

# Mao-Sheng Cao

## List of Publications by Year in descending order

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308  
papers

33,666  
citations

2543

96  
h-index

4012

176  
g-index

310  
all docs

310  
docs citations

310  
times ranked

13355  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | The effects of temperature and frequency on the dielectric properties, electromagnetic interference shielding and microwave-absorption of short carbon fiber/silica composites. <i>Carbon</i> , 2010, 48, 788-796.                              | 5.4  | 1,582     |
| 2  | Reduced Graphene Oxides: Light-weight and High-efficiency Electromagnetic Interference Shielding at Elevated Temperatures. <i>Advanced Materials</i> , 2014, 26, 3484-3489.   | 11.1 | 1,375     |
| 3  | Temperature dependent microwave attenuation behavior for carbon-nanotube/silica composites. <i>Carbon</i> , 2013, 65, 124-139.  | 5.4  | 1,009     |
| 4  | Ferroferric Oxide/Multiwalled Carbon Nanotube vs Polyaniline/Ferroferric Oxide/Multiwalled Carbon Nanotube Multiheterostructures for Highly Effective Microwave Absorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 6949-6956. | 4.0  | 823       |
| 5  | Thermally Driven Transport and Relaxation Switching Self-powered Electromagnetic Energy Conversion. <i>Small</i> , 2018, 14, e1800987.  | 5.2  | 733       |
| 6  | 2D MXenes: Electromagnetic property for microwave absorption and electromagnetic interference shielding. <i>Chemical Engineering Journal</i> , 2019, 359, 1265-1302.  | 6.6  | 715       |
| 7  | Enhanced Microwave Absorption Property of Reduced Graphene Oxide (RGO)-MnFe <sub>2</sub> O <sub>4</sub> Nanocomposites and Polyvinylidene Fluoride. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 7471-7478.                         | 4.0  | 694       |
| 8  | Electromagnetic Response and Energy Conversion for Functions and Devices in Low-dimensional Materials. <i>Advanced Functional Materials</i> , 2019, 29, 1807398.  | 7.8  | 592       |
| 9  | Ultrathin graphene: electrical properties and highly efficient electromagnetic interference shielding. <i>Journal of Materials Chemistry C</i> , 2015, 3, 6589-6599.  | 2.7  | 551       |
| 10 | Graphene nanohybrids: excellent electromagnetic properties for the absorbing and shielding of electromagnetic waves. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4586-4602.  | 2.7  | 512       |
| 11 | Flexible graphene/polymer composite films in sandwich structures for effective electromagnetic interference shielding. <i>Carbon</i> , 2014, 66, 67-76.   | 5.4  | 473       |
| 12 | Graphene/polyaniline nanorod arrays: synthesis and excellent electromagnetic absorption properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 21679.  | 6.7  | 455       |
| 13 | Temperature dependent microwave absorption of ultrathin graphene composites. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10017-10022.  | 2.7  | 432       |
| 14 | Confinedly implanted NiFe <sub>2</sub> O <sub>4</sub> -rGO: Cluster tailoring and highly tunable electromagnetic properties for selective-frequency microwave absorption. <i>Nano Research</i> , 2018, 11, 1426-1436.                           | 5.8  | 430       |
| 15 | Multi-wall carbon nanotubes decorated with ZnO nanocrystals: mild solution-process synthesis and highly efficient microwave absorption properties at elevated temperature. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10540.            | 5.2  | 420       |
| 16 | A facile fabrication and highly tunable microwave absorption of 3D flower-like Co <sub>3</sub> O <sub>4</sub> -rGO hybrid-architectures. <i>Chemical Engineering Journal</i> , 2018, 339, 487-498.  | 6.6  | 415       |
| 17 | Confinedly tailoring Fe <sub>3</sub> O <sub>4</sub> clusters-NG to tune electromagnetic parameters and microwave absorption with broadened bandwidth. <i>Chemical Engineering Journal</i> , 2018, 332, 321-330.                                 | 6.6  | 411       |
| 18 | Porous Fe <sub>3</sub> O <sub>4</sub> /Carbon Core/Shell Nanorods: Synthesis and Electromagnetic Properties. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13603-13608.   | 1.5  | 368       |

