zhi-ling Hou

List of Publications by Citations

97 papers	5,898 citations	33 h-index	76 g-index
104 ext. papers	6,851 ext. citations	4.5 avg, IF	5.78 L-index

#	Paper	IF	Citations
97	The effects of temperature and frequency on the dielectric properties, electromagnetic interference shielding and microwave-absorption of short carbon fiber/silica composites. *Carbon*, **2010**, 48, 788-796	10.4	1264
96	Temperature dependent microwave attenuation behavior for carbon-nanotube/silica composites. *Carbon*, **2013**, 65, 124-139	10.4	793
95	Ferroferric oxide/multiwalled carbon nanotube vs polyaniline/ferroferric oxide/multiwalled carbon nanotube multiheterostructures for highly effective microwave absorption. *ACS Applied Materials & Interfaces*, **2012**, 4, 6949-56	9.5	675
94	Multi-wall carbon nanotubes decorated with ZnO nanocrystals: mild solution-process synthesis and highly efficient microwave absorption properties at elevated temperature. *Journal of Materials Chemistry A*, **2014**, 2, 10540	13	341
93	High dielectric loss and its monotonic dependence of conducting-dominated multiwalled carbon nanotubes/silica nanocomposite on temperature ranging from 373 to 873 K in X-band. *Applied Physics Letters*, **2009**, 94, 233110	3.4	267
92	High-temperature microwave absorption and evolutionary behavior of multiwalled carbon nanotube nanocomposite. *Scripta Materialia*, **2009**, 61, 201-204	5.6	177
91	Facile fabrication of ultrathin graphene papers for effective electromagnetic shielding. *Journal of Materials Chemistry C*, **2014**, 2, 5057-5064	7.1	138
90	Unusual continuous dual absorption peaks in Ca-doped BiFeO3 nanostructures for broadened microwave absorption. *Nanoscale*, **2016**, 8, 10415-24	7.7	128
89	Multifunctional broadband microwave absorption of flexible graphene composites. *Carbon*, **2019**, 141, 608-617	10.4	121
88	Synthesis of zinc oxide particles coated multiwalled carbon nanotubes: Dielectric properties, electromagnetic interference shielding and microwave absorption. *Materials Research Bulletin*, **2012**, 47, 1747-1754	5.1	108
87	Silicon carbide powders: Temperature-dependent dielectric properties and enhanced microwave absorption at gigahertz range. *Solid State Communications*, **2013**, 163, 1-6	1.6	95
86	Boron nitride nanomaterials for thermal management applications. *ChemPhysChem*, **2015**, 16, 1339-46	3.2	89
85	Flexible graphene-graphene composites of superior thermal and electrical transport properties. *ACS Applied Materials & Interfaces*, **2014**, 6, 15026-32	9.5	81
84	Alignment of graphene sheets in wax composites for electromagnetic interference shielding improvement. *Nanotechnology*, **2013**, 24, 115708	3.4	77
83	Enhanced ferromagnetism and microwave absorption properties of BiFeO3 nanocrystals with Ho substitution. *Materials Letters*, **2012**, 84, 110-113	3.3	76
82	A wearable microwave absorption cloth. *Journal of Materials Chemistry C*, **2017**, 5, 2432-2441	7.1	74
81	Multi-dimensional flexible reduced graphene oxide/polymer sponges for multiple forms of strain sensors. *Carbon*, **2017**, 125, 199-206	10.4	61

