Peitao Xie

List of Publications by Year
in descending order

65 papers	4,595 citations	136950 32 h-index	106344 65 g-index
66 all docs	66 docs citations	66 times ranked	3064 citing authors

#	Article	IF	Citations
1	Flexible polydimethylsiloxane/multi-walled carbon nanotubes membranous metacomposites with negative permittivity. Polymer, 2017, 125, 50-57.	3.8	379
2	Hierarchically porous Co/C nanocomposites for ultralight high-performance microwave absorption. Advanced Composites and Hybrid Materials, 2021, 4, 173-185.	21.1	356
3	Bio-gel derived nickel/carbon nanocomposites with enhanced microwave absorption. Journal of Materials Chemistry C, 2018, 6, 8812-8822.	5.5	301
4	Lightweight Fe3C@Fe/C nanocomposites derived from wasted cornstalks with high-efficiency microwave absorption and ultrathin thickness. Advanced Composites and Hybrid Materials, 2021, 4, 1226-1238.	21.1	215
5	Tunable and weakly negative permittivity in carbon/silicon nitride composites with different carbonizing temperatures. Carbon, 2017, 125, 103-112.	10.3	199
6	Carbon nanospheres induced high negative permittivity in nanosilver-polydopamine metacomposites. Carbon, 2019, 147, 550-558.	10.3	190
7	Tunneling-induced negative permittivity in Ni/MnO nanocomposites by a bio-gel derived strategy. Journal of Materials Chemistry C, 2020, 8, 3029-3039.	5.5	169
8	Flexible polystyrene/graphene composites with epsilon-near-zero properties. Advanced Composites and Hybrid Materials, 2022, 5, 1054-1066.	21.1	169
9	Recent advances in radio-frequency negative dielectric metamaterials by designing heterogeneous composites. Advanced Composites and Hybrid Materials, 2022, 5, 679-695.	21.1	168
10	An overview of metamaterials and their achievements in wireless power transfer. Journal of Materials Chemistry C, 2018, 6, 2925-2943.	5.5	166
11	Precise regulation of weakly negative permittivity in CaCu3Ti4O12 metacomposites by synergistic effects of carbon nanotubes and grapheme. Advanced Composites and Hybrid Materials, 2022, 5, 419-430.	21.1	155
12	Design and analysis of negative permittivity behaviors in barium titanate/nickel metacomposites. Acta Materialia, 2020, 185, 412-419.	7.9	154
13	Silica microsphere templated self-assembly of a three-dimensional carbon network with stable radio-frequency negative permittivity and low dielectric loss. Journal of Materials Chemistry C, 2018, 6, 5239-5249.	5.5	143
14	Targeted Double Negative Properties in Silver/Silica Random Metamaterials by Precise Control of Microstructures. Research, 2019, 2019, 1021368.	5.7	118
15	Carbon aerogels towards new candidates for double negative metamaterials of low density. Carbon, 2018, 129, 598-606.	10.3	105
16	Flexible multi-walled carbon nanotubes/polydimethylsiloxane membranous composites toward high-permittivity performance. Advanced Composites and Hybrid Materials, 2020, 3, 1-7.	21.1	95
17	C/SiO2 meta-composite: Overcoming the Î»/a relationship limitation in metamaterials. Carbon, 2017, 125, 1-8.	10.3	90
18	Facile Synthesis of Fe@Fe₃C/C Nanocomposites Derived from Bulrush for Excellent Electromagnetic Wave-Absorbing Properties. ACS Sustainable Chemistry and Engineering, 2019, 7, 18765-18774.	6.7	90