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|----|--|------|-----------|
| 19 | NiO Hierarchical Nanorings on SiC: Enhancing Relaxation to Tune Microwave Absorption at Elevated Temperature. ACS Applied Materials & Interfaces, 2015, 7, 7073-7077.  | 4.0  | 359       |
| 20 | Small magnetic nanoparticles decorating reduced graphene oxides to tune the electromagnetic attenuation capacity. Journal of Materials Chemistry C, 2016, 4, 7130-7140.  | 2.7  | 351       |
| 21 | Two-dimensional nanosheets of MoS <sub>2</sub> : a promising material with high dielectric properties and microwave absorption performance. Nanoscale, 2015, 7, 15734-15740.   | 2.8  | 335       |
| 22 | 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, .                           | 1.5  | 333       |
| 23 | Multiscale Assembly of Grape-Like Ferroferric Oxide and Carbon Nanotubes: A Smart Absorber Prototype Varying Temperature to Tune Intensities. ACS Applied Materials & Interfaces, 2015, 7, 19408-19415.  | 4.0  | 330       |
| 24 | Quaternary Nanocomposites Consisting of Graphene, Fe <sub>3</sub> O <sub>4</sub> @Fe Core@Shell, and ZnO Nanoparticles: Synthesis and Excellent Electromagnetic Absorption Properties. ACS Applied Materials & Interfaces, 2012, 4, 6436-6442. | 4.0  | 329       |
| 25 | Dual nonlinear dielectric resonance and nesting microwave absorption peaks of hollow cobalt nanochains composites with negative permeability. Applied Physics Letters, 2009, 95, .   | 1.5  | 325       |
| 26 | Electromagnetic Property and Tunable Microwave Absorption of 3D Nets from Nickel Chains at Elevated Temperature. ACS Applied Materials & Interfaces, 2016, 8, 22615-22622.   | 4.0  | 307       |
| 27 | Enhanced Dielectric Properties and Excellent Microwave Absorption of SiC Powders Driven with NiO Nanorings. Advanced Optical Materials, 2014, 2, 214-219.  | 3.6  | 290       |
| 28 | Variable-Temperature Electron Transport and Dipole Polarization Turning Flexible Multifunctional Microsensor beyond Electrical and Optical Energy. Advanced Materials, 2020, 32, e1907156.   | 11.1 | 288       |
| 29 | 3D Fe <sub>3</sub> O <sub>4</sub> nanocrystals decorating carbon nanotubes to tune electromagnetic properties and enhance microwave absorption capacity. Journal of Materials Chemistry A, 2015, 3, 12621-12625.                               | 5.2  | 284       |
| 30 | Porous Fe <sub>3</sub> O <sub>4</sub> /SnO <sub>2</sub> Core/Shell Nanorods: Synthesis and Electromagnetic Properties. Journal of Physical Chemistry C, 2009, 113, 10061-10064.  | 1.5  | 281       |
| 31 | Temperature- and thickness-dependent electrical conductivity of few-layer graphene and graphene nanosheets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2245-2251.   | 0.9  | 276       |
| 32 | Highly ordered porous carbon/wax composites for effective electromagnetic attenuation and shielding. Carbon, 2014, 77, 130-142.  | 5.4  | 271       |
| 33 | Diverse Metal-Organic Framework Architectures for Electromagnetic Absorbers and Shielding. Advanced Functional Materials, 2021, 31, 2100470.   | 7.8  | 271       |
| 34 | Chemical reduction dependent dielectric properties and dielectric loss mechanism of reduced graphene oxide. Carbon, 2018, 127, 209-217.  | 5.4  | 268       |
| 35 | Enhanced wave absorption of nanocomposites based on the synthesized complex symmetrical CuS nanostructure and poly(vinylidene fluoride). Journal of Materials Chemistry A, 2013, 1, 4685.  | 5.2  | 264       |
| 36 | Assembling Nano-Microarchitecture for Electromagnetic Absorbers and Smart Devices. Advanced Materials, 2020, 32, e2002112.   | 11.1 | 259       |

