

# Lei Zhang

## List of Publications by Year in descending order

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84  
papers

6,592  
citations

109137

35  
h-index

62479

80  
g-index

84  
all docs

84  
docs citations

84  
times ranked

6114  
citing authors

#	ARTICLE	IF	CITATIONS
1	Accurate and broadband manipulations of harmonic amplitudes and phases to reach 256 QAM millimeter-wave wireless communications by time-domain digital coding metasurface. National Science Review, 2022, 9, nwab134.	4.6	46
2	Simultaneous and independent control of phase and polarization in terahertz band for functional integration of multiple devices. Optics and Laser Technology, 2022, 151, 108064.	2.2	5
3	Light modulation based on the enhanced Kerr effect in molybdenum disulfide nanostructures with curved features. Physical Chemistry Chemical Physics, 2022, 24, 12208-12213.	1.3	1
4	Casted MoS <sub>2</sub> nanostructures and their Raman properties. Nanoscale, 2022, 14, 10449-10455.	2.8	2
5	Single-layer dielectric metasurface with giant chiroptical effects combining geometric and propagation phase. Optics Communications, 2021, 478, 126405.	1.0	5
6	Synthetic Plasmonic Nanocircuits and the Evolution of Their Correlated Spatial Arrangement and Resonance Spectrum. ACS Photonics, 2021, 8, 166-174.	3.2	6
7	Programmable Controls to Scattering Properties of a Radiation Array. Laser and Photonics Reviews, 2021, 15, 2000449.	4.4	93
8	Superscattering, Superabsorption, and Nonreciprocity in Nonlinear Antennas. ACS Photonics, 2021, 8, 585-591.	3.2	17
9	Fully deterministic analysis on photonic whispering-gallery modes of irregular polygonal microcavities with testing in hexagons. Physical Review A, 2021, 103, .	1.0	3
10	Space-Time-Coding Digital Metasurfaces: Principles and Applications. Research, 2021, 2021, 9802673.	2.8	36
11	Graphene Nanoribbon Gap Waveguides for Dispersionless and Low-Loss Propagation with Deep-Subwavelength Confinement. Nanomaterials, 2021, 11, 1302.	1.9	3
12	Superior Deep-Ultraviolet Source Pumped by an Electron Beam for NLOS Communication. IEEE Transactions on Electron Devices, 2020, 67, 3391-3394.	1.6	5
13	Graphene Plasmon Resonances for Electrically-Tunable Sub-Femtometer Dimensional Resolution. Nanomaterials, 2020, 10, 1381.	1.9	3
14	Information Metamaterial Systems. IScience, 2020, 23, 101403.	1.9	132
15	Robust Conformal Perfect Absorber Involving Lossy Ultrathin Film. Photonics, 2020, 7, 57.	0.9	1
16	Wearable Conformal Metasurfaces for Polarization Division Multiplexing. Advanced Optical Materials, 2020, 8, 2000068.	3.6	21
17	Metallic Waveguide Arrays for Metasurface-Like Control with High Simplicity in Design. Advanced Optical Materials, 2020, 8, 2000605.	3.6	7
18	Artificial Metaphotonics Born Naturally in Two Dimensions. Chemical Reviews, 2020, 120, 6197-6246.	23.0	78

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19	Curved 2D WS <sub>2</sub> nanostructures: nanocasting and silent phonon mode. <i>Nanoscale</i> , 2020, 12, 9038-9047.	2.8	5
20	Efficient Optical Angular Momentum Manipulation for Compact Multiplexing and Demultiplexing Using a Dielectric Metasurface. <i>Advanced Optical Materials</i> , 2020, 8, 1901666.	3.6	50
21	Superior third-order nonlinearity in inorganic fullerene-like WS <sub>2</sub> nanoparticles. <i>Photonics Research</i> , 2020, 8, 1881.	3.4	7
22	Polarization-enabled tunable focusing by visible-light metalenses with geometric and propagation phase. <i>Journal of Optics (United Kingdom)</i> , 2019, 21, 115102.	1.0	7
23	Dynamically Tunable Plasmon-Induced Transparency Based on Radiative-Radiative-Coupling in a Terahertz Metal-Graphene Metamaterial. <i>Crystals</i> , 2019, 9, 146.	1.0	5
24	Digital Metasurface with Phase Code and Reflection-Transmission Amplitude Code for Flexible Full-Space Electromagnetic Manipulations. <i>Advanced Optical Materials</i> , 2019, 7, 1801429.	3.6	104
25	Extrinsic Polarization-Enabled Covert Plasmonic Colors Using Aluminum Nanostructures. <i>Annalen Der Physik</i> , 2019, 531, 1900073.	0.9	5
26	Manipulation of a ring-shaped beam via spatial self- and cross-phase modulation at lower intensity. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7618-7622.	1.3	14
27	Integration of Ultrathin Metasurfaces with a Lens for Efficient Polarization Division Multiplexing. <i>Advanced Optical Materials</i> , 2019, 7, 1900116.	3.6	18
28	Topological insulator properties of photonic kagome helical waveguide arrays. <i>Results in Physics</i> , 2019, 12, 996-1001.	2.0	17
29	The preparation, characterization and application of ultra-smooth, low-loss plasmonics noble metal films. <i>Scientia Sinica: Physica, Mechanica Et Astronomica</i> , 2019, 49, 124206.	0.2	1
30	Rational design of colorimetric sensing for a customer-oriented index range using plasmonic substrates. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 3168.	0.9	7
31	Wavenumber-Splitting Metasurfaces Achieve Multichannel Diffusive Invisibility. <i>Advanced Optical Materials</i> , 2018, 6, 1800010.	3.6	70
32	Design of aluminum nitride metalens for broadband ultraviolet incidence routing. <i>Nanophotonics</i> , 2018, 8, 171-180.	2.9	49
33	Multitasking Shared Aperture Enabled with Multiband Digital Coding Metasurface. <i>Advanced Optical Materials</i> , 2018, 6, 1800657.	3.6	76
34	Transmission-Reflection-Integrated Multifunctional Coding Metasurface for Full-Space Controls of Electromagnetic Waves. <i>Advanced Functional Materials</i> , 2018, 28, 1802205.	7.8	221
35	Modulation of the High-order Laguerre-Gaussian beam in Dressing Four-wave Mixing. <i>IEEE Journal of Quantum Electronics</i> , 2018, , 1-1.	1.0	2
36	Hybrid coupling enhances photoluminescence of monolayer MoS <sub>2</sub> on plasmonic nanostructures. <i>Optics Letters</i> , 2018, 43, 4128.	1.7	18

