



Ferromagnetic and Magnetic Properties of Nanostructures

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Magnetic nanoparticles, having both magnetic and chemical components that can be manipulated using magnetic fields, have recently been a focus of research. Due to their unique properties, magnetic nanoparticles have a wide range of applications, such as magnetic resonance imaging, biomedicine, data storage, nanofluids, catalysis, target specific targeting, optical filters, cation sensors, magnetically tunable electronics, waste water management, etc. The properties of magnetic nanoparticles, such as oxides and metallics (with and without shell), depend on the synthesis methods used and the crystal structure of the nanoparticles. Physical modeling is also being used to study the properties of magnetic nanoparticles, based on their rotation dynamics. This Special Issue aims at receiving articles explaining developments in the properties of magnetic nanomaterials with different applications. This Special Issue focuses on the synthesis and properties of various magnetic nanoparticles, as well as physical modeling, in the form of articles, reviews, letters, communications and academic articles.

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Guest Editor





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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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