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|----|--|------|-----------|
| 37 | Synthesis, Multi-Nonlinear Dielectric Resonance, and Excellent Electromagnetic Absorption Characteristics of Fe <sub>3</sub> O <sub>4</sub> /ZnO Core/Shell Nanorods. <i>Journal of Physical Chemistry C</i> , 2010, 114, 9239-9244. | 1.5  | 254       |
| 38 | Controllable fabrication of mono-dispersed RGO-hematite nanocomposites and their enhanced wave absorption properties. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5996.   | 5.2  | 251       |
| 39 | Microwave absorption properties and mechanism of cage-like ZnO-SiO <sub>2</sub> nanocomposites. <i>Applied Physics Letters</i> , 2007, 91, .   | 1.5  | 249       |
| 40 | Polymer-composite with high dielectric constant and enhanced absorption properties based on graphene-CuS nanocomposites and polyvinylidene fluoride. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12115.                       | 5.2  | 226       |
| 41 | Enhanced permittivity and multi-region microwave absorption of nanoneedle-like ZnO in the X-band at elevated temperature. <i>Journal of Materials Chemistry C</i> , 2015, 3, 4670-4677.  | 2.7  | 224       |
| 42 | Tuning three-dimensional textures with graphene aerogels for ultra-light flexible graphene/texture composites of effective electromagnetic shielding. <i>Carbon</i> , 2015, 93, 151-160.   | 5.4  | 213       |
| 43 | Magnetic and conductive graphene papers toward thin layers of effective electromagnetic shielding. <i>Journal of Materials Chemistry A</i> , 2015, 3, 2097-2107.   | 5.2  | 208       |
| 44 | Eco-mimetic nanoarchitecture for green EMI shielding. <i>Chemical Engineering Journal</i> , 2019, 369, 1068-1077.  | 6.6  | 205       |
| 45 | High-temperature microwave absorption and evolutionary behavior of multiwalled carbon nanotube nanocomposite. <i>Scripta Materialia</i> , 2009, 61, 201-204.   | 2.6  | 204       |
| 46 | Self-assembling flexible 2D carbide MXene film with tunable integrated electron migration and group relaxation toward energy storage and green EMI shielding. <i>Carbon</i> , 2020, 157, 80-89.                                      | 5.4  | 204       |
| 47 | Graphene-Fe <sub>3</sub> O <sub>4</sub> nanohybrids: Synthesis and excellent electromagnetic absorption properties. <i>Journal of Applied Physics</i> , 2013, 113, .   | 1.1  | 203       |
| 48 | A Nano-Micro Engineering Nanofiber for Electromagnetic Absorber, Green Shielding and Sensor. <i>Nano-Micro Letters</i> , 2021, 13, 27.   | 14.4 | 200       |
| 49 | Interfacial Engineering of Carbon Nanofiber-Graphene-Carbon Nanofiber Heterojunctions in Flexible Lightweight Electromagnetic Shielding Networks. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 10516-10523.              | 4.0  | 198       |
| 50 | Strong and thermostable polymeric graphene/silica textile for lightweight practical microwave absorption composites. <i>Carbon</i> , 2016, 100, 109-117.   | 5.4  | 195       |
| 51 | Molecular Patching Engineering to Drive Energy Conversion as Efficient and Environment-Friendly Cell toward Wireless Power Transmission. <i>Advanced Functional Materials</i> , 2020, 30, 1908299.                                   | 7.8  | 194       |
| 52 | Tailoring MOF-based materials to tune electromagnetic property for great microwave absorbers and devices. <i>Carbon</i> , 2020, 162, 157-171.  | 5.4  | 189       |
| 53 | Atomic Layer Tailoring Titanium Carbide MXene To Tune Transport and Polarization for Utilization of Electromagnetic Energy beyond Solar and Chemical Energy. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 12535-12543.  | 4.0  | 187       |
| 54 | Electrospinning and in-situ hierarchical thermal treatment to tailor NiCo <sub>2</sub> O <sub>4</sub> nanofibers for tunable microwave absorption. <i>Carbon</i> , 2021, 171, 953-962.   | 5.4  | 185       |

