

## Special Issue

# New 2D Materials for Energy Storage and Conversion

### Message from the Guest Editors

In the search for sustainable energy solutions, the role of advanced materials cannot be overstated. Among these, the emergence of two-dimensional (2D) materials has sparked a paradigm shift in various fields. These atomically thin materials exhibit extraordinary properties, revolutionizing the landscape of energy storage devices, energy conversion systems, and catalysis—the unique properties of 2D materials offer unprecedented opportunities for addressing global energy challenges. However, achieving the full potential of 2D materials requires interdisciplinary collaboration and continued fundamental research efforts in order to overcome the existing limitations and scale up production processes. As such, we are pleased to invite you to contribute your expertise to the body of 2D material knowledge, to explore how these materials may help advance energy storage and conversion. This Special Issue aims to explore recent advancements, challenges, and future directions in the realm of 2D materials for energy storage and conversion applications. Original research articles and reviews are welcome.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 November 2024)



## Nanomaterials

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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.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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