Special Issue

Nonlinear Optics in Low-Dimensional Nanomaterials

Message from the Guest Editors

This Special Issue aims to present the latest experimental and theoretical research on nonlinear optics in various low-dimensional materials and lowdimensional material-based nonlinear optical applications. We invite authors to contribute original research articles and review papers that cover current progress on nonlinear optics in low-dimensional materials. Research topics include: 1. Nonlinear optics in two-dimensional materials; 2. Nonlinear optics in onedimensional materials; 3. Nonlinear optics in zerodimensional materials; 4. Nonlinear optics in other novel nano/microstructures; 5. Modulation of nonlinear optical responses in low-dimensional materials: 6. Lowdimensional material-based nonlinear optical applications, including laser technology, ultrafast photonics, integrated photonics devices, nonlinear light control, bio-imaging; 7, Nonlinear optical characterization methods for low-dimensional materials: 8. Theoretical study on nonlinear responses in lowdimensional materials.

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2025)



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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.

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