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|----|--|------|-----------|
| 55 | Lightweight and High-Performance Microwave Absorber Based on 2D WS <sub>2</sub> @rGO Heterostructures. Nano-Micro Letters, 2019, 11, 38.   | 14.4 | 176       |
| 56 | Electronic Structure and Electromagnetic Properties for 2D Electromagnetic Functional Materials in Gigahertz Frequency. Annalen Der Physik, 2019, 531, 1800390.  | 0.9  | 173       |
| 57 | Electromagnetic absorber converting radiation for multifunction. Materials Science and Engineering Reports, 2021, 145, 100627.   | 14.8 | 169       |
| 58 | Tailoring Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> nanosheets to tune local conductive network as an environmentally friendly material for highly efficient electromagnetic interference shielding. Nanoscale, 2019, 11, 6080-6088.                 | 2.8  | 168       |
| 59 | Matching design and mismatching analysis towards radar absorbing coatings based on conducting plate. Materials & Design, 2003, 24, 391-396.  | 5.1  | 163       |
| 60 | Facile fabrication of ultrathin graphene papers for effective electromagnetic shielding. Journal of Materials Chemistry C, 2014, 2, 5057-5064.   | 2.7  | 159       |
| 61 | A green fabrication and variable temperature electromagnetic properties for thermal stable microwave absorption towards flower-like Co <sub>3</sub> O <sub>4</sub> @rGO/SiO <sub>2</sub> composites. Composites Part B: Engineering, 2019, 166, 187-195. | 5.9  | 158       |
| 62 | Genetic Dielectric Genes Inside 2D Carbon-Based Materials with Tunable Electromagnetic Function at Elevated Temperature. Small Structures, 2021, 2, 2100104.   | 6.9  | 157       |
| 63 | Heterogeneous p-n Junction CdS/Cu <sub>2</sub> O Nanorod Arrays: Synthesis and Superior Visible-Light-Driven Photoelectrochemical Performance for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2018, 10, 11652-11662.                         | 4.0  | 154       |
| 64 | Unusual continuous dual absorption peaks in Ca-doped BiFeO <sub>3</sub> nanostructures for broadened microwave absorption. Nanoscale, 2016, 8, 10415-10424.  | 2.8  | 147       |
| 65 | Initiating VB-Group Laminated NbS <sub>2</sub> Electromagnetic Wave Absorber toward Superior Absorption Bandwidth as Large as 6.48 GHz through Phase Engineering Modulation. Advanced Functional Materials, 2022, 32, 2108194.                           | 7.8  | 147       |
| 66 | Controllable synthesis of uniform ZnO nanorods and their enhanced dielectric and absorption properties. Journal of Materials Chemistry A, 2014, 2, 8644-8651.  | 5.2  | 141       |
| 67 | Synergetic dielectric loss and magnetic loss towards superior microwave absorption through hybridization of few-layer WS <sub>2</sub> nanosheets with NiO nanoparticles. Science Bulletin, 2020, 65, 138-146.  | 4.3  | 139       |
| 68 | Thermally-tailoring dielectric genes in graphene-based heterostructure to manipulate electromagnetic response. Carbon, 2021, 184, 136-145.   | 5.4  | 139       |
| 69 | Nonlinear resonant and high dielectric loss behavior of CdS@Fe <sub>2</sub> O <sub>3</sub> heterostructure nanocomposites. Applied Physics Letters, 2008, 93, 183118.  | 1.5  | 137       |
| 70 | Assembling 3D flower-like Co <sub>3</sub> O <sub>4</sub> -MWCNT architecture for optimizing low-frequency microwave absorption. Carbon, 2021, 174, 638-646.  | 5.4  | 134       |
| 71 | Silicon carbide powders: Temperature-dependent dielectric properties and enhanced microwave absorption at gigahertz range. Solid State Communications, 2013, 163, 1-6.   | 0.9  | 133       |
| 72 | High-performance microwave absorption enabled by Co <sub>3</sub> O <sub>4</sub> modified VB-group laminated VS <sub>2</sub> with frequency modulation from S-band to Ku-band. Journal of Materials Science and Technology, 2022, 107, 155-164.           | 5.6  | 133       |

