Bin Zheng

List of Publications by Citations

64 papers	1,490 citations	19 h-index	37 g-index
76 ext. papers	1,963 ext. citations	7.1 avg, IF	4.8 L-index

#	Paper	IF	Citations
64	Full-Polarization 3D Metasurface Cloak with Preserved Amplitude and Phase. *Advanced Materials*, **2016**, 28, 6866-71	24	186
63	Origami-Based Reconfigurable Metamaterials for Tunable Chirality. *Advanced Materials*, **2017**, 29, 1700412	24	129
62	Deep-learning-enabled self-adaptive microwave cloak without human intervention. *Nature Photonics*, **2020**, 14, 383-390	33.9	113
61	Ray-optics cloaking devices for large objects in incoherent natural light. *Nature Communications*, **2013**, 4, 2652	17.4	112
60	Broadband polygonal invisibility cloak for visible light. *Scientific Reports*, **2012**, 2, 255	4.9	81
59	Hyperbolic spoof plasmonic metasurfaces. *NPG Asia Materials*, **2017**, 9, e428-e428	10.3	77
58	Gradient Chiral Metamirrors for Spin-Selective Anomalous Reflection. *Laser and Photonics Reviews*, **2017**, 11, 1700115	8.3	61
57	Chiral metamirrors for broadband spin-selective absorption. *Applied Physics Letters*, **2017**, 110, 231103	3.4	53
56	Concealing arbitrary objects remotely with multi-folded transformation optics. *Light: Science and Applications*, **2016**, 5, e16177	16.7	44
55	Kirigami metamaterials for reconfigurable toroidal circular dichroism. *NPG Asia Materials*, **2018**, 10, 888-898	10.3	39
54	Broadband compact acoustic absorber with high-efficiency ventilation performance. *Applied Physics Letters*, **2018**, 113, 103501	3.4	35
53	Transformation Optics: From Classic Theory and Applications to its New Branches. *Laser and Photonics Reviews*, **2017**, 11, 1700034	8.3	34
52	Multi-frequency metasurface carpet cloaks. *Optics Express*, **2018**, 26, 14123-14131	3.3	33
51	Ultrawideband chromatic aberration-free meta-mirrors. *Advanced Photonics*, **2020**, 3,	8.1	29
50	Bifunctional acoustic metamaterial lens designed with coordinate transformation. *Applied Physics Letters*, **2017**, 110, 113503	3.4	27
49	Origami Metawall: Mechanically Controlled Absorption and Deflection of Light. *Advanced Science*, **2019**, 6, 1901434	13.6	22
48	Toroidal Localized Spoof Plasmons on Compact Metadisks. *Advanced Science*, **2018**, 5, 1700487	13.6	21

47	3D Visible-Light Invisibility Cloak. *Advanced Science*, **2018**, 5, 1800056	13.6	20
46	A broadband polygonal cloak for acoustic wave designed with linear coordinate transformation. *Journal of the Acoustical Society of America*, **2016**, 140, 95	2.2	20
45	Design of Ultracompact Graphene-Based Superscatterers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2017**, 23, 130-137	3.8	19
44	Large-Scale Far-Infrared Invisibility Cloak Hiding Object from Thermal Detection. *Advanced Optical Materials*, **2015**, 3, 1738-1742	8.1	19
43	Realizing transmitted metasurface cloak by a tandem neural network. *Photonics Research*, **2021**, 9, B229	6	18
42	Frequency-Controlled Focusing Using Achromatic Metasurface. *Advanced Optical Materials*, **2021**, 9, 2001811	8.1	17
41	Magnetic Hyperbolic Metasurface: Concept, Design, and Applications. *Advanced Science*, **2018**, 5, 1801495	13.6	17
40	Bistable scattering in graphene-coated dielectric nanowires. *Nanoscale*, **2017**, 9, 8449-8457	7.7	16
39	Angular-Adaptive Spin-Locked Retroreflector Based on Reconfigurable Magnetic Metagrating. *Advanced Optical Materials*, **2019**, 7, 1900151	8.1	16
38	Diodelike Spin-Orbit Interactions of Light in Chiral Metasurfaces. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 7148-7155	4.9	16
37	Panoramic lens designed with transformation optics. *Scientific Reports*, **2017**, 7, 40083	4.9	15
36	Spiral Field Generation in Smith-Purcell Radiation by Helical Metagratings. *Research*, **2019**, 2019, 3806137	7.8	14
35	Inverse design of acoustic metamaterials based on machine learning using a Gauss Bayesian model. *Journal of Applied Physics*, **2020**, 128, 134902	2.5	13
34	Direct current remote cloak for arbitrary objects. *Light: Science and Applications*, **2019**, 8, 30	16.7	11
33	Manipulating surface plasmon polaritons with infinitely anisotropic metamaterials. *Optics Express*, **2017**, 25, 10515-10526	3.3	11
32	Transient response of a signal through a dispersive invisibility cloak. *Optics Letters*, **2016**, 41, 4911-4914	3	11
31	Machine learning-enabled metasurface for direction of arrival estimation. *Nanophotonics*, **2022**,	6.3	10
30	Non-contact radio frequency shielding and wave guiding by multi-folded transformation optics method. *Scientific Reports*, **2016**, 6, 36846	4.9	9

