



Functionalized Magnetite Nanomaterials – Synthesis, Properties, and Applications

Guest Editor:

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Message from the Guest Editor

Functional magnetite nanomaterials are currently considered attractive materials for advanced technological applications such as biological medicine, green energy, and the inorganic-based magnetic semiconductor. The field of magnetite nanomaterials has developed rapidly in the last few years due to its special magnetic properties. Based on these attributes, a series of synthetic routes have been explored with different levels of control on the size, shape, and polydispersity. Recently, many functionalized magnetite nanostructures have been reported in various fields, including MRI imaging, drug delivery and hyperthermia, metal ions removal, energy harnessing, and environmental pollution control. Despite these remarkable prospects, many problems in this field have yet to be resolved.

This Special Issue aims to cover the main properties, applications, and synthesis methods of magnetite nanomaterials that match your research interests. You are cordially invited to contribute your most recent research for publication.





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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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