Jierong Cheng

List of Publications by Year
in descending order

31 papers	606 citations	687363 13 h-index	580821 25 g-index
31 all docs	31 docs citations	31 times ranked	781 citing authors

#	Article	IF	Citations
1	Neural network aided diffractive metagratings for efficient beam splitting at terahertz frequencies. Journal Physics D: Applied Physics, 2022, 55, 155106.	2.8	0
2	Terahertz Metagrating Accordion for Dynamic Beam Steering. Advanced Optical Materials, 2022, 10, .	7.3	6
3	Terahertz tight-focused Bessel beam generation and point-to-point focusing based on nonlocal diffraction engineering. Optics Letters, 2022, 47, 2879.	3.3	4
4	3D high-NA metalenses enabled by efficient 2D optimization. Optics Communications, 2022, 520, 128448.	2.1	1
5	Highâ€Efficiency Terahertz Nonreciprocal Oneâ€Way Transmission and Active Asymmetric Chiral Manipulation Based on Magnetoplasmon/Dielectric Metasurface. Advanced Optical Materials, 2021, 9, 2002216.	7.3	22
6	An Efficient Bi-Functional Metagrating via Asymmetric Diffraction of Terahertz Beams. IEEE Photonics Technology Letters, 2021, 33, 441-444.	2.5	5
7	Active terahertz spin state and optical chirality in liquid crystal chiral metasurface. Physical Review Materials, 2021, 5, .	2.4	20
8	Terahertz dual-band polarization control and wavefront shaping over freestanding dielectric binary gratings with high efficiency. Optics and Lasers in Engineering, 2021, 143, 106636.	3.8	9
9	Magnetically Induced Terahertz Birefringence and Chirality Manipulation in Transverseâ€Magnetized Metasurface. Advanced Optical Materials, 2021, 9, 2101097.	7.3	26
10	An Efficient Bi-functional Metagrating via Asymmetric Diffraction of Terahertz Beams. , 2021, , .		0
11	Graphene-based transmissive terahertz metalens with dynamic and fixed focusing. Journal Physics D: Applied Physics, 2020, 53, 025105.	2.8	8
12	Efficient Wide-Band Large-Angle Refraction and Splitting of a Terahertz Beam by Low-Index 3D-Printed Bilayer Metagratings. Physical Review Applied, 2020, 14, .	3.8	19
13	Enhanced Terahertz Amplification Based on Photo-Excited Graphene-Dielectric Hybrid Metasurface. Nanomaterials, 2020, 10, 2448.	4.1	2
14	Active Terahertz Anisotropy and Dispersion Engineering Based on Dual-frequency Liquid Crystal and Dielectric Metasurface. Journal of Lightwave Technology, 2020, , 1-1.	4.6	9
15	Extremely large-angle beam deflection based on low-index sparse dielectric metagratings. Journal Physics D: Applied Physics, 2020, 53, 245101.	2.8	7
16	Graphene metalenses with diverse electrical tunabilities at different terahertz frequencies. Optical Engineering, 2020, 59, .	1.0	4
17	Low-Index 3D-Printable Metagratings for Extreme Beam-Bending at Sub Terahertz. , 2020, , .		0
18	Ultra-Narrow Band Mid-Infrared Perfect Absorber Based on Hybrid Dielectric Metasurface. Nanomaterials, 2019, 9, 1350.	4.1	30

#	Article	IF	Citations
19	Active Terahertz Shielding and Absorption Based on Graphene Foam Modulated by Electric and Optical Field Excitation. Advanced Optical Materials, 2019, 7, 1900555.	7.3	33
20	Recent Progress on Graphene-Functionalized Metasurfaces for Tunable Phase and Polarization Control. Nanomaterials, 2019, 9, 398.	4.1	55
21	Nonreciprocal terahertz beam steering based on magneto-optic metagratings. Scientific Reports, 2019, 9, 20210.	3.3	16
22	Low-index second-order metagratings for large-angle anomalous reflection. Optics Letters, 2019, 44, 939.	3.3	17
23	Dielectric metasurfaces in transmission and reflection modes approaching and beyond bandwidth of conventional blazed grating. Optics Express, 2018, 26, 12547.	3.4	6
24	Optimization-based Dielectric Metasurfaces for Angle-Selective Multifunctional Beam Deflection. Scientific Reports, 2017, 7, 12228.	3.3	64
25	An integral equation based domain decomposition method for solving large-size substrate-supported aperiodic plasmonic array platforms. MRS Communications, 2016, 6, 105-115.	1.8	5
26	All-dielectric ultrathin conformal metasurfaces: lensing and cloaking applications at 532â€‰nm wavelength. Scientific Reports, 2016, 6, 38440.	3.3	51
27	Large enhancement of third-order nonlinear effects with a resonant all-dielectric metasurface. AIP Advances, 2016, 6, .	1.3	5
28	Real-time two-dimensional beam steering with gate-tunable materials: a theoretical investigation. Applied Optics, 2016, 55, 6137.	2.1	10
29	Wave manipulation with designer dielectric metasurfaces. Optics Letters, 2014, 39, 6285.	3.3	135
30	Surface Plasmon Engineering in Graphene Functionalized with Organic Molecules: A Multiscale Theoretical Investigation. Nano Letters, 2014, 14, 50-56.	9.1	37
31	Graphene metasurfaces engineered with organic molecules. , 2014, , .		0