80	Ultrathin Topological Insulator Absorber: Unique Dielectric Behavior of BiTe Nanosheets Based on Conducting Surface States. *ACS Applied Materials & Interfaces*, **2019**, 11, 33285-33291	9.5	59
79	Enhanced Fluorescence Properties of Carbon Dots in Polymer Films. *Journal of Materials Chemistry C*, **2016**, 4, 6967-6974	7.1	59
78	Ni-decorated SiC powders: Enhanced high-temperature dielectric properties and microwave absorption performance. *Powder Technology*, **2013**, 237, 309-313	5.2	59
77	Microwave responses and general model of nanotetraneedle ZnO: Integration of interface scattering, microcurrent, dielectric relaxation, and microantenna. *Journal of Applied Physics*, **2010**, 107, 054304	2.5	50
76	A universal permittivity-attenuation evaluation diagram for accelerating design of dielectric-based microwave absorption materials: A case of graphene-based composites. *Carbon*, **2017**, 118, 86-97	10.4	45
75	High dielectric loss and microwave absorption behavior of multiferroic BiFeO 3 ceramic. *Ceramics International*, **2013**, 39, 7241-7246	5.1	44
74	Microwave permittivity and permeability experiments in high-loss dielectrics: Caution with implicit Fabry-P□ot resonance for negative imaginary permeability. *Applied Physics Letters*, **2013**, 103, 162905	3.4	44
73	Lightweight ferroferric oxide nanotubes with natural resonance property and design for broadband microwave absorption. *Journal of Materials Science*, **2017**, 52, 8258-8267	4.3	42
72	Structure, ferromagnetism and microwave absorption properties of La substituted BiFeO3 nanoparticles. *Materials Letters*, **2013**, 111, 130-133	3.3	42
71	Structural stability, electronic and optical properties of Ni-doped 3C□SiC by first principles calculation. *Journal of Alloys and Compounds*, **2011**, 509, 6117-6122	5.7	39
70	Enhanced magnetization and improved leakage in Er-doped BiFeO3 nanoparticles. *Physica Status Solidi (A) Applications and Materials Science*, **2013**, 210, 809-813	1.6	37
69	Construction of caterpillar-like hierarchically structured Co/MnO/CNTs derived from MnO2/ZIF-8@ZIF-67 for electromagnetic wave absorption. *Carbon*, **2021**, 173, 521-527	10.4	35
68	Mutual promotion effect of Pr and Mg co-substitution on structure and multiferroic properties of BiFeO3 ceramic. *Ceramics International*, **2017**, 43, 262-267	5.1	34
67	Biopolymer nanofiber/reduced graphene oxide aerogels for tunable and broadband high-performance microwave absorption. *Composites Part B: Engineering*, **2019**, 161, 1-9	10	34
66	Layer by layer 2D MoS2/rGO hybrids: An optimized microwave absorber for high-efficient microwave absorption. *Applied Surface Science*, **2019**, 470, 899-907	6.7	33
65	Flexible Semitransparent Energy Harvester with High Pressure Sensitivity and Power Density Based on Laterally Aligned PZT Single-Crystal Nanowires. *ACS Applied Materials & Interfaces*, **2017**, 9, 24696-24703	8.5	30
64	Mg-substitution for promoting magnetic and ferroelectric properties of BiFeO 3 multiferroic nanoparticles. *Materials Letters*, **2016**, 175, 207-211	3.3	29
63	High sensitivity self-recovery ethanol sensor based on polyporous graphene oxide/melamine composites. *Carbon*, **2018**, 137, 467-474	10.4	28

62	Designing high-performance electromagnetic wave absorption materials based on polymeric graphene-based dielectric composites: from fabrication technology to periodic pattern design. *Journal of Materials Chemistry C*, **2017**, 5, 6745-6754	7.1	25
61	A general model of dielectric constant for porous materials. *Applied Physics Letters*, **2016**, 108, 102902	3.4	25
60	Construction of three-dimensional graphene interfaces into carbon fiber textiles for increasing deposition of nickel nanoparticles: flexible hierarchical magnetic textile composites for strong electromagnetic shielding. *Nanotechnology*, **2017**, 28, 045710	3.4	24
59	Highly sensitive humidity sensor based on graphene oxide foam. *Applied Physics Letters*, **2017**, 111, 153101	3.4	23
58	Beta-manganese dioxide nanorods for sufficient high-temperature electromagnetic interference shielding in X-band. *Applied Physics A: Materials Science and Processing*, **2014**, 116, 1779-1783	2.6	23
57	Enhanced Ferromagnetism and Microwave Dielectric Properties of Bi 0.95 Y 0.05 FeO 3 Nanocrystals. *Chinese Physics Letters*, **2011**, 28, 037702	1.8	20
56	Uniform SiOx/graphene composite materials for lithium ion battery anodes. *Journal of Alloys and Compounds*, **2019**, 809, 151798	5.7	19
55	Scattering mechanisms and anomalous conductivity of heavily N-doped 3C-SiC in ultraviolet region. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2010**, 374, 2286-2289	2.3	19
54	Exceptional electrical and thermal transport properties in tunable all-graphene papers. *RSC Advances*, **2015**, 5, 75239-75247	3.7	18
53	Nano-scale and micron-scale manganese dioxide vs corresponding paraffin composites for electromagnetic interference shielding and microwave absorption. *Materials Research Bulletin*, **2014**, 51, 277-286	5.1	18
52	Tetra-needle zinc oxide/silica composites: High-temperature dielectric properties at X-band. *Solid State Communications*, **2013**, 154, 64-68	1.6	18
51	Enhanced magnetization and bias voltage-dependent dielectric properties of Sm-doped BiFeO3 multiferroic nanofibers. *Journal of Materials Science*, **2018**, 53, 10249-10260	4.3	16
50	The Comprehensive Retrieval Method of Electromagnetic Parameters Using the Scattering Parameters of Metamaterials for Two Choices of Time-Dependent Factors. *Chinese Physics Letters*, **2012**, 29, 017701	1.8	14
49	Smart mechano-hydro-dielectric coupled hybrid sponges for multifunctional sensors. *Sensors and Actuators B: Chemical*, **2018**, 270, 239-246	8.5	14
48	Graphene oxide foams: the simplest carbon-air prototypes for unique variable dielectrics. *Journal of Materials Chemistry C*, **2017**, 5, 3397-3407	7.1	13
47	Broadening Electromagnetic Absorption Bandwidth: Design from Microscopic Dielectric-Magnetic Coupled Absorbers to Macroscopic Patterns. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1700589	1.6	13
46	Size-modulated electromagnetic properties and highly efficient microwave absorption of magnetic iron oxide ceramic opened-hollow microspheres. *Ceramics International*, **2019**, 45, 23043-23049	5.1	13
45	The self-consistent nonlinear theory of electron cyclotron maser based on anomalous Doppler effect. *Applied Physics Letters*, **2011**, 98, 261502	3.4	13

