Xiong Li

List of Publications by Citations

102 papers	4,333 citations	35 h-index	64 g-index
112 ext. papers	5,225 ext. citations	6.3 avg, IF	5.75 L-index

#	Paper	IF	Citations
102	Catenary optics for achromatic generation of perfect optical angular momentum. *Science Advances*, **2015**, 1, e1500396	14.3	422
101	Multicolor 3D meta-holography by broadband plasmonic modulation. *Science Advances*, **2016**, 2, e1601102	14.3	370
100	Design and fabrication of broadband ultralow reflectivity black Si surfaces by laser micro/nanoprocessing. *Light: Science and Applications*, **2014**, 3, e185-e185	16.7	208
99	All-Dielectric Metasurfaces for Simultaneous Giant Circular Asymmetric Transmission and Wavefront Shaping Based on Asymmetric Photonic Spin□Orbit Interactions. *Advanced Functional Materials*, **2017**, 27, 1704295	15.6	174
98	Ultrabroadband superoscillatory lens composed by plasmonic metasurfaces for subdiffraction light focusing. *Laser and Photonics Reviews*, **2015**, 9, 713-719	8.3	159
97	Merging Geometric Phase and Plasmon Retardation Phase in Continuously Shaped Metasurfaces for Arbitrary Orbital Angular Momentum Generation. *ACS Photonics*, **2016**, 3, 2022-2029	6.3	156
96	A planar chiral meta-surface for optical vortex generation and focusing. *Scientific Reports*, **2015**, 5, 10365	4.9	142
95	Spatially and spectrally engineered spin-orbit interaction for achromatic virtual shaping. *Scientific Reports*, **2015**, 5, 9822	4.9	118
94	Broadband spin Hall effect of light in single nanoapertures. *Light: Science and Applications*, **2017**, 6, e16276	16.7	108
93	Orbital Angular Momentum Multiplexing and Demultiplexing by a Single Metasurface. *Advanced Optical Materials*, **2017**, 5, 1600502	8.1	104
92	Plasmonic Metasurfaces for Simultaneous Thermal Infrared Invisibility and Holographic Illusion. *Advanced Functional Materials*, **2018**, 28, 1706673	15.6	101
91	Engineering the phase front of light with phase-change material based planar lenses. *Scientific Reports*, **2015**, 5, 8660	4.9	100
90	High-Efficiency and Wide-Angle Beam Steering Based on Catenary Optical Fields in Ultrathin Metalens. *Advanced Optical Materials*, **2018**, 6, 1800592	8.1	92
89	Multispectral optical metasurfaces enabled by achromatic phase transition. *Scientific Reports*, **2015**, 5, 15781	4.9	88
88	Achromatic flat optical components via compensation between structure and material dispersions. *Scientific Reports*, **2016**, 6, 19885	4.9	80
87	Revisitation of Extraordinary Young□ Interference: from Catenary Optical Fields to Spin□Orbit Interaction in Metasurfaces. *ACS Photonics*, **2018**, 5, 3198-3204	6.3	79
86	Catenary nanostructures as compact Bessel beam generators. *Scientific Reports*, **2016**, 6, 20524	4.9	70