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37	Suboptimal Coding Metasurfaces for Terahertz Diffuse Scattering. <i>Scientific Reports</i> , 2018, 8, 11908.	1.6	29
38	3D Metaphotonic Nanostructures with Intrinsic Chirality. <i>Advanced Functional Materials</i> , 2018, 28, 1803147.	7.8	102
39	Lead Halide Perovskite Nanostructures for Dynamic Color Display. <i>ACS Nano</i> , 2018, 12, 8847-8854.	7.3	142
40	A Reconfigurable Active Huygens' Metalens. <i>Advanced Materials</i> , 2017, 29, 1606422.	11.1	470
41	Unveiling the relationship between optical bistability and vacuum Rabi splitting. <i>Europhysics Letters</i> , 2017, 117, 53001.	0.7	9
42	Gold nanoparticle mediated graphene plasmon for broadband enhanced infrared spectroscopy. <i>Nanotechnology</i> , 2017, 28, 264001.	1.3	17
43	Information metamaterials and metasurfaces. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3644-3668.	2.7	297
44	Realization of Full Control of a Terahertz Wave Using Flexible Metasurfaces. <i>Advanced Optical Materials</i> , 2017, 5, 1700486.	3.6	18
45	Spin-Controlled Multiple Pencil Beams and Vortex Beams with Different Polarizations Generated by Pancharatnam-Berry Coding Metasurfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36447-36455.	4.0	205
46	Infrared Nanoimaging Reveals the Surface Metallic Plasmons in Topological Insulator. <i>ACS Photonics</i> , 2017, 4, 3055-3062.	3.2	27
47	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. <i>ACS Nano</i> , 2017, 11, 9382-9389.	7.3	157
48	Phase Control of Eu <sup>3+</sup> -Doped YPO <sub>4</sub> Nano-/Microcrystals. <i>Crystal Growth and Design</i> , 2017, 17, 5935-5944.	1.4	33
49	Graphene-coated nanowires with a drop-shaped cross section for 10 <sup>6</sup> nm confinement and 1 <sup>6</sup> mm <sup>2</sup> propagation. <i>Optics Letters</i> , 2017, 42, 2078.	1.7	19
50	Visible-Frequency Metasurface for Structuring and Spatially Multiplexing Optical Vortices. <i>Advanced Materials</i> , 2016, 28, 2533-2539.	11.1	387
51	Anomalous Shift Behaviors in the Photoluminescence of Dolmen-Like Plasmonic Nanostructures. <i>ACS Photonics</i> , 2016, 3, 979-984.	3.2	22
52	Gate-Programmable Electro-Optical Addressing Array of Graphene-Coated Nanowires with Sub-10 nm Resolution. <i>ACS Photonics</i> , 2016, 3, 1847-1853.	3.2	24
53	Anomalous Refraction and Nondiffractive Bessel-Beam Generation of Terahertz Waves through Transmission-Type Coding Metasurfaces. <i>ACS Photonics</i> , 2016, 3, 1968-1977.	3.2	175
54	Highly efficient plasmon excitation in graphene-Bi <sub>2</sub> Te <sub>3</sub> heterostructure. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016, 33, 1842.	0.9	16

