Special Issue

The Synthesis and Applications of Two-Dimensional Hexagonal Boron Nitride in Electronics and Optics

Message from the Guest Editor

Recently, two-dimensional hexagonal boron nitrides attract considerable interest due to their wide range of scientific and technological applications in electronics and optics. More specifically, h-BN consists of two-dimensional hexagonal net-like layers of boron and nitrogen atoms. Thus, this Special Issue aims to summarize and report recent research achievements in electronic and optical application of hexagonal boron nitrides. This Special Issue provides a platform for the collection of the eminent advancement of this field. The main subject of this Special Issue regards hexagonal boron nitride, including a variety of its electronic and optical applications. Potential topics include, but are not limited to, the following:

- Novel synthesis routes for high-quality h-BN;
- The modification of materials properties via a variety of methods, including the doping of foreign atoms, the introduction of atomic defects, etc.;
- The development of electronic and optical devices utilizing special properties of h-BN;
- Electron transport and luminescence investigations;
- The application of electronic and optical properties of h-BN.

Guest Editor

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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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