Lei Zhang

List of Publications by Year
in descending order

84 papers	6,592 citations	109321 35 h-index	62596 80 g-index
84 all docs	84 docs citations	84 times ranked	6114 citing authors

#	Article	IF	Citations
1	Plasmonic Color Palettes for Photorealistic Printing with Aluminum Nanostructures. Nano Letters, 2014, 14, 4023-4029.	9.1	501
2	A Reconfigurable Active Huygens' Metalens. Advanced Materials, 2017, 29, 1606422.	21.0	470
3	Ultrathin Pancharatnamâ€“Berry Metasurface with Maximal Crossâ€Polarization Efficiency. Advanced Materials, 2015, 27, 1195-1200.	21.0	431
4	Visibleâ€Frequency Metasurface for Structuring and Spatially Multiplexing Optical Vortices. Advanced Materials, 2016, 28, 2533-2539.	21.0	387
5	Advances in Full Control of Electromagnetic Waves with Metasurfaces. Advanced Optical Materials, 2016, 4, 818-833.	7.3	306
6	Information metamaterials and metasurfaces. Journal of Materials Chemistry C, 2017, 5, 3644-3668.	5.5	297
7	Hybrid bilayer plasmonic metasurface efficiently manipulates visible light. Science Advances, 2016, 2, e1501168.	10.3	278
8	Three-dimensional plasmonic stereoscopic prints in full colour. Nature Communications, 2014, 5, 5361.	12.8	269
9	Color generation<i>via</i>subwavelength plasmonic nanostructures. Nanoscale, 2015, 7, 6409-6419.	5.6	262
10	Giant photoluminescence enhancement in tungsten-diselenideâ€“gold plasmonic hybrid structures. Nature Communications, 2016, 7, 11283.	12.8	244
11	Transmissionâ€Reflectionâ€Integrated Multifunctional Coding Metasurface for Fullâ€Space Controls of Electromagnetic Waves. Advanced Functional Materials, 2018, 28, 1802205.	14.9	221
12	Spin-Controlled Multiple Pencil Beams and Vortex Beams with Different Polarizations Generated by Pancharatnam-Berry Coding Metasurfaces. ACS Applied Materials & Interfaces, 2017, 9, 36447-36455.	8.0	205
13	Silicon multiâ€metaâ€holograms for the broadband visible light. Laser and Photonics Reviews, 2016, 10, 500-509.	8.7	181
14	Anomalous Refraction and Nondiffractive Bessel-Beam Generation of Terahertz Waves through Transmission-Type Coding Metasurfaces. ACS Photonics, 2016, 3, 1968-1977.	6.6	175
15	Dielectric Meta-Holograms Enabled with Dual Magnetic Resonances in Visible Light. ACS Nano, 2017, 11, 9382-9389.	14.6	157
16	Lead Halide Perovskite Nanostructures for Dynamic Color Display. ACS Nano, 2018, 12, 8847-8854.	14.6	142
17	Information Metamaterial Systems. IScience, 2020, 23, 101403.	4.1	132
18	Periodic inversion and phase transition of finite energy Airy beams in a medium with parabolic potential. Optics Express, 2015, 23, 10467.	3.4	128

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19	Digital Metasurface with Phase Code and Reflectionâ€"Transmission Amplitude Code for Flexible Fullâ€Space Electromagnetic Manipulations. Advanced Optical Materials, 2019, 7, 1801429.	7.3	104
20	3D Metaphotonic Nanostructures with Intrinsic Chirality. Advanced Functional Materials, 2018, 28, 1803147.	14.9	102
21	Encapsulated Annealing: Enhancing the Plasmon Quality Factor in Lithographicallyâ€"Defined Nanostructures. Scientific Reports, 2014, 4, 5537.	3.3	96
22	Programmable Controls to Scattering Properties ofÂaÂRadiation Array. Laser and Photonics Reviews, 2021, 15, 2000449.	8.7	93
23	Spoof Plasmon-Based Slow-Wave Excitation ofÂDielectric Resonator Antennas. IEEE Transactions on Antennas and Propagation, 2016, 64, 2094-2099.	5.1	91
24	Rapid phase transition of a phase-change metamaterial perfect absorber. Optical Materials Express, 2013, 3, 1101.	3.0	86
25	Artificial Metaphotonics Born Naturally in Two Dimensions. Chemical Reviews, 2020, 120, 6197-6246.	47.7	78
26	Multitasking Shared Aperture Enabled with Multiband Digital Coding Metasurface. Advanced Optical Materials, 2018, 6, 1800657.	7.3	76
27	Wavenumberâ€Splitting Metasurfaces Achieve Multichannel Diffusive Invisibility. Advanced Optical Materials, 2018, 6, 1800010.	7.3	70
28	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.	14.6	50
29	Efficient Optical Angular Momentum Manipulation for Compact Multiplexing and Demultiplexing Using a Dielectric Metasurface. Advanced Optical Materials, 2020, 8, 1901666.	7.3	50
30	Design of aluminum nitride metalens for broadband ultraviolet incidence routing. Nanophotonics, 2018, 8, 171-180.	6.0	49
31	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.	9.5	46
32	Anomalous behavior of nearly-entire visible band manipulated with degenerated image dipole array. Nanoscale, 2014, 6, 12303-12309.	5.6	43
33	Efficient Excitation of Multiple Plasmonic Modes on Three-Dimensional Graphene: An Unexplored Dimension. ACS Photonics, 2016, 3, 1986-1992.	6.6	42
34	Creating double negative index materials using the Babinet principle with one metasurface. Physical Review B, 2013, 87, .	3.2	40
35	Theoretical realization of robust broadband transparency in ultrathin seamless nanostructures by dual blackbodies for near infrared light. Nanoscale, 2013, 5, 3373.	5.6	36
36	Space-Time-Coding Digital Metasurfaces: Principles and Applications. Research, 2021, 2021, 9802673.	5.7	36