85	Nanoapertures with ordered rotations: symmetry transformation and wide-angle flat lensing. *Optics Express*, **2017**, 25, 31471-31477	3.3	65
84	Generation and detection of orbital angular momentum via metasurface. *Scientific Reports*, **2016**, 6, 24286	4.9	64
83	Merging plasmonics and metamaterials by two-dimensional subwavelength structures. *Journal of Materials Chemistry C*, **2017**, 5, 4361-4378	7.1	63
82	Fabrication of anisotropically arrayed nano-slots metasurfaces using reflective plasmonic lithography. *Nanoscale*, **2015**, 7, 18805-12	7.7	63
81	Actively Tunable Structural Color Rendering with Tensile Substrate. *Advanced Optical Materials*, **2017**, 5, 1600829	8.1	54
80	Dispersion controlling meta-lens at visible frequency. *Optics Express*, **2017**, 25, 21419-21427	3.3	54
79	Multi-Channel Vortex Beam Generation by Simultaneous Amplitude and Phase Modulation with Two-Dimensional Metamaterial. *Advanced Materials Technologies*, **2017**, 2, 1600201	6.8	52
78	Multistate Switching of Photonic Angular Momentum Coupling in Phase-Change Metadevices. *Advanced Materials*, **2020**, 32, e1908194	24	51
77	Achromatic Broadband Super-Resolution Imaging by Super-Oscillatory Metasurface. *Laser and Photonics Reviews*, **2018**, 12, 1800064	8.3	50
76	Color display and encryption with a plasmonic polarizing metamirror. *Nanophotonics*, **2018**, 7, 323-331	6.3	48
75	Colorful Metahologram with Independently Controlled Images in Transmission and Reflection Spaces. *Advanced Functional Materials*, **2019**, 29, 1809145	15.6	47
74	Simultaneous Full-Color Printing and Holography Enabled by Centimeter-Scale Plasmonic Metasurfaces. *Advanced Science*, **2020**, 7, 1903156	13.6	46
73	Off-axis multi-wavelength dispersion controlling metalens for multi-color imaging. *Opto-Electronic Advances*, **2020**, 3, 19000501-19000507	6.5	44
72	Ultrahigh-capacity dynamic holographic displays via anisotropic nanoholes. *Nanoscale*, **2017**, 9, 1409-1415	7.7	38
71	Metasurface-based broadband hologram with high tolerance to fabrication errors. *Scientific Reports* , **2016**, 6, 19856	4.9	37
70	Quasi-continuous metasurface for ultra-broadband and polarization-controlled electromagnetic beam deflection. *Scientific Reports*, **2015**, 5, 17733	4.9	36
69	Tunable bandwidth of band-stop filter by metamaterial cell coupling in optical frequency. *Optics Express*, **2011**, 19, 5283-9	3.3	36
68	Broadband metamaterial as an "invisible" radiative cooling coat. *Optics Communications*, **2018**, 407, 204-207	2	35

67	Super-resolution imaging with a Bessel lens realized by a geometric metasurface. *Optics Express*, **2017**, 25, 13933-13943	3.3	35
66	Chip-Integrated Geometric Metasurface As a Novel Platform for Directional Coupling and Polarization Sorting by Spin□Orbit Interaction. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-7	3.8	34
65	Broadband Functional Metasurfaces: Achieving Nonlinear Phase Generation toward Achromatic Surface Cloaking and Lensing. *Advanced Optical Materials*, **2019**, 7, 1801480	8.1	31
64	Meta-Chirality: Fundamentals, Construction and Applications. *Nanomaterials*, **2017**, 7,	5.4	30
63	Extreme-Angle Silicon Infrared Optics Enabled by Streamlined Surfaces. *Advanced Materials*, **2021**, 33, e2008157	24	30
62	Spoof Plasmonic Metasurfaces with Catenary Dispersion for Two-Dimensional Wide-Angle Focusing and Imaging. *IScience*, **2019**, 21, 145-156	6.1	29
61	Generalized Pancharatnam-Berry Phase in Rotationally Symmetric Meta-Atoms. *Physical Review Letters*, **2021**, 126, 183902	7.4	29
60	Asymmetric Transmission and Wavefront Manipulation toward Dual-Frequency Meta-Holograms. *ACS Photonics*, **2019**, 6, 1541-1546	6.3	27
59	Polarization-Controlled Broadband Accelerating Beams Generation by Single Catenary-Shaped Metasurface. *Advanced Optical Materials*, **2019**, 7, 1900503	8.1	27
58	Laser Linewidth Measurement Based on Amplitude Difference Comparison of Coherent Envelope. *IEEE Photonics Technology Letters*, **2016**, 28, 759-762	2.2	26
57	Dynamic Control of the Extraordinary Optical Scattering in Semicontinuous 2D Metamaterials. *Advanced Optical Materials*, **2016**, 4, 659-663	8.1	25
56	Midinfrared real-time polarization imaging with all-dielectric metasurfaces. *Applied Physics Letters*, **2019**, 114, 161904	3.4	24
55	Heat Resisting Metallic Meta-Skin for Simultaneous Microwave Broadband Scattering and Infrared Invisibility Based on Catenary Optical Field. *Advanced Materials Technologies*, **2019**, 4, 1800612	6.8	24
54	Catenary Functions Meet Electromagnetic Waves: Opportunities and Promises. *Advanced Optical Materials*, **2020**, 8, 2001194	8.1	23
53	Plasmonic lithography for the fabrication of surface nanostructures with a feature size down to 9 nm. *Nanoscale*, **2020**, 12, 2415-2421	7.7	21
52	Super-Resolution Long-Depth Focusing by Radially Polarized Light Irradiation Through Plasmonic Lens in Optical Meso-field. *Plasmonics*, **2014**, 9, 55-60	2.4	20
51	Methodologies for On-Demand Dispersion Engineering of Waves in Metasurfaces. *Advanced Optical Materials*, **2019**, 7, 1801376	8.1	19
50	Experimental demonstration of a continuous varifocal metalens with large zoom range and high imaging resolution. *Applied Physics Letters*, **2019**, 115, 163103	3.4	19

