

## Special Issue

# Boron Nitride (BN) Nanomaterials and Their Emerging Applications

### Message from the Guest Editors

This Special Issue aims to spotlight the revolutionary advancements and versatile applications of boron nitride (BN) nanomaterials. BN, a compound with a structure similar to graphite but superior properties such as high thermal conductivity, electrical insulation and thermo-chemical stability, has captivated the attention of researchers and industry experts. This Special Issue seeks to compile cutting-edge research, review articles and case studies that explore the synthesis, functionalization, characterization and application of BN nanomaterials across various sectors. We invite contributions that delve into the novel properties of BN nanomaterials, innovative fabrication techniques and their emerging applications in fields such as electronics, energy conversion and storage, thermal management and biomedical engineering. The goal is to provide a comprehensive overview of the current state of research, challenges and future perspectives in the realm of BN nanostructured materials.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 May 2025)



## Nanomaterials

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones  
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