Special Issue

Advances in Spin Physics in Semiconductor Nanostructures

Message from the Guest Editor

Spin physics in semiconductors has a 50-year history marked with bright discoveries and, mostly failed, hopes for large-scale applications in spintronics. It was vastly enriched when quantum wells and quantum dots came into play, becoming a playground for testing fundamental concepts of quantum mechanics and many-body physics. Now, the field continues to flourish on old as well as new types of structures and materials, including 2D crystals, microcavities, and perovskite-based nanostructures. This Special Issue aims to publish recent advances in the spin physics of charge carriers, excitons, nuclei, and magnetic impurities in all types of semiconductor structures. Original research papers as well as review articles are welcomed.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2023)



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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 nanometerscale 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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