Special Issue

Advanced Nanomaterials for Electromagnetic Shielding and Absorption Applications

Message from the Guest Editors

Electromagnetic radiation has become a serious environmental pollution problem with the rapid development of wireless communication and the widespread use of various electronic devices. Electromagnetic shielding and absorption materials play a critical role in enhancing electronic reliability, healthcare, and defense security. Low-dimensional materials with unique electronic structures and physicochemical properties are necessary for their particular electromagnetic functions. Nanomaterials with heterogenous components and precise structural designs have received attentions due to their promising applications in electromagnetic shielding and absorbing. This Special Issue will highlight the latest processing methods, microstructure characterizations, mechanisms, properties of novel nanomaterials, and their applications in electromagnetic shielding and absorbing. Original theoretical and experimental research articles, communications, and reviews are welcome.

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Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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