Special Issue

Nanomaterials and Nanostructures for Spintronic Terahertz Devices

Message from the Guest Editors

This Special Issue aims to present comprehensive research outlining progress on the application of nanomaterials and nanostructures in spintronic THz devices, including THz emitters, modulators, detectors, and related components. Research on their applications—ranging from fundamental studies to industrial technologies—is also welcome. We invite authors to contribute original research articles and review papers covering recent advances in this field. Potential topics include, but are not limited to, the following: Spintronic THz emitters; Spintronic THz modulators; Spintronic THz detectors; Physical mechanisms of spintronic THz emission, modulation, and detection; Theoretical and computational studies of spintronic THz phenomena; The interactions between THz waves and spintronic nanomaterials or nanostructures; Fabrication and characterization of spintronic THz devices; Applications of spintronic THz devices. We look forward to receiving your contributions.

Guest Editors

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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.

Editor-in-Chief

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