Special Issue

Advanced 2D Nanomaterials: Characterization and Application

Message from the Guest Editor

Two-dimensional (2D) materials have attracted tremendous interest due to their unusual mechanical, electronic, optoelectronic, and topological properties. However, despite extensive developments in their application, the full potential of 2D materials has yet to be realized. To this end, cutting-edge and integrated characteristic approaches are needed to determine the unique features of these materials, showcasing the remarkable potential for fundamental science and technological applications. This Special Issue is focused on the up-to-date characterization and application through illustrating intrinsic properties and technological advances of 2D materials. We are seeking original research papers and topical reviews on but not limited to the following aspects:

- Advanced functional 2D materials synthesis and characterization, and application.
- 2D heterostructure characterization and application.
- Emerging phenomenon in 2D materials and their heterostructures.
- Property engineering of 2D materials and their related applications.
- 2D materials nanofabrication approaches.
- Theoretical calculations of 2D materials properties and related device performance

Guest Editor

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Deadline for manuscript submissions

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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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