

## Special Issue

# Emerging 2D Materials for Energy Storage and Conversion Applications

### Message from the Guest Editor

This Special Issue aims to highlight novel 2D materials and the latest developments in 2D materials for energy applications, focusing on innovative synthesis techniques and the fundamental insights and strategies for their integration into devices. Our aim is to showcase cutting-edge research that explores how these materials can revolutionize energy storage and conversion and ultimately contribute to a more sustainable energy future.

We invite original research articles, reviews, and perspectives on, but not limited to, the following topics:

**- Novel synthesis and characterization - Energy conversion systems - Energy storage technologies - Catalysis and electrocatalysis - Theoretical and simulated insights - Device manufacturing and integration - Emerging trends and future prospects** We encourage researchers from academia and industry to contribute high-impact studies that push the boundaries of 2D material research for energy storage and conversion. With this Special Issue, we aim to foster interdisciplinary collaboration and accelerate the transition to next-generation energy technologies.

We look forward to your valuable contributions.

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### Guest Editor

Dr. Bushra Jabar

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### Deadline for manuscript submissions

20 October 2025



## Materials

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## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

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