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19	Permittivity transition from positive to negative in acrylic polyurethane-aluminum composites. Composites Science and Technology, 2020, 188, 107969.	7.8	78
20	Enhanced microwave absorption properties of Fe3C/C nanofibers prepared by electrospinning. Journal of Alloys and Compounds, 2019, 804, 305-313.	5.5	75
21	Low-temperature sintering Graphene/CaCu3Ti4O12 nanocomposites with tunable negative permittivity. Journal of Alloys and Compounds, 2019, 771, 699-710.	5.5	73
22	Regulation mechanism of negative permittivity in percolating composites via building blocks. Applied Physics Letters, 2017, 111, .	3.3	72
23	Negative permittivity in titanium nitrideâ€alumina composite for functionalized structural ceramics. Journal of the American Ceramic Society, 2020, 103, 403-411.	3.8	69
24	Negative permittivity adjusted by SiO2-coated metallic particles in percolative composites. Journal of Alloys and Compounds, 2017, 725, 1259-1263.	5.5	64
25	Significantly enhanced dielectric permittivity and low loss in epoxy composites incorporating 3d W-WO3/BaTiO3 foams. Journal of Materials Science, 2021, 56, 4254-4265.	3.7	60
26	Hydrosoluble Graphene/Polyvinyl Alcohol Membranous Composites with Negative Permittivity Behavior. Macromolecular Materials and Engineering, 2020, 305, 1900709.	3.6	59
27	Epsilon-negative BaTiO3/Cu composites with high thermal conductivity and yet low electrical conductivity. Journal of Materiomics, 2020, 6, 145-151.	5.7	58
28	Improved breakdown strengths and energy storage properties of polyimide composites: The effect of internal interfaces of C/<scp>SiO₂</scp> hybrid nanoparticles. Polymer Composites, 2021, 42, 3000-3010.	4.6	50
29	Radioâ€frequency negative permittivity in the graphene/silicon nitride composites prepared by spark plasma sintering. Journal of the American Ceramic Society, 2018, 101, 1598-1606.	3.8	40
30	Low-loss and temperature-stable negative permittivity in La0.5Sr0.5MnO3 ceramics. Journal of the European Ceramic Society, 2020, 40, 1917-1921.	5.7	38
31	Ultraweakly and fine-tunable negative permittivity of polyaniline/nickel metacomposites with high-frequency diamagnetic response. Composites Science and Technology, 2022, 217, 109092.	7.8	35
32	Synergistic Effects of Carbon Nanotubes on Negative Dielectric Properties of Graphene-Phenolic Resin Composites. Journal of Physical Chemistry C, 2017, 121, 12037-12045.	3.1	33
33	Radio-frequency epsilon-negative property and diamagnetic response of percolative Ag/CCTO metacomposites. Scripta Materialia, 2021, 203, 114067.	5.2	33
34	Functional nano-units prepared by electrostatic self-assembly for three-dimension carbon networks hosted in CaCu3Ti4O12 ceramics towards radio-frequency negative permittivity. Journal of Alloys and Compounds, 2018, 743, 618-625.	5.5	32
35	Generation mechanism of negative permittivity and Kramersâ€“Kronig relations in BaTiO₃/Y₃Fe₅O₁₂multiferroic composites. Journal of Physics Condensed Matter, 2017, 29, 365703.	1.8	31
36	Negative permittivity behavior in Ti3AlC2-polyimide composites and the regulation mechanism. Journal of Materials Science: Materials in Electronics, 2021, 32, 10388-10397.	2.2	31