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|----|--|------|-----------|
| 73 | Nd doping of bismuth ferrite to tune electromagnetic properties and increase microwave absorption by magnetic–dielectric synergy. <i>Journal of Materials Chemistry C</i> , 2015, 3, 9276-9282.  | 2.7  | 129       |
| 74 | Polarization enhancement of microwave absorption by increasing aspect ratio of ellipsoidal nanorattles with Fe <sub>3</sub> O <sub>4</sub> cores and hierarchical CuSiO <sub>3</sub> shells. <i>Nanoscale</i> , 2014, 6, 5782-5790.                              | 2.8  | 126       |
| 75 | Improving the antistatic ability of polypropylene fibers by inner antistatic agent filled with carbon nanotubes. <i>Composites Science and Technology</i> , 2004, 64, 2089-2096.   | 3.8  | 124       |
| 76 | Synthesis of zinc oxide particles coated multiwalled carbon nanotubes: Dielectric properties, electromagnetic interference shielding and microwave absorption. <i>Materials Research Bulletin</i> , 2012, 47, 1747-1754.   | 2.7  | 122       |
| 77 | Fabrication of multi-functional PVDF/RGO composites via a simple thermal reduction process and their enhanced electromagnetic wave absorption and dielectric properties. <i>RSC Advances</i> , 2014, 4, 19594-19601.   | 1.7  | 122       |
| 78 | Carbon nanotube-CdS core–shell nanowires with tunable and high-efficiency microwave absorption at elevated temperature. <i>Nanotechnology</i> , 2016, 27, 065702.  | 1.3  | 120       |
| 79 | Synthesis and enhanced ethanol sensing characteristics of Î±-Fe <sub>2</sub> O <sub>3</sub> /SnO <sub>2</sub> core–shell nanorods. <i>Nanotechnology</i> , 2009, 20, 045502.   | 1.3  | 119       |
| 80 | Self-Assembly Construction of WS <sub>2</sub> –rGO Architecture with Green EMI Shielding. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 26807-26816.   | 4.0  | 117       |
| 81 | Conductive WS <sub>2</sub> -NS/CNTs hybrids based 3D ultra-thin mesh electromagnetic wave absorbers with excellent absorption performance. <i>Applied Surface Science</i> , 2020, 528, 147052.   | 3.1  | 116       |
| 82 | One-step fabrication of N-doped CNTs encapsulating M nanoparticles (M = Fe, Co, Ni) for efficient microwave absorption. <i>Applied Surface Science</i> , 2018, 447, 244-253.   | 3.1  | 115       |
| 83 | Developing MXenes from Wireless Communication to Electromagnetic Attenuation. <i>Nano-Micro Letters</i> , 2021, 13, 115.   | 14.4 | 115       |
| 84 | Green Approach to Conductive PEDOT:PSS Decorating Magnetic-Graphene to Recover Conductivity for Highly Efficient Absorption. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14017-14025.  | 3.2  | 113       |
| 85 | Wire-in-tube ZnO@carbon by molecular layer deposition: Accurately tunable electromagnetic parameters and remarkable microwave absorption. <i>Chemical Engineering Journal</i> , 2020, 382, 122860.   | 6.6  | 113       |
| 86 | Sol–gel synthesis of Nd-doped BiFeO <sub>3</sub> multiferroic and its characterization. <i>Ceramics International</i> , 2015, 41, 8768-8772.   | 2.3  | 112       |
| 87 | Implantation of WSe <sub>2</sub> nanosheets into multi-walled carbon nanotubes for enhanced microwave absorption. <i>Journal of Colloid and Interface Science</i> , 2022, 609, 746-754.  | 5.0  | 110       |
| 88 | Phase diagram and properties of Pb(In <sub>1/2</sub> Nb <sub>1/2</sub> )O <sub>3</sub> –Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> –PbTiO <sub>3</sub> polycrystalline ceramics. <i>Journal of the European Ceramic Society</i> , 2012, 32, 433-439. | 2.8  | 109       |
| 89 | The enhanced polarization relaxation and excellent high-temperature dielectric properties of N-doped SiC. <i>Applied Physics Letters</i> , 2014, 104, .  | 1.5  | 109       |
| 90 | Polymer composites with enhanced wave absorption properties based on modified graphite and polyvinylidene fluoride. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7031.   | 5.2  | 105       |