44	Origin of Negative Imaginary Part of Effective Permittivity of Passive Materials. *Chinese Physics Letters*, **2017**, 34, 097701	1.8	11
43	First Principle Study of the Electronic Properties of 3C-SiC Doped with Different Amounts of Ni. *Chinese Physics Letters*, **2012**, 29, 077701	1.8	11
42	High-Sensitivity and Ultrafast-Response Ethanol Sensors Based on Graphene Oxide. *ACS Applied Materials & Interfaces*, **2020**, 12, 38708-38713	9.5	11
41	High-temperature dielectric properties and microwave absorption abilities of Bi1MgxFeO3 nanoparticles. *Ceramics International*, **2017**, 43, 11815-11819	5.1	10
40	One-Step Synthesis of SiOx@Graphene Composite Material by a Hydrothermal Method for Lithium-Ion Battery Anodes. *Energy & Fuels*, **2020**, 34, 3895-3900	4.1	10
39	Structural and thermoelectric properties of Zr-doped TiPdSn half-Heusler compound by first-principles calculations. *Chemical Physics Letters*, **2020**, 741, 137055	2.5	10
38	Highly dispersive GO-based supramolecular absorber: Chemical-reduction optimization for impedance matching. *Journal of Alloys and Compounds*, **2020**, 834, 155122	5.7	9
37	Modeling for multi-resonant behavior of broadband metamaterial absorber with geometrical substrate. *Chinese Physics B*, **2017**, 26, 127802	1.2	9
36	Ultrafast-Response Humidity Sensor with High Humidity Durability Based on a Freestanding Film of Graphene Oxide Supramolecular. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900869	1.6	9
35	Fast-moving piezoelectric micro-robotic fish with double caudal fins. *Robotics and Autonomous Systems*, **2021**, 140, 103733	3.5	9
34	Polarization Mechanism of Oxygen Vacancy and Its Influence on Dielectric Properties in ZnO. *Chinese Physics Letters*, **2011**, 28, 027101	1.8	8
33	Highly efficient and giant negative electrocaloric effect of a Nb and Sn co-doped lead zirconate titanate antiferroelectric film near room temperature.. *RSC Advances*, **2019**, 9, 34114-34119	3.7	6
32	Delicate construction of Si@SiOx composite materials by microwave hydrothermal for lithium-ion battery anodes. *Ionics*, **2020**, 26, 69-74	2.7	6
31	Plasmonic nanosensor based on sharp Fano resonances induced by aperture-coupled slot system. *Optics Communications*, **2021**, 480, 126438	2	6
30	Low-loss near-zero-index metamaterial based on a single board for broadband electromagnetic-wave switches. *Optics Communications*, **2019**, 446, 113-117	2	5
29	Enhanced photovoltaic property based on reduced leakage current and band gap in Nd-doped BiFeO3 films. *Materials Research Express*, **2019**, 6, 086426	1.7	5
28	Wide-domain controlled electromagnetic and microwave absorption properties of PANI/Ni0.5Zn0.5Fe2O4 composites. *Materials Research Express*, **2017**, 4, 075029	1.7	5
27	High-Temperature Permittivity and Data-Mining of Silicon Dioxide at GHz Band. *Chinese Physics Letters*, **2012**, 29, 027701	1.8	5

