-efficiency all-dielectric transmission metasurface for linearly polarized light in the visible region. <i>Photonics Research</i> , 2018, 6, 517.	3.4	30
18	Mechanisms of 2 $\pi$ phase control in dielectric metasurface and transmission enhancement effect. <i>Optics Express</i> , 2019, 27, 23186.	1.7	27

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19	Realization of compact broadband optical diode in linear air-hole photonic crystal waveguide. Optics Express, 2016, 24, 24592.	1.7	25
20	Design of a broadband reciprocal optical diode in a silicon waveguide assisted by silver surface plasmonic splitter. Optics Express, 2017, 25, 19129.	1.7	24
21	All-dielectric three-element transmissive Huygens's™ metasurface performing anomalous refraction. Photonics Research, 2019, 7, 1501.	3.4	24
22	Underdetermined Wideband DOA Estimation for Off-Grid Sources with Coprime Array Using Sparse Bayesian Learning. Sensors, 2018, 18, 253.	2.1	23
23	THE STRAIN DISTRIBUTIONS AND CARRIER'S CONFINING POTENTIALS OF SELF-ORGANIZED InAs/GaAs QUANTUM DOT. International Journal of Modern Physics B, 2006, 20, 4899-4907.	1.0	17
24	Copper plasmonic metamaterial glazing for directional thermal energy management. Materials and Design, 2020, 188, 108407.	3.3	17
25	Ultra-broadband large-angle beam splitter based on a homogeneous metasurface at visible wavelengths. Optics Express, 2020, 28, 32226.	1.7	17
26	The optimal structure of two dimensional photonic crystals with the large absolute band gap. Optics Express, 2011, 19, 19346.	1.7	16
27	Numerical investigations of a near-infrared plasmonic refractive index sensor with extremely high figure of merit and low loss based on the hybrid plasmonic waveguide-nanocavity system. Optics Express, 2016, 24, 23260.	1.7	12
28	Numerical Study of an Efficient Solar Absorber Consisting of Metal Nanoparticles. Nanoscale Research Letters, 2017, 12, 601.	3.1	12
29	Design of Compact TE-Polarized Mode-Order Converter in Silicon Waveguide With High Refractive Index Material. IEEE Photonics Journal, 2018, 10, 1-7.	1.0	12
30	Switchable bifunctional metasurface based on VO2 for ultra-broadband polarization conversion and perfect absorption in same infrared waveband. Optics Communications, 2022, 503, 127442.	1.0	12
31	Equilibrium critical size of coherent InSb/GaSb quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2402-2405.	1.3	10
32	Design of plasmonic solar cells combining dual interface nanostructure for broadband absorption enhancement. Optics Communications, 2014, 333, 213-218.	1.0	10
33	High-Efficiency, Dual-Band Beam Splitter Based on an All-Dielectric Quasi-Continuous Metasurface. Materials, 2021, 14, 3184.	1.3	10
34	Beyond dipole excitation: the performance of quadrupole-based Huygens's™ metasurface. Optics Letters, 2020, 45, 4847.	1.7	10
35	Structural and electronic properties of hydrogenated GaBi and InBi honeycomb monolayers with point defects. RSC Advances, 2018, 8, 7022-7028.	1.7	9
36	Broadband Ultrathin Transmission Quarter Waveplate with Rectangular Hole Array Based on Plasmonic Resonances. Nanoscale Research Letters, 2019, 14, 384.	3.1	9

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37	Lattice-distorted lithiation behavior of a square phase Janus MoSSe monolayer for electrode applications. <i>Nanoscale Advances</i> , 2021, 3, 2902-2910.	2.2	9
38	Realization of perfect selective absorber based on multipole modes in all-dielectric moth-eye structure. <i>Optics Express</i> , 2019, 27, 5703.	1.7	9
39	Tuning the Fano resonances in a single defect nanocavity coupled with a plasmonic waveguide for sensing applications. <i>Modern Physics Letters B</i> , 2015, 29, 1550218.	1.0	8
40	Broadband Mid-infrared Dual-Band Double-Negative Metamaterial: Realized Using a Simple Geometry. <i>Plasmonics</i> , 2018, 13, 1287-1295.	1.8	8
41	Broadband anomalous reflective metasurface for complementary conversion of arbitrary incident polarization angles. <i>Optics Express</i> , 2021, 29, 38404.	1.7	8
42	Waveguide-integrated digital metamaterials for wavelength, mode and polarization demultiplexing. <i>Optical Materials</i> , 2021, 122, 111770.	1.7	8
43	Design of a broadband reciprocal optical diode in multimode silicon waveguide by partial depth etching. <i>Optics Communications</i> , 2018, 418, 88-92.	1.0	7
44	Design of Multifunctional Tunable Metasurface Assisted by Elastic Substrate. <i>Nanomaterials</i> , 2022, 12, 2387.	1.9	7
45	Three-Dimensional Simulation of Particle-Induced Mode Splitting in Large Toroidal Microresonators. <i>Sensors</i> , 2020, 20, 5420.	2.1	6
46	Topology design of digital metamaterials for ultra-compact integrated photonic devices based on mode manipulation. <i>Nanoscale Advances</i> , 2021, 3, 4579-4588.	2.2	6
47	The sensing characteristics of periodic staggered surface plasmon gratings. <i>Optics Communications</i> , 2016, 381, 391-395.	1.0	5
48	Dual interface gratings design for absorption enhancement in thin crystalline silicon solar cells. <i>Optics Communications</i> , 2017, 399, 62-67.	1.0	5
49	Near infrared nonlinearity in silver telluride-core/carbon-sheath and tellurium-core/carbon-sheath nanostructures synthesized by reduction carbonization approach. <i>Journal of Materials Science</i> , 2014, 49, 6892-6899.	1.7	4
50	Ultra-Compact Waveguide-Integrated TE-Mode Converters With High Mode Purity by Designing Ge/Si Patterns. <i>IEEE Photonics Journal</i> , 2019, 11, 1-8.	1.0	4
51	Underdetermined DOA estimation using coprime array via multiple measurement sparse Bayesian learning. <i>Signal, Image and Video Processing</i> , 2019, 13, 1311-1318.	1.7	4
52	Direct Integration of Few-Layer MoS <sub>2</sub> at Plasmonic Au Nanostructure by Substrate-Diffusion Delivered Mo. <i>Advanced Materials Interfaces</i> , 2020, 7, 1902093.	1.9	4
53	Catalytic activity for hydrogen evolution reaction in square phase Janus MoSSe monolayer: A first-principles study. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2021, 126, 114485.	1.3	4
54	All-dielectric colored truncated cone metasurfaces with silicon Mie magnetic resonators. <i>Applied Optics</i> , 2019, 58, 6742.	0.9	4

