Special Issue

2D Nanomaterials for Optoelectronic Devices—II

Message from the Guest Editor

2D materials have turned out to be a very exciting playground for the next generation of optoelectronic devices. This is fostered by their unique characteristics: They are mechanically robust, but flexible, and as van der Waals materials they can be integrated into a great variety of architectures without lattice constraints. They exhibit strong light-matter interaction; however they are fairly transparent due to their atomic-scale thickness. By taking benefit from their valley degree of freedom innovative devices with e.g. controlled helicity of emitted light can be developed. The large surface can be used to add enhanced functionalities to light sensors like sensitivity to the surrounding or gas detection. The purpose of the present Special Issue is to present state-of-the-art research on optoelectronic devices based on 2D materials. It shall collect exciting concepts, theoretical background, relevant material synthesis and characterization, and of course novel devices by leading groups in the research community. See more information at https://mdpi.com/si/155973. We look forward to your contributions.

Guest Editor

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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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