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37	In vivo imaging of the morphology and changes in pH along the gastrointestinal tract of Japanese medaka by photonic band-gap hydrogel microspheres. Analytica Chimica Acta, 2013, 787, 193-202.	5.4	35
38	Phase Control of Eu³⁺-Doped YPO₄ Nano-/Microcrystals. Crystal Growth and Design, 2017, 17, 5935-5944.	3.0	33
39	Dynamically configurable hybridization of plasmon modes in nanoring dimer arrays. Nanoscale, 2015, 7, 12018-12022.	5.6	32
40	Largeâ€Area Graphene Nanodot Array for Plasmonâ€Enhanced Infrared Spectroscopy. Small, 2016, 12, 1302-1308.	10.0	32
41	Suboptimal Coding Metasurfaces for Terahertz Diffuse Scattering. Scientific Reports, 2018, 8, 11908.	3.3	29
42	Controlled synthesis and tunable luminescence of uniform YPO₄Â·0.8H₂O and YPO₄Â·0.8H₂Oâ€‰:â€‰Tb³⁺/Eu³⁺ nanocrystals by a facile approach. Journal of Materials Chemistry C, 2014, 2, 9149-9158.	5.5	28
43	Infrared Nanoimaging Reveals the Surface Metallic Plasmons in Topological Insulator. ACS Photonics, 2017, 4, 3055-3062.	6.6	27
44	Gate-Programmable Electro-Optical Addressing Array of Graphene-Coated Nanowires with Sub-10 nm Resolution. ACS Photonics, 2016, 3, 1847-1853.	6.6	24
45	Anomalous Shift Behaviors in the Photoluminescence of Dolmen-Like Plasmonic Nanostructures. ACS Photonics, 2016, 3, 979-984.	6.6	22
46	Wearable Conformal Metasurfaces for Polarization Division Multiplexing. Advanced Optical Materials, 2020, 8, 2000068.	7.3	21
47	Three-dimensional visible-light capsule enclosing perfect supersized darkness via antiresolution. Laser and Photonics Reviews, 2014, 8, 743-749.	8.7	19
48	Graphene-coated nanowires with a drop-shaped cross section for 10â€‰â€‰nm confinement and 1â€‰â€‰mm propagation. Optics Letters, 2017, 42, 2078.	3.3	19
49	Realization of Full Control of a Terahertz Wave Using Flexible Metasurfaces. Advanced Optical Materials, 2017, 5, 1700486.	7.3	18
50	Hybrid coupling enhances photoluminescence of monolayer MoS₂ on plasmonic nanostructures. Optics Letters, 2018, 43, 4128.	3.3	18
51	Integration of Ultrathin Metasurfaces with a Lens for Efficient Polarization Division Multiplexing. Advanced Optical Materials, 2019, 7, 1900116.	7.3	18
52	Gold nanoparticle mediated graphene plasmon for broadband enhanced infrared spectroscopy. Nanotechnology, 2017, 28, 264001.	2.6	17
53	Topological insulator properties of photonic kagome helical waveguide arrays. Results in Physics, 2019, 12, 996-1001.	4.1	17
54	Superscattering, Superabsorption, and Nonreciprocity in Nonlinear Antennas. ACS Photonics, 2021, 8, 585-591.	6.6	17

