



Development of Boron-Based Materials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue covers but is not limited to the synthesis and applications of novel boron allotropes. Different ex- and in-situ techniques to characterize and investigate these advanced materials, such as their surface and interface properties, will be included.

As examples of important topics, materials, and techniques, we expect contributions on:

- Low-dimensional structures such as all-boron clusters, fullerenes, and one- and two-dimensional materials.
- Novel allotropes of bulk boron.
- Boron-based nanostructures such as alloys, heterostructures, and organic–inorganic hybrid structures.
- Nanoscale compounds, including borides and boron hydrides, halides, carbides, and nitrides.
- Novel two-dimensional transition metal borides (MBenes).
- Defect-induced properties addressing quantum applications.
- Advanced materials characterization techniques and the latest methods of computer simulations.





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Message from the Editor-in-Chief

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