Xiaowei Li

List of Publications by Year in descending order

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85 papers	2,815 citations	185998 28 h-index	197535 49 g-index
85 all docs	85 docs citations	85 times ranked	2245 citing authors

#	Article	IF	Citations
1	Multichannel vectorial holographic display and encryption. Light: Science and Applications, 2018, 7, 95.	7.7	291
2	Broadband Hybrid Holographic Multiplexing with Geometric Metasurfaces. Advanced Materials, 2015, 27, 6444-6449.	11.1	177
3	Polarization-Encrypted Orbital Angular Momentum Multiplexed Metasurface Holography. ACS Nano, 2020, 14, 5553-5559.	7.3	155
4	Micro/nano-structures-enhanced triboelectric nanogenerators by femtosecond laser direct writing. Nano Energy, 2019, 62, 638-644.	8.2	121
5	Volumetric Generation of Optical Vortices with Metasurfaces. ACS Photonics, 2017, 4, 338-346.	3.2	108
6	Simultaneous Spectral and Spatial Modulation for Color Printing and Holography Using All-Dielectric Metasurfaces. Nano Letters, 2019, 19, 8964-8971.	4.5	103
7	Broadband Multiplane Holography Based on Plasmonic Metasurface. Advanced Optical Materials, 2017, 5, 1700434.	3.6	74
8	Maskâ€Free Patterning of Highâ€Conductivity Metal Nanowires in Open Air by Spatially Modulated Femtosecond Laser Pulses. Advanced Materials, 2015, 27, 6238-6243.	11.1	73
9	High-throughput microchannel fabrication in fused silica by temporally shaped femtosecond laser Bessel-beam-assisted chemical etching. Optics Letters, 2018, 43, 98.	1.7	72
10	Experimental demonstration of tunable directional excitation of surface plasmon polaritons with a subwavelength metallic double slit. Applied Physics Letters, 2011, 98, 251109.	1.5	69
11	Continuous modulations of femtosecond laser-induced periodic surface structures and scanned line-widths on silicon by polarization changes. Optics Express, 2013, 21, 15505.	1.7	64
12	Low-adhesive superhydrophobic surface-enhanced Raman spectroscopy substrate fabricated by femtosecond laser ablation for ultratrace molecular detection. Journal of Materials Chemistry B, 2017, 5, 777-784.	2.9	63
13	Nanoscale Polarization Manipulation and Encryption Based on Dielectric Metasurfaces. Advanced Optical Materials, 2018, 6, 1800490.	3.6	56
14	Optical Field Enhancement in Au Nanoparticle-Decorated Nanorod Arrays Prepared by Femtosecond Laser and Their Tunable Surface-Enhanced Raman Scattering Applications. ACS Applied Materials & Interfaces, 2018, 10, 1297-1305.	4.0	55
15	Selective Diffraction with Complex Amplitude Modulation by Dielectric Metasurfaces. Advanced Optical Materials, 2018, 6, 1701181.	3.6	53
16	High-efficiency Bessel beam array generation by Huygens metasurfaces. Nanophotonics, 2019, 8, 1079-1085.	2.9	53
17	Cylindrically Focused Nonablative Femtosecond Laser Processing of Longâ€Range Uniform Periodic Surface Structures with Tunable Diffraction Efficiency. Advanced Optical Materials, 2019, 7, 1900706.	3.6	47
18	Fabrication of highly homogeneous and controllable nanogratings on silicon via chemical etching-assisted femtosecond laser modification. Nanophotonics, 2019, 8, 869-878.	2.9	47