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37	Tailorable radio-frequency negative permittivity of titanium nitride sintered with different oxidation pretreatments. Ceramics International, 2017, 43, 16980-16985.	4.8	30
38	Nitrogen-doped carbon nanofibers with sulfur heteroatoms for improving microwave absorption. Journal of Materials Science, 2020, 55, 5832-5842.	3.7	30
39	Tunable radio-frequency negative permittivity of Carbon/CaCu3Ti4O12 metacomposites. Journal of Alloys and Compounds, 2020, 834, 155164.	5.5	30
40	Targeted Double Negative Properties in Silver/Silica Random Metamaterials by Precise Control of Microstructures. Research, 2019, 2019, 1-11.	5.7	30
41	Epsilon-negative behavior of BaTiO3/Ag metacomposites prepared by an in situ synthesis. Ceramics International, 2020, 46, 9342-9346.	4.8	28
42	Compressible sliver nanowires/polyurethane sponge metacomposites with weakly negative permittivity controlled by elastic deformation. Journal of Materials Science, 2020, 55, 15481-15492.	3.7	25
43	Epsilonâ€Negative Carbon Aerogels with State Transition from Dielectric to Degenerate Semiconductor. Advanced Electronic Materials, 2021, 7, 2000877.	5.1	25
44	Iron/epoxy random metamaterials with adjustable epsilon-near-zero and epsilon-negative property. Journal of Materials Science: Materials in Electronics, 2021, 32, 15995-16007.	2.2	19
45	Tunable negative permittivity and permeability of yttrium iron garnet/polyaniline composites in radio frequency region. Journal of Materials Science: Materials in Electronics, 2018, 29, 6119-6124.	2.2	18
46	Regulation mechanism of negative permittivity in poly (p-phenylene sulfide)/multiwall carbon nanotubes composites. Synthetic Metals, 2018, 244, 15-19.	3.9	17
47	Insights into Ion Occupancy Manipulation of Feâ€“Co Oxide Free-Standing Cathodes for Liâ€“O‹sub›2‹/sub› Batteries with Enhanced Deep Charge Capability and Long-Term Capability. ACS Applied Materials & Interfaces, 2020, 12, 30268-30279.	8.0	17
48	Metacomposites: functional design via titanium nitride/nickel(II) oxide composites towards tailorable negative dielectric properties at radio-frequency range. Journal of Materials Science: Materials in Electronics, 2018, 29, 5853-5861.	2.2	16
49	Surface-reconstructed formation of hierarchical TiO‹sub›2‹/sub› mesoporous nanosheets with fast lithium-storage capability. Materials Chemistry Frontiers, 2021, 5, 3216-3225.	5.9	16
50	Double dielectric modification of nickel foam-based microwave absorbers with improved impedance matching and absorption performances. Ceramics International, 2021, 47, 33490-33497.	4.8	12
51	Tunable and weakly negative permittivity at radio frequency range based on titanium nitride/polyethylene terephthalate composites. Journal of Materials Science: Materials in Electronics, 2018, 29, 15994-16003.	2.2	10
52	Negative permittivity behavior of titanium nitride/polyphenylene sulfide â€œmetacompositesâ€•under radio frequency. Journal of Materials Science: Materials in Electronics, 2018, 29, 12144-12151.	2.2	9
53	A novel carbon aerogel enabling respiratory monitoring for bio-facial masks. Journal of Materials Chemistry A, 2021, 9, 13143-13150.	10.3	9
54	Strategy of adjusting negative permittivity with invariant permeability property in metallic granular percolating composites. Journal of Materials Science: Materials in Electronics, 2018, 29, 1246-1253.	2.2	8

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55	Flexible acrylic-polyurethane/copper composites with a frequency and temperature-independent permittivity. Journal of Materials Science: Materials in Electronics, 2018, 29, 20832-20839.	2.2	7
56	Communicationâ€"Epsilon-Negative Metacomposite Realized by Titanium Carbide Alumina Binary Ceramics in Radio Frequency. ECS Journal of Solid State Science and Technology, 2019, 8, N36-N38.	1.8	7
57	Weakly Radio-Frequency Negative Permittivity of Poly(vinylidene fluoride)/Ti3SiC2 MAX Phase Metacomposites. Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 248-257.	3.7	7
58	Three-dimensional graphene network supported by poly phenylene sulfide with negative permittivity at radio-frequency. Journal of Materials Science: Materials in Electronics, 2018, 29, 20768-20774.	2.2	6
59	Large-Area, Low-Cost Infrared Metamaterial Fabrication Via Pulsed Laser Deposition with Metallic Mesh as a Shadow Mask. Plasmonics, 2016, 11, 373-379.	3.4	5
60	Weakly negative permittivity with an extremely low plasma frequency in polyvinyl alcohol/graphene membranous metacomposites. Journal of Materials Science: Materials in Electronics, 2021, 32, 23081-23089.	2.2	5
61	Iron Granular Percolative Composites toward Radio-Frequency Negative Permittivity. ECS Journal of Solid State Science and Technology, 2018, 7, N132-N136.	1.8	4
62	Reverse design of negative permittivity property in Nickel-Network/Epoxy composites. Materials Letters, 2019, 248, 177-180.	2.6	4
63	Meta-composites: NiO supported 3D carbon networks structured by 1D building blocks towards tailorable negative permittivity. Journal of Materials Science: Materials in Electronics, 2018, 29, 18815-18827.	2.2	1
64	Steered polymorphic nanodomains in TiO₂ to boost visible-light photocatalytic oxidation. RSC Advances, 2022, 12, 9660-9670.	3.6	1
65	Dielectric and Magnetic Relaxation Behavior in Fe78Si9B13/Polyaniline Composites at Radio-Frequency Range. ECS Journal of Solid State Science and Technology, 2017, 6, N87-N91.	1.8	0