49	Wavelength-selective orbital angular momentum generation based on a plasmonic metasurface. *Nanoscale*, **2016**, 8, 12267-71	7.7	18
48	Generation of Polarization-Sensitive Modulated Optical Vortices with All-Dielectric Metasurfaces. *ACS Photonics*, **2019**, 6, 628-633	6.3	17
47	Near-field collimation of light carrying orbital angular momentum with bull's-eye-assisted plasmonic coaxial waveguides. *Scientific Reports*, **2015**, 5, 12108	4.9	16
46	Pushing the plasmonic imaging nanolithography to nano-manufacturing. *Optics Communications*, **2017**, 404, 62-72	2	16
45	Tight focusing of radially and azimuthally polarized light with plasmonic metalens. *Optics Communications*, **2015**, 356, 445-450	2	15
44	Broadband and high-efficiency accelerating beam generation by dielectric catenary metasurfaces. *Nanophotonics*, **2020**, 9, 2829-2837	6.3	15
43	Helicity Multiplexed Spin-Orbit Interaction in Metasurface for Colorized and Encrypted Holographic Display. *Annalen Der Physik*, **2017**, 529, 1700248	2.6	14
42	Dispersion engineering in metamaterials and metasurfaces. *Journal Physics D: Applied Physics*, **2018**, 51, 054002	3	13
41	Introducing dipole-like resonance into magnetic resonance to realize simultaneous drop in transmission and reflection at terahertz frequency. *Journal of Applied Physics*, **2010**, 108, 053103	2.5	13
40	All-metallic geometric metasurfaces for broadband and high-efficiency wavefront manipulation. *Nanophotonics*, **2020**, 9, 3209-3215	6.3	12
39	High-Efficiency and Tunable Circular-Polarization Beam Splitting with a Liquid-Filled All-Metallic Catenary Meta-Mirror. *Advanced Materials Technologies*, **2019**, 4, 1900334	6.8	11
38	Dual-Functional Metasurface toward Giant Linear and Circular Dichroism. *Advanced Optical Materials*, **2020**, 8, 1902061	8.1	11
37	Crosstalk reduction of integrated optical waveguides with nonuniform subwavelength silicon strips. *Scientific Reports*, **2020**, 10, 4491	4.9	10
36	Angular-multiplexed multichannel optical vortex arrays generators based on geometric metasurface. *IScience*, **2021**, 24, 102107	6.1	9
35	Ultra-wideband manipulation of electromagnetic waves by bilayer scattering engineered gradient metasurface.. *RSC Advances*, **2018**, 8, 13061-13066	3.7	8
34	Functional metasurfaces based on metallic and dielectric subwavelength slits and stripes array. *Journal of Physics Condensed Matter*, **2018**, 30, 144003	1.8	8
33	Metasurface spatiotemporal dynamics and asymmetric photonic spin-orbit interactions mediated vector-polarization optical chaos. *Physical Review Research*, **2021**, 3,	3.9	8
32	A Tunable Metasurface Deflector Based on MIM Waveguide Filled with Phase-Change Material. *Plasmonics*, **2019**, 14, 1735-1741	2.4	7