26	A highly conductive self-assembled multilayer graphene nanosheet film for electronic tattoos in the applications of human electrophysiology and strain sensing. *Nanoscale*, **2021**, 13, 10798-10806	7.7	5
25	The novel structure and superconductivity of zirconium hydride. *Computational Materials Science*, **2017**, 134, 38-41	3.2	4
24	Sm doped BiFeO3 nanofibers for improved photovoltaic devices. *Chinese Journal of Physics*, **2020**, 66, 301-306	3.5	4
23	Nanoscale polygonal carbon: a unique low-loading filler for effective microwave absorption. *Journal of Materials Science: Materials in Electronics*, **2016**, 27, 8159-8168	2.1	4
22	Electronic scattering leads to anomalous thermal conductivity of n-type cubic silicon carbide in the high-temperature region. *Journal of Physics Condensed Matter*, **2012**, 24, 445802	1.8	4
21	A low-reflection coaxial tunable attenuator based on zero refractive index metamaterial. *Journal of Applied Physics*, **2016**, 120, 183102	2.5	4
20	Rutile TiO2 nanorod with anomalous resonance for charge storage and frequency selective absorption. *Ceramics International*, **2021**, 47, 2016-2021	5.1	4
19	Different Roles of a Boron Substitute for Carbon and Silicon in □SiC. *Chinese Physics Letters*, **2012**, 29, 077102	1.8	3
18	The nonlinear theory of slow-wave electron cyclotron masers with inclusion of the beam velocity spread. *Annals of Physics*, **2013**, 339, 588-595	2.5	2
17	Efficiency enhancement of anomalous-Doppler electron cyclotron masers with tapered magnetic field. *Physics of Plasmas*, **2014**, 21, 023117	2.1	2
16	The resonance interaction of relativistic charged particle and circularly polarized electromagnetic wave. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 1104-1106	3.7	2
15	Enhancing the efficiency of slow-wave electron cyclotron masers with the tapered refractive index. *Physics of Plasmas*, **2013**, 20, 043107	2.1	2
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10	Numerical Simulations of Nonlinear Dynamics of Electron Cyclotron Maser with a Straight Beam. *Chinese Physics Letters*, **2011**, 28, 117702	1.8	1
9	A density-functional theory investigation on desorption of O 2 on Sn(111) and its comparison with initial oxidation on the X (111) (X = Si, Ge, Sn, Pb) surfaces. *Chinese Physics B*, **2012**, 21, 126803	1.2	1

8	Graphene and Carbon Nanotube Dual-Decorated SiOx Composite Anode Material for Lithium-Ion Batteries. *Energy & Fuels*, **2021**, 35, 19784-19790	4.1	1
7	MXene films: Toward high-performance electromagnetic interference shielding and supercapacitor electrode. *Composites Part A: Applied Science and Manufacturing*, **2022**, 157, 106935	8.4	1
6	Preparation and absorption performance of CNTs/PUR honeycomb composite absorbing material. *Journal of Physics: Conference Series*, **2021**, 2076, 012026	0.3	0
5	Microwave Absorption and Mechanical Properties of CNTs/ PU Composites with Honeycomb Structure. *Applied Composite Materials*,1	2	0
4	Metal-organic frameworks derived carbon nanotube and carbonyl iron composite materials for broadband microwave absorbers with a wide filling range. *Journal of Magnetism and Magnetic Materials*, **2022**, 169391	2.8	0
3	Highly tunable directional optical antennas with large local angular chiroptical effects. *Journal of Applied Physics*, **2022**, 131, 033103	2.5	
2	Distinct local angular chiroptical effects with unidirectional emission based on asymmetric plasmonic nanopillar antennas. *Optics Communications*, **2022**, 514, 128122	2	
1	Ultra-unidirectional Emission with Enhanced Spectral Splitting Based on Plasmonic Nano-pillars and its Metasurface. *Plasmonics*,1	2.4	