Wei Liu

List of Publications by Year
in descending order

61	2,458	236612 25	197535 49
papers	citations	h-index	g-index

61	61	61	2130
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Arbitrary polarization-independent backscattering or reflection by rotationally symmetric reciprocal structures. Physical Review B, 2021, 103, .	1.1	1
2	Polarization singularities in light scattering by small particles. Physical Review A, 2021, 103, .	1.0	8
3	Topological polarization singularities in metaphotonics. Nanophotonics, 2021, 10, 1469-1486.	2.9	42
4	Nonlinear Lithium Niobate Metasurfaces for Second Harmonic Generation. Laser and Photonics Reviews, 2021, 15, 2000521.	4.4	57
5	Deep-learning-enabled inverse engineering of multi-wavelength invisibility-to-superscattering switching with phase-change materials. Optics Express, 2021, 29, 10527.	1.7	18
6	Evolution and global charge conservation for polarization singularities emerging from non-Hermitian degeneracies. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	17
7	Symmetry Protected Invariant Scattering Properties for Incident Plane Waves of Arbitrary Polarizations. Laser and Photonics Reviews, 2021, 15, 2000496.	4.4	2
8	Extremize Optical Chiralities through Polarization Singularities. Physical Review Letters, 2021, 126, 253901.	2.9	33
9	Second Harmonic Generation Enhancement From Plasmonic Toroidal Resonance in Core-Shell Nanodisk. IEEE Photonics Journal, 2021, 13, 1-9.	1.0	8
10	Polarization Singularities of Photonic Quasicrystals in Momentum Space. Physical Review Letters, 2021, 127, 043901.	2.9	22
11	Scattering invariance for arbitrary polarizations protected by joint spatial-duality symmetries. Physical Review B, 2020, 102, .	1.1	5
12	Scattering and absorption invariance of nonmagnetic particles under duality transformations. Physical Review A, 2020, 102, .	1.0	3
13	Electromagnetic Duality Protected Scattering Properties of Nonmagnetic Particles. ACS Photonics, 2020, 7, 1830-1838.	3.2	8
14	Line Singularities and Hopf Indices of Electromagnetic Multipoles. Laser and Photonics Reviews, 2020, 14, 2000049.	4.4	19
15	Global Mie Scattering: Polarization Morphologies and the Underlying Topological Invariant. ACS Omega, 2020, 5, 14157-14163.	1.6	10
16	Scattering activities bounded by reciprocity and parity conservation. Physical Review Research, 2020, 2, .	1.3	13
17	On the constraints of electromagnetic multipoles for symmetric scatterers: eigenmode analysis. Optics Express, 2020, 28, 3073.	1.7	13
18	Optical telescope with Cassegrain metasurfaces. Nanophotonics, 2020, 9, 3263-3269.	2.9	10

#	Article	IF	Citations
19	Multipolar Conversion Induced Subwavelength Highâ€Q Kerker Supermodes with Unidirectional Radiations. Laser and Photonics Reviews, 2019, 13, 1900067.	4.4	39
20	Optical Metasurfaces for Designing Planar Cassegrain-Schwarzschild Objectives. Physical Review Applied, 2019, 11, .	1.5	11
21	Singularities and PoincarÃ© Indices of Electromagnetic Multipoles. Physical Review Letters, 2019, 122, 153907.	2.9	86
22	Multipolar Conversion Induced Subwavelength High-Q Kerker Supermodes. , 2019, , .		1
23	Cascaded rotational Doppler effect. Optics Letters, 2019, 44, 2346.	1.7	13
24	Beam Steering with Dielectric Metalattices. ACS Photonics, 2018, 5, 1733-1741.	3.2	66
25	Generalized Kerker effects in nanophotonics and meta-optics [Invited]. Optics Express, 2018, 26, 13085.	1.7	298
26	Multiple unidirectional forward scattering of hybrid metal-dielectric nanoantenna in the near-infrared region. Optical Materials Express, 2018, 8, 3410.	1.6	1
27	Multipolar interference effects in nanophotonics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160317.	1.6	81
28	Mutual injection coupling and phase locking of two multiwavelength fiber lasers. Optical Engineering, 2017, 56, 026121.	0.5	3
29	Scattering Invisibility With Freeâ€Space Field Enhancement of Allâ€Dielectric Nanoparticles. Laser and Photonics Reviews, 2017, 11, 1700103.	4.4	18
30	Superscattering pattern shaping for radially anisotropic nanowires. Physical Review A, 2017, 96, .	1.0	33
31	Generalized Magnetic Mirrors. Physical Review Letters, 2017, 119, 123902.	2.9	79
32	Unidirectional superscattering by multilayered cavities of effective radial anisotropy. Scientific Reports, 2016, 6, 34775.	1.6	19
33	Ultradirectional scattering of radially anisotropic nanoparticles. , 2016, , .		0
34	Q-factor enhancement in all-dielectric anisotropic nanoresonators. Physical Review B, 2016, 94, .	1.1	15
35	Q-factor and absorption enhancement for plasmonic anisotropic nanoparticles. Optics Letters, 2016, 41, 3563.	1.7	6
36	Geometric interpretations for resonances of plasmonic nanoparticles. Scientific Reports, 2015, 5, 12148.	1.6	25