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|-----|---|------|-----------|
| 91  | Electromagnetic Functions of Patterned 2D Materials for Micro-Nano Devices Covering GHz, THz, and Optical Frequency. <i>Advanced Optical Materials</i> , 2019, 7, 1900689.  | 3.6  | 105       |
| 92  | Light-weight and low-cost electromagnetic wave absorbers with high performances based on biomass-derived reduced graphene oxides. <i>Nanotechnology</i> , 2019, 30, 445708.   | 1.3  | 104       |
| 93  | Hierarchical three-dimensional flower-like Co <sub>3</sub> O <sub>4</sub> architectures with a mesocrystal structure as high capacity anode materials for long-lived lithium-ion batteries. <i>Nano Research</i> , 2018, 11, 1437-1446.   | 5.8  | 102       |
| 94  | A wearable microwave absorption cloth. <i>Journal of Materials Chemistry C</i> , 2017, 5, 2432-2441.  | 2.7  | 100       |
| 95  | Graphene-wrapped multiloculated nickel ferrite: A highly efficient electromagnetic attenuation material for microwave absorbing and green shielding. <i>Nano Research</i> , 2022, 15, 6751-6760.  | 5.8  | 100       |
| 96  | Improved dielectric properties and highly efficient and broadened bandwidth electromagnetic attenuation of thickness-decreased carbon nanosheet/wax composites. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1846.  | 2.7  | 98        |
| 97  | Enhanced photoelectrochemical properties of ZnO/ZnSe/CdSe/Cu <sub>2-x</sub> Se core-shell nanowire arrays fabricated by ion-replacement method. <i>Applied Catalysis B: Environmental</i> , 2017, 209, 110-117.   | 10.8 | 98        |
| 98  | Ultrathin Topological Insulator Absorber: Unique Dielectric Behavior of Bi <sub>2</sub> Te <sub>3</sub> Nanosheets Based on Conducting Surface States. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33285-33291.   | 4.0  | 94        |
| 99  | The synthesis and selective gas sensing characteristics of SnO <sub>2</sub> /In <sub>2</sub> O <sub>3</sub> /Fe <sub>2</sub> O <sub>3</sub> hierarchical nanostructures. <i>Nanotechnology</i> , 2008, 19, 205603.  | 1.3  | 91        |
| 100 | Highly Efficient Microwave Absorption of Magnetic Nanospindle-Conductive Polymer Hybrids by Molecular Layer Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 11116-11125.   | 4.0  | 91        |
| 101 | Multifunctional BiFeO <sub>3</sub> composites: Absorption attenuation dominated effective electromagnetic interference shielding and electromagnetic absorption induced by multiple dielectric and magnetic relaxations. <i>Composites Science and Technology</i> , 2018, 159, 240-250. | 3.8  | 90        |
| 102 | Highly efficient microwave absorption properties and broadened absorption bandwidth of MoS <sub>2</sub> -iron oxide hybrids and MoS <sub>2</sub> -based reduced graphene oxide hybrids with Hetero-structures. <i>Applied Surface Science</i> , 2018, 462, 872-882.                     | 3.1  | 90        |
| 103 | Effects of hydroxyl groups and hydrogen passivation on the structure, electrical and optical properties of silicon carbide nanowires. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126106.   | 0.9  | 88        |
| 104 | Computation design and performance prediction towards a multi-layer microwave absorber. <i>Materials &amp; Design</i> , 2002, 23, 557-564.  | 5.1  | 87        |
| 105 | Alignment of graphene sheets in wax composites for electromagnetic interference shielding improvement. <i>Nanotechnology</i> , 2013, 24, 115708.  | 1.3  | 87        |
| 106 | Customizing coaxial stacking VS <sub>2</sub> nanosheets for dual-band microwave absorption with superior performance in the C- and K <sub>u</sub> -bands. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5923-5933.   | 2.7  | 86        |
| 107 | Green building materials lit up by electromagnetic absorption function: A review. <i>Journal of Materials Science and Technology</i> , 2022, 112, 329-344.  | 5.6  | 86        |
| 108 | Regulating bifunctional flower-like NiFe <sub>2</sub> O <sub>4</sub> /graphene for green EMI shielding and lithium ion storage. <i>Journal of Materials Science and Technology</i> , 2022, 127, 48-60.  | 5.6  | 86        |

