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Nanostructured Materials for Electromagnetic Shielding Applications

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Message from the Guest Editors

5G is currently on everyone's lips. However, many of the advantages of this new standard can only be exploited with improved devices. Electromagnetic interference (EMI) can disrupt electronic devices, equipment, and systems. With the new generation of mobile phones being especially designed for 5G technology, EMI shielding has become more and more important. Without proper shielding, our brand-new phones would not work. Higher performance of 5G technology is only possible through increased frequencies. The use of the large band of higher frequencies comes with new challenges with regard to electromagnetic interference and electromagnetic shielding. The classical methods of shielding by using metallic plates or metallic coatings is no longer suited for this new technology; therefore, there it is a need for new materials capable of providing dielectric characteristics for lower frequencies and conductive characteristics for higher frequencies. We welcome original papers, short articles, and reviews that report on the fabrication, characterization, integration, development, or application of such materials, as well as studies on environmental issues related to them.



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Special Issue



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Message from the Editor-in-Chief

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.

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