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37	Toroidal dipoleâ€induced transparency in coreâ€“shell nanoparticles. Laser and Photonics Reviews, 2015, 9, 564-570.	4.4	86
38	Elusive Pure Anapole Excitation in Homogenous Spherical Nanoparticles with Radial Anisotropy. Journal of Nanomaterials, 2015, 2015, 1-7.	1.5	11
39	Adiabatic nanofocusing of the fundamental modes in plasmonic parabolic potentials. Optics Communications, 2015, 346, 88-92.	1.0	2
40	Towards photodetection with high efficiency and tunable spectral selectivity: graphene plasmonics for light trapping and absorption engineering. Nanoscale, 2015, 7, 13530-13536.	2.8	127
41	Efficient excitation and tuning of toroidal dipoles within individual homogenous nanoparticles. Optics Express, 2015, 23, 24738.	1.7	32
42	Ultra-directional super-scattering of homogenous spherical particles with radial anisotropy. Optics Express, 2015, 23, 14734.	1.7	49
43	Invisible nanowires with interfering electric and toroidal dipoles. Optics Letters, 2015, 40, 2293.	1.7	105
44	Ultra-directional forward scattering by individual core-shell nanoparticles. Optics Express, 2014, 22, 16178.	1.7	147
45	Strong field enhancement and light-matter interactions with all-dielectric metamaterials based on split bar resonators. Optics Express, 2014, 22, 30889.	1.7	79
46	Visible supercontinuum generation through hollow beams in a two-mode photonic crystal fiber. Applied Physics Express, 2014, 7, 062502.	1.1	4
47	Electromagnetically induced transparency-like optical responses in all-dielectric metamaterials. Journal of Optics (United Kingdom), 2014, 16, 125102.	1.0	33
48	Control of light scattering by nanoparticles with optically-induced magnetic responses. Chinese Physics B, 2014, 23, 047806.	0.7	43
49	Optically isotropic responses induced by discrete rotational symmetry of nanoparticle clusters. Nanoscale, 2013, 5, 6395.	2.8	62
50	Scattering of core-shell nanowires with the interference of electric and magnetic resonances. Optics Letters, 2013, 38, 2621.	1.7	75
51	Magnetic Light: Optical Magnetism of Dielectric Nanoparticles. Optics and Photonics News, 2012, 23, 35.	0.4	15
52	Polarization-independent Fano resonances in arrays of core-shell nanoparticles. Physical Review B, 2012, 86, .	1.1	47
53	Broadband Unidirectional Scattering by Magneto-Electric Coreâ€“Shell Nanoparticles. ACS Nano, 2012, 6, 5489-5497.	7.3	277
54	Plasmonic analogue of quantum paddle balls. , 2011, , .		0

#	Article	IF	Citations
55	Plasmonic Airy beam manipulation in linear optical potentials. Optics Letters, 2011, 36, 1164.	1.7	130
56	Airy Plasmons: Bending Light on a Chip. Optics and Photonics News, 2011, 22, 35.	0.4	1
57	Polychromatic nanofocusing of surface plasmon polaritons. Physical Review B, 2011, 83, .	1.1	23
58	Bouncing plasmonic waves in half-parabolic potentials. Physical Review A, 2011, 84, .	1.0	2
59	Mode transformation in waveguiding plasmonic structures. Photonics and Nanostructures - Fundamentals and Applications, 2011, 9, 207-212.	1.0	14
60	Manipulation of Airy plasmon beams by linear optical potentials. , 2011, , .		5
61	Complete spectral gap in coupled dielectric waveguides embedded into metal. Applied Physics Letters, 2010, 97, 021106.	1.5	6