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19	Quantitatively Correlated Amplitude Holography Based on Photon Sieves. Advanced Optical Materials, 2020, 8, 1901169.	3.6	45
20	Surface micro/nanostructure evolution of Auâ€“Ag alloy nanoplates: Synthesis, simulation, plasmonic photothermal and surface-enhanced Raman scattering applications. Nano Research, 2016, 9, 876-885.	5.8	43
21	Polarization and Holography Recording in Realâ€•and kâ€Space Based on Dielectric Metasurface. Advanced Functional Materials, 2021, 31, 2100406.	7.8	43
22	High aspect ratio, high-quality microholes in PMMA: a comparison between femtosecond laser drilling in air and in vacuum. Applied Physics A: Materials Science and Processing, 2015, 119, 61-68.	1.1	41
23	Switchable active phase modulation and holography encryption based on hybrid metasurfaces. Nanophotonics, 2020, 9, 905-912.	2.9	34
24	Hybrid superhydrophilicâ€“superhydrophobic micro/nanostructures fabricated by femtosecond laser-induced forward transfer for sub-femtomolar Raman detection. Microsystems and Nanoengineering, 2019, 5, 48.	3.4	32
25	Mechanism and elimination of bending effect in femtosecond laser deep-hole drilling. Optics Express, 2015, 23, 27853.	1.7	31
26	High-aspect-ratio, high-quality microdrilling by electron density control using a femtosecond laser Bessel beam. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	31
27	Manipulation of LIPSS orientation on silicon surfaces using orthogonally polarized femtosecond laser double-pulse trains. Optics Express, 2019, 27, 9782.	1.7	31
28	Near-field plasmonic beam engineering with complex amplitude modulation based on metasurface. Applied Physics Letters, 2018, 112, .	1.5	30
29	Fourâ€Wave Mixing Holographic Multiplexing Based on Nonlinear Metasurfaces. Advanced Optical Materials, 2019, 7, 1900782.	3.6	30
30	Non-diffraction-length, tunable, Bessel-like beams generation by spatially shaping a femtosecond laser beam for high-aspect-ratio micro-hole drilling. Optics Express, 2018, 26, 21960.	1.7	29
31	Dynamic Display of Full-Stokes Vectorial Holography Based on Metasurfaces. ACS Photonics, 2021, 8, 1746-1753.	3.2	29
32	All-dielectric bifocal isotropic metalens for a single-shot hologram generation device. Optics Express, 2020, 28, 21549.	1.7	27
33	Shaped femtosecond laser induced photoreduction for highly controllable Au nanoparticles based on localized field enhancement and their SERS applications. Nanophotonics, 2020, 9, 691-702.	2.9	26
34	Cylindrical shockwave-induced compression mechanism in femtosecond laser Bessel pulse micro-drilling of PMMA. Applied Physics Letters, 2017, 110, .	1.5	25
35	Rotational Multiplexing Method Based on Cascaded Metasurface Holography. Advanced Optical Materials, 2022, 10, .	3.6	25
36	Multiplexed Generation of Generalized Vortex Beams with Onâ€Demand Intensity Profiles Based on Metasurfaces. Laser and Photonics Reviews, 2022, 16, .	4.4	25

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37	Crystal orientation dependence of femtosecond laser-induced periodic surface structure on (100) silicon. Optics Letters, 2014, 39, 3114.	1.7	24
38	Polarization Multiplexing Terahertz Metasurfaces through Spatial Femtosecond Laserâ€Shaping Fabrication. Advanced Optical Materials, 2020, 8, 2000136.	3.6	23
39	Correlated triple hybrid amplitude and phase holographic encryption based on a metasurface. Photonics Research, 2022, 10, 678.	3.4	23
40	Full-Stokes polarization transformations and time sequence metasurface holographic display. Photonics Research, 2022, 10, 1031.	3.4	23
41	Selfâ€Aligned Laserâ€Induced Periodic Surface Structures for Largeâ€Area Controllable Nanopatterning. Laser and Photonics Reviews, 2022, 16, .	4.4	23
42	Integrated plasmonic semi-circular launcher for dielectric-loaded surface plasmon-polariton waveguide. Optics Express, 2011, 19, 6541.	1.7	22
43	Generation of Airy beam arrays in real and K spaces based on a dielectric metasurface. Optics Express, 2021, 29, 18781.	1.7	21
44	Femtosecond laser-induced cross-periodic structures on a crystalline silicon surface under low pulse number irradiation. Applied Surface Science, 2015, 326, 216-221.	3.1	20
45	Fastâ€Response Oxygen Optical Fiber Sensor based on PEA₂SnI₄ Perovskite with Extremely Low Limit of Detection. Advanced Science, 2022, 9, e2104708.	5.6	20
46	Anisotropy modulations of femtosecond laser pulse induced periodic surface structures on silicon by adjusting double pulse delay. Optics Express, 2014, 22, 15820.	1.7	18
47	Controllable Plasmonic Nanostructures induced by Dual-wavelength Femtosecond Laser Irradiation. Scientific Reports, 2017, 7, 17333.	1.6	17
48	A deep learning approach for trustworthy high-fidelity computational holographic orbital angular momentum communication. Applied Physics Letters, 2021, 119, .	1.5	17
49	Morphology adjustable microlens array fabricated by single spatially modulated femtosecond pulse. Nanophotonics, 2022, 11, 571-581.	2.9	17
50	Controllable Polarization and Diffraction Modulated Multiâ€Functionality Based on Metasurface. Advanced Optical Materials, 2022, 10, .	3.6	17
51	Thermally Reconfigurable Hologram Fabricated by Spatially Modulated Femtosecond Pulses on a Heat-Shrinkable Shape Memory Polymer for Holographic Multiplexing. ACS Applied Materials & Interfaces, 2021, 13, 51736-51745.	4.0	16
52	Fabrication of microlenses with continuously variable numerical aperture through a temporally shaped femtosecond laser. Optics Express, 2021, 29, 4596.	1.7	15
53	Magnetically controllable metasurface and its application. Frontiers of Optoelectronics, 2021, 14, 154-169.	1.9	15
54	Controllable Si (100) micro/nanostructures by chemical-etching-assisted femtosecond laser single-pulse irradiation. Applied Physics Letters, 2017, 110, .	1.5	13