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55	Temporal behavior of dark spatial solitons in closed-circuit photovoltaic media. Optics Communications, 2008, 281, 2913-2917.	2.1	16
56	Rational design of high performance surface plasmon resonance sensors based on two-dimensional metallic hole arrays. Optics Express, 2012, 20, 12610.	3.4	16
57	Highly efficient plasmon excitation in graphene-Bi_2Te_3 heterostructure. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1842.	2.1	16
58	Manipulation of a ring-shaped beam <i>via</i> spatial self- and cross-phase modulation at lower intensity. Physical Chemistry Chemical Physics, 2019, 21, 7618-7622.	2.8	14
59	Interplay between absorption and radiative decay rates of surface plasmon polaritons for field enhancement in periodic arrays. Optics Letters, 2014, 39, 501.	3.3	13
60	Temporal development of spatial solitons in biased photorefractive-photovoltaic materials. Journal of Modern Optics, 2008, 55, 1571-1585.	1.3	12
61	One-dimensional steady-state bright photovoltaic solitons in LiNbO3:Fe crystal with background illumination. Optik, 2010, 121, 575-580.	2.9	9
62	Unveiling the relationship between optical bistability and vacuum Rabi splitting. Europhysics Letters, 2017, 117, 53001.	2.0	9
63	Polarization-enabled tunable focusing by visible-light metalenses with geometric and propagation phase. Journal of Optics (United Kingdom), 2019, 21, 115102.	2.2	7
64	Metallic Waveguide Arrays for Metasurfaceâ€Like Control with High Simplicity in Design. Advanced Optical Materials, 2020, 8, 2000605.	7.3	7
65	Rational design of colorimetric sensing for a customer-oriented index range using plasmonic substrates. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 3168.	2.1	7
66	Superior third-order nonlinearity in inorganic fullerene-like WS₂ nanoparticles. Photonics Research, 2020, 8, 1881.	7.0	7
67	Synthetic Plasmonic Nanocircuits and the Evolution of Their Correlated Spatial Arrangement and Resonance Spectrum. ACS Photonics, 2021, 8, 166-174.	6.6	6
68	Dynamically Tunable Plasmon-Induced Transparency Based on Radiativeâ€“Radiative-Coupling in a Terahertz Metalâ€“Graphene Metamaterial. Crystals, 2019, 9, 146.	2.2	5
69	Extrinsic Polarizationâ€Enabled Covert Plasmonic Colors Using Aluminum Nanostructures. Annalen Der Physik, 2019, 531, 1900073.	2.4	5
70	Superior Deep-Ultraviolet Source Pumped by an Electron Beam for NLOS Communication. IEEE Transactions on Electron Devices, 2020, 67, 3391-3394.	3.0	5
71	Curved 2D WS₂ nanostructures: nanocasting and silent phonon mode. Nanoscale, 2020, 12, 9038-9047.	5.6	5
72	Single-layer dielectric metasurface with giant chiroptical effects combining geometric and propagation phase. Optics Communications, 2021, 478, 126405.	2.1	5

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73	Simultaneous and independent control of phase and polarization in terahertz band for functional integration of multiple devices. Optics and Laser Technology, 2022, 151, 108064.	4.6	5
74	Surface Plasmon Polariton Cross-Coupling Enhanced Forward Emission from Insulatorâ€“Metal-Capped ZnO Films. ACS Applied Materials & Interfaces, 2015, 7, 23496-23500.	8.0	4
75	Graphene Plasmon Resonances for Electrically-Tunable Sub-Femtometer Dimensional Resolution. Nanomaterials, 2020, 10, 1381.	4.1	3
76	Fully deterministic analysis on photonic whispering-gallery modes of irregular polygonal microcavities with testing in hexagons. Physical Review A, 2021, 103, .	2.5	3
77	Graphene Nanoribbon Gap Waveguides for Dispersionless and Low-Loss Propagation with Deep-Subwavelength Confinement. Nanomaterials, 2021, 11, 1302.	4.1	3
78	Waveguides induced by steady-state gray solitons in biased photorefractiveâ€“photovoltaic crystals. Optics Communications, 2008, 281, 49-54.	2.1	2
79	Modulation of the High-order Laguerre-Gaussian beam in Dressing Four-wave Mixing. IEEE Journal of Quantum Electronics, 2018, , 1-1.	1.9	2
80	Casted MoS₂ nanostructures and their Raman properties. Nanoscale, 2022, 14, 10449-10455.	5.6	2
81	Grey screening-photovoltaic soliton-induced waveguides. Chinese Physics B, 2007, 16, 3423-3428.	1.3	1
82	Robust Conformal Perfect Absorber Involving Lossy Ultrathin Film. Photonics, 2020, 7, 57.	2.0	1
83	The preparation, characterization and application of ultra-smooth, low-loss plasmonics noble metal films. Scientia Sinica: Physica, Mechanica Et Astronomica, 2019, 49, 124206.	0.4	1
84	Light modulation based on the enhanced Kerr effect in molybdenum disulfide nanostructures with curved features. Physical Chemistry Chemical Physics, 2022, 24, 12208-12213.	2.8	1