Special Issue

Optical Properties of Semiconductor Nanomaterials: 2nd Edition

Message from the Guest Editors

Semiconductor nanomaterials are promising for next-generation applications in many fields, such as energy harvesting, electronic and optoelectronic devices, chemical and biosensors, and catalysts at the nanoscale. A major feature of semiconductor nanomaterials is that their unique optical properties differ significantly from the bulk material due to their quantum size effect or large surface-to-volume ratio. The optical properties of semiconductor nanomaterials are not only related to their atomic structure and electronic properties, but also strongly correlated with their shape, size, and surface functionality, making them attractive objects of fundamental research and novel potential applications. We are pleased to invite you to submit a manuscript to this Special Issue. This Special Issue aims to collect the latest experimental and theoretical research articles on the optical properties of semiconductor nanomaterials and their applications. The scope of this Special Issue addresses the preparation, characterization and application of semiconductor nanomaterials. Original research articles and reviews are welcome.

Guest Editors

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Deadline for manuscript submissions

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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

Prof. Dr. Eugenia Valsami-Jones
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