Special Issue

Development of Boron-Based Materials

Message from the Guest Editor

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.

Guest Editor

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Deadline for manuscript submissions

closed (10 January 2025)



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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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