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55	Controllable Photonic Structures on Silicon-on-Insulator Devices Fabricated Using Femtosecond Laser Lithography. ACS Applied Materials & Interfaces, 2021, 13, 43622-43631.	4.0	13
56	Dynamic control of mode modulation and spatial multiplexing using hybrid metasurfaces. Optics Express, 2019, 27, 18740.	1.7	13
57	High-Uniformity Submicron Gratings with Tunable Periods Fabricated through Femtosecond Laser-Assisted Molding Technology for Deformation Detection. ACS Applied Materials & Interfaces, 2022, 14, 16911-16919.	4.0	13
58	Nanoscale material redistribution induced by spatially modulated femtosecond laser pulses for flexible high-efficiency surface patterning. Optics Express, 2017, 25, 31431.	1.7	12
59	Creating a three-dimensional surface with antireflective properties by using femtosecond-laser Bessel-beam-assisted thermal oxidation. Optics Letters, 2020, 45, 2989.	1.7	12
60	High-quality micropattern printing by interlacing-pattern holographic femtosecond pulses. Nanophotonics, 2020, 9, 2895-2904.	2.9	10
61	High-efficiency broadband polarization converter based on â„¦-shaped metasurface. Journal Physics D: Applied Physics, 2017, 50, 454001.	1.3	9
62	Flexible Grayâ€Scale Surface Patterning Through Spatiotemporalâ€Interferenceâ€Based Femtosecond Laser Shaping. Advanced Optical Materials, 2018, 6, 1801021.	3.6	9
63	Femtosecond laser induced concentric semi-circular periodic surface structures on silicon based on the quasi-plasmonic annular nanostructure. Nanotechnology, 2018, 29, 305301.	1.3	9
64	Functionalization of freeform curved surfaces by shaped femtosecond laser pulses in the propagation axis. Optics Express, 2021, 29, 5487.	1.7	9
65	Compact magnetic field sensor based on plasmonic fiber-tip. Optics Express, 2021, 29, 38904.	1.7	9
66	Flash Ablation of Tunable and Deep-Subwavelength Nanogap by Using a Spatially Modulated Femtosecond Laser Pulse for Plasmonic Application. ACS Applied Nano Materials, 2019, 2, 4933-4941.	2.4	8
67	Continuous control of microlens morphology on Si based on the polarization-dependent femtosecond laser induced periodic surface structures modulation. Optics and Laser Technology, 2019, 119, 105629.	2.2	8
68	Chemical etching mechanisms and crater morphologies pre-irradiated by temporally decreasing pulse trains of femtosecond laser. Applied Surface Science, 2019, 469, 44-49.	3.1	8
69	Single-shot phase retrieval based on anisotropic metasurface. Applied Physics Letters, 2022, 120, .	1.5	8
70	Femtosecond laser induced tunable surface transformations on (111) Si aided by square grids diffraction. Applied Physics Letters, 2015, 107, .	1.5	7
71	High-efficiency fabrication of computer-generated holograms in silica glass using a femtosecond Bessel beam. Optics and Laser Technology, 2021, 135, 106729.	2.2	7
72	Enhancement and blueshift of high-frequency laser-induced periodic surface structures with preformed nanoscale surface roughness. Optics Express, 2019, 27, 19973.	1.7	7

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73	Imaging-based optical barcoding for relative humidity sensing based on meta-tip. Nanophotonics, 2021, 11, 111-118.	2.9	7
74	Ultra-dense moving cascaded metasurface holography by using a physics-driven neural network. Optics Express, 2022, 30, 24285.	1.7	7
75	Sharp-featured Au@Ag core/shell nanocuboid synthesis and the label-free ultrasensitive SERS detection of protein single-point mutations. Materials Chemistry Frontiers, 2018, 2, 1720-1724.	3.2	6
76	Plasmonic leak-free focusing lens under radially polarized illumination. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	1.0	5
77	Polarization-dependent elliptical crater morphologies formed on a silicon surface by single-shot femtosecond laser ablation. Applied Optics, 2014, 53, 6742.	0.9	5
78	Controllable Formation of Si Nanostructures Based on Quasi-Plasmonic Planar Nanostructures Formed by Annular-Shaped Femtosecond Laser Pulse. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	4
79	Magnetically controllable holographic encryption based on a magneto-optical metasurface. Optics Express, 2022, 30, 8366.	1.7	3
80	High efficiency and scalable fabrication of fresnel zone plates using holographic femtosecond pulses. Nanophotonics, 2022, 11, 3081-3091.	2.9	2
81	Controllable photon energy deposition efficiency in laser processing of fused silica by temporally shaped femtosecond pulse: Experimental and theoretical study. Optics and Laser Technology, 2020, 128, 106265.	2.2	1
82	Fabrication of nanogap structures through spatially shaped femtosecond laser modification with the assistance of wet chemical etching. Optics Letters, 2021, 46, 3560.	1.7	1
83	Alternate morphology evolution of bulge structures on thin gold films induced by internal stress distribution adjusted by femtosecond laser double-pulse. Optics and Laser Technology, 2022, 151, 108035.	2.2	1
84	Directional excitation of SPP in metallic nanoslits and its functional application. , 2012, , .		0
85	Preliminary Exploration of a Laser-Based Surface Microtexturing Strategy for Improving the Wear Resistance of Dentin: An In Vitro Study. Photobiomodulation, Photomedicine, and Laser Surgery, 2022, 40, 355-361.	0.7	0