Special Issue

Two-Dimensional and Nanostructured Materials for Electronic and Energy Applications

Message from the Guest Editor

This Special Issue will present the recent advances in 2D materials and their potential applications, focusing on emerging trends in the synthesis and characterizations of 2D materials and investigations of their fundamental intrinsic properties as well as device applications. Original articles and review papers will cover the following topics though are not limited to them: first-principle calculations of 2D materials, exfoliation and synthesis techniques of 2D materials, characterizations of the intrinsic properties of 2D materials, modification and interface engineering approaches for 2D materials, interactions of 2D materials with organic and inorganic molecules, 2D van der Waals heterostructures. Contributions on 2D devices in electronics and energy are strongly encouraged. Studies on the applications of 2D materials in optoelectronics, valleytronics, spintronics, twistronics and other related fields are also welcome. I kindly invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome. **Fudan University**

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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