Special Issue

Advancements in the Nanotribology of Two-Dimensional Layered Materials

Message from the Guest Editors

This Special Issue aims to cover the latest developments in the nanotribological characterization of 2D layered materials using FFM. **Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:**

- Nanotribology of 2D materials, as investigated by FFM and colloidal probe FFM techniques;
- FFM characterization of 2D materials heterostructures, including friction control by strain effects and friction of Moiré superstructures;
- Functionalization of AFM probes with 2D materials to systematically characterize the nanotribology of homo- and hetero-junctions;
- Nanoscale/mesoscale friction explored through the FFM-assisted manipulation of nanomaterials and micro-objects on 2D materials platforms;
- Electronic control of friction, e.g., by tuning surface trapped charges, doping charge levels, or strain levels in nanoscale/mesoscale contact junctions based on 2D materials.
- Impact of structural or chemical defects on the nanotribology of 2D materials;
- Nanotribology of solution-processed single-layer and few-layer 2D flakes.

I look forward to receiving your contributions.

Guest Editors

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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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