Special Issue

Graphene and Related Layered Materials: Structures, Properties, and Applications

Message from the Guest Editors

This Special Issue aims to advance the understanding of the **structures, properties, and applications** of graphene and its related layered materials. The scope of this research topic extends across multiple fields, including physics, chemistry, materials science, and engineering, addressing both fundamental and applied research. By focusing on these aspects, this Special Issue will provide a platform for novel insights into the synthesis and functionalization of these nanomaterials, as well as their potential for integration into next-generation technologies. Key topics of interest include:

- **Graphene and Related Layered Materials**
- **Nanomaterials Synthesis**
- **Energy Storage**
- **Catalysis Design**
- **Electrical Engineering**
- **Flexible Electronics**
- **Sustainable Technologies**

We invite researchers and engineers to contribute their original research, reviews, and perspectives on these rapidly evolving topics. Together, we aim to deepen our understanding of these revolutionary materials and accelerate their integration into real-world solutions related to energy, the environment, and electronics.

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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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