# Special Issue

# Research Progress on Two-Dimensional Materials

## Message from the Guest Editor

The field of two-dimensional (2D) materials has seen significant advances in both fundamental science and applications. The tremendous variety of 2D materials, such as graphene, hexagonal boron nitride, transition metal dichalcogenides and phosphorene, and their van der Waals heterostructures produce diverse electronic, optical and mechanical properties according to their unique bandgap structures. Such diversity is a rich source for novel phenomena, such as valleytronics, twistronics and topology, together with novel electro-optical devices, which cannot be achieved using conventional technologies based on bulk materials. Therefore, this Special Issue aims to introduce recent progress in 2D materials, as well as their applications, for a wide range of topics. All topics related to 2D materials, including novel physics, fabrication methods, ab initio calculations, biological and chemical sensors and electronic and/or optical devices, are welcome. I hope this Special Issue inspires both academic and industrial communities towards breaking new ground.

## Guest Editor

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## Deadline for manuscript submissions

closed (20 November 2023)

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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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