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|-----|--|-----|-----------|
| 109 | Nickel layer deposition on SiC nanoparticles by simple electroless plating and its dielectric behaviors. Powder Technology, 2006, 168, 84-88.  | 2.1 | 85        |
| 110 | Enhancing electromagnetic wave absorption performance of Co <sub>3</sub> O <sub>4</sub> nanoparticles functionalized MoS <sub>2</sub> nanosheets. Journal of Alloys and Compounds, 2020, 829, 154531.  | 2.8 | 85        |
| 111 | Microwave absorption properties of multiferroic BiFeO <sub>3</sub> nanoparticles. Materials Letters, 2009, 63, 1344-1346.  | 1.3 | 84        |
| 112 | Multiple electrical response and enhanced energy storage induced by unusual coexistent-phase structure in relaxor ferroelectric ceramics. Acta Materialia, 2018, 146, 202-210.   | 3.8 | 83        |
| 113 | Enhanced ferromagnetism and microwave absorption properties of BiFeO <sub>3</sub> nanocrystals with Ho substitution. Materials Letters, 2012, 84, 110-113.   | 1.3 | 82        |
| 114 | Coaxial multi-interface hollow Ni-Al <sub>2</sub> O <sub>3</sub> -ZnO nanowires tailored by atomic layer deposition for selective-frequency absorptions. Nano Research, 2017, 10, 1595-1607.   | 5.8 | 82        |
| 115 | Microwave synthesis of Al-doped SiC powders and study of their dielectric properties. Materials Research Bulletin, 2010, 45, 247-250.  | 2.7 | 80        |
| 116 | Preparation and microwave absorption properties of basalt fiber/nickel core-shell heterostructures. Journal of Alloys and Compounds, 2010, 495, 254-259.   | 2.8 | 80        |
| 117 | Metal-organic frameworks based photocatalysts: Architecture strategies for efficient solar energy conversion. Chemical Engineering Journal, 2021, 419, 129459.   | 6.6 | 78        |
| 118 | Polymer/carbon nanocomposites for enhanced thermal transport properties of carbon nanotubes versus graphene sheets as nanoscale fillers. Journal of Materials Chemistry, 2012, 22, 17133.  | 6.7 | 77        |
| 119 | Controllable Fabrication of CuS Hierarchical Nanostructures and Their Optical, Photocatalytic, and Wave Absorption Properties. ChemPlusChem, 2013, 78, 250-258.  | 1.3 | 77        |
| 120 | High-performance microwave absorption materials based on MoS <sub>2</sub> -graphene isomorphic hetero-structures. Journal of Alloys and Compounds, 2018, 758, 62-71.   | 2.8 | 77        |
| 121 | Tailoring rGO-NiFe <sub>2</sub> O <sub>4</sub> hybrids to tune transport of electrons and ions for supercapacitor electrodes. Journal of Alloys and Compounds, 2019, 811, 152011.  | 2.8 | 77        |
| 122 | Vertically implanting MoSe <sub>2</sub> nanosheets on the RGO sheets towards excellent multi-band microwave absorption. Carbon, 2022, 197, 324-333.  | 5.4 | 77        |
| 123 | Fabrication of Reduced Graphene Oxide (RGO)/Co <sub>3</sub> O <sub>4</sub> Nanohybrid Particles and a RGO/Co <sub>3</sub> O <sub>4</sub> /Poly(vinylidene fluoride) Composite with Enhanced Wave Absorption Properties. ChemPlusChem, 2014, 79, 375-381. | 1.3 | 76        |
| 124 | High-efficiency and dynamic stable electromagnetic wave attenuation for La doped bismuth ferrite at elevated temperature and gigahertz frequency. RSC Advances, 2015, 5, 77184-77191.  | 1.7 | 76        |
| 125 | Ni-decorated SiC powders: Enhanced high-temperature dielectric properties and microwave absorption performance. Powder Technology, 2013, 237, 309-313.   | 2.1 | 75        |
| 126 | Biomass-derived carbon-coated WS <sub>2</sub> core-shell nanostructures with excellent electromagnetic absorption in C-band. Applied Surface Science, 2022, 577, 151939.   | 3.1 | 75        |



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|-----|--|-----|-----------|
| 127 | Thermal frequency shift and tunable microwave absorption in BiFeO <sub>3</sub> family. Scientific Reports, 2016, 6, 24837.   | 1.6 | 74        |
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