29	Broadband subwavelength imaging using non-resonant metamaterials. *Applied Physics Letters*, **2014**, 104, 073502	3.4	9
28	Dispersion engineering of hyperbolic plasmons in bilayer 2D materials. *Optics Letters*, **2018**, 43, 5737-5740	3	9
27	Experimental Realization of an Extreme-Parameter Omnidirectional Cloak. *Research*, **2019**, 2019, 8282641	7.18	8
26	Non-contact method to freely control the radiation patterns of antenna with multi-folded transformation optics. *Scientific Reports*, **2017**, 7, 13171	4.9	7
25	Ultra-broadband carpet cloak for transverse-electric polarization. *Journal of Optics (United Kingdom)*, **2016**, 18, 044006	1.7	7
24	Structure-Induced Hyperbolic Dispersion in Waveguides. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 5463-5468	4.9	6
23	Airy beams on two dimensional materials. *Optics Communications*, **2018**, 414, 40-44	2	6
22	Free-space carpet cloak using transformation optics and graphene. *Optics Letters*, **2014**, 39, 6739-42	3	6
21	Metasurface-based focus-tunable mirror. *Optics Express*, **2019**, 27, 30332-30339	3.3	6
20	Dynamic recognition and mirage using neuro-metamaterials.. *Nature Communications*, **2022**, 13, 2694	17.4	6
19	Demonstration of Spider-Eyes-Like Intelligent Antennas for Dynamically Perceiving Incoming Waves. *Advanced Intelligent Systems*, **2021**, 3, 2100066	6	5
18	Spoof Surface Plasmonic Graphene for Controlling the Transports and Emissions of Electromagnetic Waves. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 50-56	4.1	5
17	Observing the transient buildup of a superscatterer in the time domain. *Optics Express*, **2017**, 25, 4967-4974	3.3	4
16	In Situ Customized Illusion Enabled by Global Metasurface Reconstruction. *Advanced Functional Materials*,2109331	15.6	4
15	Design of a reconfigurable broadband greyscale multiplexed metasurface hologram. *Applied Optics*, **2020**, 59, 3660-3665	1.7	4
14	Ultrathin Acoustic Metasurface Holograms with Arbitrary Phase Control. *Applied Sciences (Switzerland)*, **2019**, 9, 3585	2.6	3
13	Launching phase-controlled surface plasmons on Babinet metasurfaces. *Optics Letters*, **2018**, 43, 3253-3256	3	3
12	A SIMPLE UNIDIRECTIONAL OPTICAL INVISIBILITY CLOAK MADE OF WATER. *Progress in Electromagnetics Research*, **2014**, 146, 1-5	3.8	3

List of Publications

11	Analog of giant magnetoimpedance in magnetized near-zero plasma. *Optics Letters*, **2019**, 44, 991-994	3	3
10	Machine-Learning-Assisted Acoustic Consecutive Fano Resonances: Application to a Tunable Broadband Low-Frequency Metasilencer. *Physical Review Applied*, **2021**, 16,	4.3	3
9	Broadband Spin-Locked Metasurface Retroreflector.. *Advanced Science*, **2022**, e2201397	13.6	3
8	A bi-functional illusion device based on transformation optics. *Journal of Optics (United Kingdom)*, **2019**, 21, 035104	1.7	2
7	Progress of novel electromagnetic cloaking research. *Wuli Xuebao/Acta Physica Sinica*, **2020**, 69, 154104	0.6	2
6	Spiral Field Generation in Smith-Purcell Radiation by Helical Metagratings. *Research*, **2019**, 2019, 1-8	7.8	2
5	Achieving panorama using singular metamaterials. *Applied Physics Letters*, **2019**, 114, 051904	3.4	1
4	Machine learning-assisted low-frequency and broadband sound absorber with coherently coupled weak resonances. *Applied Physics Letters*, **2022**, 120, 033501	3.4	1
3	Experimental study on invisibility cloaks **2016**,		1
2	Deep Neural Network with Data Cropping Algorithm for Absorptive Frequency-Selective Transmission Metasurface. *Advanced Optical Materials*,2200178	8.1	1
1	Homogeneous material based acoustic concentrators and rotators with linear coordinate transformation. *Scientific Reports*, **2021**, 11, 11531	4.9	0