Special Issue

Analysis of 2D Semiconductor: Materials, Devices and Applications

Message from the Guest Editors

Two-dimensional (2D) semiconductors, boasting exceptional attributes such as high carrier mobility, adjustable bandgaps, large specific surface areas, and remarkable scalability, exhibit tremendous application prospects across a multitude of domains, including electronics, optoelectronics, microelectronics, thermoelectrics, catalysis, and energy. Consequently, research on 2D semiconductors has risen to prominence as a leading and dynamic focal point. The aim of this Special Issue is to publish original research and review articles that delve into the latest advancements and emerging trends in the computational, theoretical, and experimental exploration of 2D semiconductors.

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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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