31	High-Performance Multilayer Radiative Cooling Films Designed with Flexible Hybrid Optimization Strategy. *Materials*, **2020**, 13,	3.5	7
30	Large-Area and Low-Cost Nanoslit-Based Flexible Metasurfaces for Multispectral Electromagnetic Wave Manipulation. *Advanced Optical Materials*, **2019**, 7, 1900657	8.1	7
29	Monolithic-Integrated Multiplexed Devices Based on Metasurface-Driven Guided Waves. *Advanced Theory and Simulations*, **2021**, 4, 2000239	3.5	7
28	Inversion Symmetry Breaking in Lithium Intercalated Graphitic Materials. *ACS Applied Materials & Interfaces*, **2020**, 12, 28561-28567	9.5	6
27	An Ultrabroadband THz Absorber Based on Structured Doped Silicon With Antireflection Techniques. *IEEE Photonics Journal*, **2018**, 10, 1-10	1.8	6
26	Electromagnetic Architectures: Structures, Properties, Functions and Their Intrinsic Relationships in Subwavelength Optics and Electromagnetics. *Advanced Photonics Research*, **2021**, 2, 2100023	1.9	6
25	Synthetic vector optical fields with spatial and temporal tunability. *Science China: Physics, Mechanics and Astronomy*, **2022**, 65, 1	3.6	6
24	Full Stokes Polarimetry for Wide-Angle Incident Light. *Physica Status Solidi - Rapid Research Letters*, **2020**, 14, 2000044	2.5	5
23	Emerging Long-Range Order from Freeform Disordered Metasurface.. *Advanced Materials*, **2022**, e2108709	29	5
22	Tunable Optical Hooks in the Visible Band Based on Ultra-Thin Metalenses. *Annalen Der Physik*, **2020**, 532, 1900396	2.6	5
21	Flexible and Tunable Dielectric Color Meta-hologram. *Plasmonics*, **2020**, 15, 217-223	2.4	5
20	Ultrathin Planar Microlens Arrays Based on Geometric Metasurface. *Annalen Der Physik*, **2018**, 530, 1700326	2.6	5
19	Wide Field-of-view and Broadband Terahertz Beam Steering Based on Gap Plasmon Geodesic Antennas. *Scientific Reports*, **2017**, 7, 41642	4.9	4
18	Switchable Quarter-Wave Plate and Half-Wave Plate Based on Phase-Change Metasurface. *IEEE Photonics Journal*, **2020**, 12, 1-10	1.8	4
17	Refined Model for Plasmon Ruler Based on Catenary-Shaped Optical Fields. *Plasmonics*, **2019**, 14, 845-850	2.4	4
16	Improvement of Focusing Efficiency of Plasmonic Planar Lens by Oil Immersion. *Plasmonics*, **2015**, 10, 539-545	2.4	3
15	Metasurfaces: All-Dielectric Metasurfaces for Simultaneous Giant Circular Asymmetric Transmission and Wavefront Shaping Based on Asymmetric Photonic Spin-Orbit Interactions (Adv. Funct. Mater. 47/2017). *Advanced Functional Materials*, **2017**, 27, 1770280	15.6	3
14	Directional Coupling and Spin Routing in Catenary-Shaped SOI Waveguide. *IEEE Photonics Technology Letters*, **2019**, 31, 415-418	2.2	3

13	Wavelength-Dependent Three-Dimensional Volumetric Optical Vortices Modulation Based on Metasurface. *IEEE Photonics Journal*, **2018**, 10, 1-8	1.8	3
12	Photonic Devices: Plasmonic Metasurfaces for Switchable Photonic Spin□Orbit Interactions Based on Phase Change Materials (Adv. Sci. 10/2018). *Advanced Science*, **2018**, 5, 1870063	13.6	2
11	All-metallic high-efficiency generalized Pancharatnam□Berry phase metasurface with chiral meta-atoms. *Nanophotonics*, **2022**,	6.3	2
10	Breaking the Cut-Off Wavelength Limit of GaTe through Self-Driven Oxygen Intercalation in Air.. *Advanced Science*, **2021**, e2103429	13.6	2
9	Catenary Optics: Catenary Electromagnetics for Ultra-Broadband Lightweight Absorbers and Large-Scale Flat Antennas (Adv. Sci. 7/2019). *Advanced Science*, **2019**, 6, 1970038	13.6	1
8	Meta-holograms based on evanescent waves for encryption. *RSC Advances*, **2017**, 7, 53611-53616	3.7	1
7	Quasi-Continuous Metasurface Beam Splitters Enabled by Vector Iterative Fourier Transform Algorithm. *Materials*, **2021**, 14,	3.5	1
6	Waveguide evanescent waves based structured illumination microscopy with compact structure and flexible design. *Journal Physics D: Applied Physics*, **2021**, 54, 215101	3	0
5	Bulk plasmon polariton based structured illumination microscopy by utilizing hyperbolic metamaterials. *Journal Physics D: Applied Physics*, **2021**, 54, 285103	3	0
4	Dual-wavelength multilevel diffractive lenses for near-infrared imaging. *Journal Physics D: Applied Physics*, **2021**, 54, 175109	3	0
3	Bloch Surface Wave Assisted Structured Illumination Microscopy for Sub-100 nm Resolution. *IEEE Photonics Journal*, **2021**, 13, 1-9	1.8	0
2	Catenary Optics: Heat Resisting Metallic Meta-Skin for Simultaneous Microwave Broadband Scattering and Infrared Invisibility Based on Catenary Optical Field (Adv. Mater. Technol. 2/2019). *Advanced Materials Technologies*, **2019**, 4, 1970012	6.8	
1	Planar Hyperspectral Imager With Small Smile and Keystone Based on Two Metasurfaces. *IEEE Photonics Journal*, **2022**, 14, 1-8	1.8	