Special Issue

2D Structured Materials: Synthesis, Properties and Applications (2nd Edition)

Message from the Guest Editors

We are pleased to invite researchers to contribute to this Special Issue concerning the synthesis, properties, and application of 2D structured materials. This Special Issue aims to discuss the properties and structures of these materials and to widen the community's fundamental understanding of their use. Potential topics include, but are not limited to:

- Novel synthesis methods and developments related to 2D materials and their heterostructure;
- Experimental and theoretical exploration of the growth mechanism for 2D materials;
- Electrical, optical, mechanical, thermal, and magnetic properties of 2D materials and structures;
- Device applications of 2D materials and their heterostructures in electronics, optoelectronics, energy, flexible sensors, transistors and other functional devices;
- Electronic, magnetic, and structural phase transitions of 2D materials under extreme conditions;
- Novel applications of 2D structured materials;
- Moiré superlattices and related moiré excitons in twisted van der Waals heterostructures.

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.

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