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55	Efficient Excitation of Multiple Plasmonic Modes on Three-Dimensional Graphene: An Unexplored Dimension. ACS Photonics, 2016, 3, 1986-1992.	3.2	42
56	Giant photoluminescence enhancement in tungsten-diselenide-gold plasmonic hybrid structures. Nature Communications, 2016, 7, 11283.	5.8	244
57	Advances in Full Control of Electromagnetic Waves with Metasurfaces. Advanced Optical Materials, 2016, 4, 818-833.	3.6	306
58	Silicon meta-holograms for the broadband visible light. Laser and Photonics Reviews, 2016, 10, 500-509.	4.4	181
59	Large-Area Graphene Nanodot Array for Plasmon-Enhanced Infrared Spectroscopy. Small, 2016, 12, 1302-1308.	5.2	32
60	Spoof Plasmon-Based Slow-Wave Excitation of Dielectric Resonator Antennas. IEEE Transactions on Antennas and Propagation, 2016, 64, 2094-2099.	3.1	91
61	Hybrid bilayer plasmonic metasurface efficiently manipulates visible light. Science Advances, 2016, 2, e1501168.	4.7	278
62	Ultrathin Pancharatnam-Berry Metasurface with Maximal Cross-Polarization Efficiency. Advanced Materials, 2015, 27, 1195-1200.	11.1	431
63	Dynamically configurable hybridization of plasmon modes in nanoring dimer arrays. Nanoscale, 2015, 7, 12018-12022.	2.8	32
64	Color generation via subwavelength plasmonic nanostructures. Nanoscale, 2015, 7, 6409-6419.	2.8	262
65	Periodic inversion and phase transition of finite energy Airy beams in a medium with parabolic potential. Optics Express, 2015, 23, 10467.	1.7	128
66	Surface Plasmon Polariton Cross-Coupling Enhanced Forward Emission from Insulator-Metal-Capped ZnO Films. ACS Applied Materials & Interfaces, 2015, 7, 23496-23500.	4.0	4
67	Interplay between absorption and radiative decay rates of surface plasmon polaritons for field enhancement in periodic arrays. Optics Letters, 2014, 39, 501.	1.7	13
68	Three-dimensional visible-light capsule enclosing perfect supersized darkness via antiresolution. Laser and Photonics Reviews, 2014, 8, 743-749.	4.4	19
69	Three-dimensional plasmonic stereoscopic prints in full colour. Nature Communications, 2014, 5, 5361.	5.8	269
70	Controlled synthesis and tunable luminescence of uniform YPO <sub>4</sub> ·0.8H <sub>2</sub> O and YPO <sub>4</sub> ·0.8H <sub>2</sub> O·xH <sub>2</sub> O Tb <sup>3+</sup> /Eu <sup>3+</sup> nanocrystals by a facile approach. Journal of Materials Chemistry C, 2014, 2, 9149-9158.	2.7	28
71	Anomalous behavior of nearly-entire visible band manipulated with degenerated image dipole array. Nanoscale, 2014, 6, 12303-12309.	2.8	43
72	Unveiling the Correlation between Nanometer-Thick Molecular Monolayer Sensitivity and Near-Field Enhancement and Localization in Coupled Plasmonic Oligomers. ACS Nano, 2014, 8, 9188-9198.	7.3	50

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73	Plasmonic Color Palettes for Photorealistic Printing with Aluminum Nanostructures. <i>Nano Letters</i> , 2014, 14, 4023-4029.	4.5	501
74	Encapsulated Annealing: Enhancing the Plasmon Quality Factor in Lithographicallyâ€‘Defined Nanostructures. <i>Scientific Reports</i> , 2014, 4, 5537.	1.6	96
75	Theoretical realization of robust broadband transparency in ultrathin seamless nanostructures by dual blackbodies for near infrared light. <i>Nanoscale</i> , 2013, 5, 3373.	2.8	36
76	In vivo imaging of the morphology and changes in pH along the gastrointestinal tract of Japanese medaka by photonic band-gap hydrogel microspheres. <i>Analytica Chimica Acta</i> , 2013, 787, 193-202.	2.6	35
77	Creating double negative index materials using the Babinet principle with one metasurface. <i>Physical Review B</i> , 2013, 87, .	1.1	40
78	Rapid phase transition of a phase-change metamaterial perfect absorber. <i>Optical Materials Express</i> , 2013, 3, 1101.	1.6	86
79	Rational design of high performance surface plasmon resonance sensors based on two-dimensional metallic hole arrays. <i>Optics Express</i> , 2012, 20, 12610.	1.7	16
80	One-dimensional steady-state bright photovoltaic solitons in LiNbO <sub>3</sub> :Fe crystal with background illumination. <i>Optik</i> , 2010, 121, 575-580.	1.4	9
81	Waveguides induced by steady-state gray solitons in biased photorefractiveâ€‘photovoltaic crystals. <i>Optics Communications</i> , 2008, 281, 49-54.	1.0	2
82	Temporal behavior of dark spatial solitons in closed-circuit photovoltaic media. <i>Optics Communications</i> , 2008, 281, 2913-2917.	1.0	16
83	Temporal development of spatial solitons in biased photorefractive-photovoltaic materials. <i>Journal of Modern Optics</i> , 2008, 55, 1571-1585.	0.6	12
84	Grey screening-photovoltaic soliton-induced waveguides. <i>Chinese Physics B</i> , 2007, 16, 3423-3428.	1.3	1