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55	Calculation of critical size of coherent InAs quantum dot on GaAs substrate. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012, 46, 52-56.	1.3	3
56	Calculation of the bending area of threading dislocations of InGaAs quantum dots on a GaAs substrate. <i>Superlattices and Microstructures</i> , 2013, 63, 29-35.	1.4	3
57	Plastic relaxation and coherency limit in uncapped multi-faceted InAs/GaAs(001) nanoislands. <i>Journal of Applied Physics</i> , 2013, 114, 093504.	1.1	3
58	Sub-Poissonian photon statistics in quantum dot-metal nanoparticles hybrid system with gain media. <i>Scientific Reports</i> , 2019, 9, 10088.	1.6	3
59	Armchair Janus MoSSe Nanoribbon with Spontaneous Curling: A First-Principles Study. <i>Nanomaterials</i> , 2021, 11, 3442.	1.9	3
60	Improved bidirectional networks for nanostructure color design. <i>Optics Communications</i> , 2022, 520, 128419.	1.0	3
61	The calculation of InGaN quantum dot formation mechanism on GaN pyramid. <i>Superlattices and Microstructures</i> , 2015, 84, 72-79.	1.4	2
62	Focal Shift of Nano-Optical Lens Affected by Periodic Resonance With Substrate. <i>IEEE Photonics Journal</i> , 2016, 8, 1-9.	1.0	2
63	Simultaneous All-Optical or and xor Logic Gates Based on the Bimodal Photonic Cavity Containing a Quantum Dot. <i>IEEE Photonics Journal</i> , 2016, 8, 1-10.	1.0	2
64	Optically Active Plasmonic Metasurfaces based on the Hybridization of In-Plane Coupling and Out-of-Plane Coupling. <i>Nanoscale Research Letters</i> , 2018, 13, 144.	3.1	2
65	Free space continuous-variable quantum key distribution with practical links. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 3690.	0.9	2
66	A new recognition algorithm with high result reliability. , 2012, , .		1
67	The Formation Site of Noninterfacial Misfit Dislocations in InAs/GaAs Quantum Dots. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-5.	1.5	1
68	Asymmetric light transmission based on coupling between photonic crystal waveguides and L1/L3 cavity. <i>Journal of Modern Optics</i> , 2017, 64, 1626-1631.	0.6	1
69	Numerical Investigations of a Silicon Photonic TE-Pass Polarizer Consisting of Alternating Copper/Silicon Nitride Layers. <i>IEEE Photonics Journal</i> , 2017, 9, 1-9.	1.0	1
70	High-Contrast and Compact Integrated Wavelength Diplexer Based on Subwavelength Grating Anisotropic Metamaterial for 1550/2000Ånm. <i>IEEE Photonics Journal</i> , 2021, 13, 1-10.	1.0	1
71	Universal design rules for 2π phase trapezoidal metasurface based on Fabry-Perot resonance in visible and near-infrared. <i>Optical Engineering</i> , 2021, 60, .	0.5	1
72	Ultra-broadband polarization metasurface-based splitter with tunable beam splitting ratio. <i>Optics Communications</i> , 2022, 523, 128719.	1.0	1

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73	Hydrothermal Synthesis and Mechanism of Unusual Zigzag Ag <sub>2</sub> Te and Ag <sub>2</sub> Te/C Core-Shell Nanostructures. Journal of Nanomaterials, 2014, 2014, 1-5.	1.5	0
74	Polarization insensitive transmission enhanced by staggered metal disk array. Optical Materials, 2017, 73, 563-569.	1.7	0
75	Bi-Directional Faraday Rotation Selective Enhancement on Embedded Nano-Gratings. IEEE Photonics Technology Letters, 2017, 29, 1615-1618.	1.3	0
76	Regulable photon bunching and anti-bunching in quantum dot-bimodal cavity coupling system. , 2017, , .		0