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2D Magnetism and Its Applications on Nanoelectromechanical Systems (NEMS)

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Message from the Guest Editors

Dear Colleagues,

Quantum materials and technology are important pillars of optoelectronic circuits and systems and can be used to achieve higher integration capacity and better devices. This Special Issue aims to advocate the use of novel NEMSs to detect and design quantum materials and applications. The aim is to revolutionize equipment applications by developing rugged and reliable NEMSs.

Nanoelectromechanical systems (NEMSs) have achieved outstanding results and have been driving force in recent developments. Nanomaterials consist of nanoparticles with zero- to multi-dimensional structures in a matrix and are known for their enhanced electrical, mechanical, and tribological properties at the nanoscale. In particular, advances in technology have enabled nanomaterials to be integrated into the interface of NEMS devices.

This Special Issue will cover the exploration and design of quantum materials and applications using novel NEMSs. These devices are suitable for a variety of purposes, including material properties/functions, basic design strategies, working mechanisms, and related applications in real-life scenarios.

Prof. Dr. Xie Hongchao

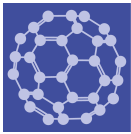
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Guest Editors



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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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