



materials



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Research Progress of Advanced Two-Dimensional Materials

Guest Editor:

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Deadline for manuscript
submissions:

closed (20 October 2023)

Message from the Guest Editor

In this Special Issue, we would like to invite researchers from around the world to present their latest progress in advanced 2D materials and devices. The topics of this Special Issue cover but are not limited to (1) controllable synthesis and preparation methods, including mechanical exfoliation, liquid exfoliation, physical deposition, epitaxial growth, chemical synthesis, as well as phase engineering of 2D materials; (2) microscopy, spectroscopy and manipulation of advanced properties and quantum effects, including the mechanical, thermal, optical, electrical, magnetic, ferroelectric, superconducting, chirality properties, and correlated electronic states of 2D materials, along with newly emerging Moiré heterostructures and superlattices; (3) promising applications of 2D materials and devices in electronics, optoelectronics, catalysis, energy storage, solar cells, biomedicine, sensors, environments, etc.; (4) theoretic calculations, simulations, design, and mechanism of 2D materials and devices.

We welcome submissions of related work in various fields to jointly promote progress in this rapidly developing field.



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Special Issue



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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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