Special Issue

New Vista on Friction: Superlubricity and Atomistics of Friction

Message from the Guest Editor

For increasing applications of nano-mechanical devices, friction between contacting parts of surfaces has become a crucial factor in determining their performances and the lifetime of severe energy dissipation and material loss. The concept of superlubricity has recently received much interest after the demonstration of ultralow friction in various systems such as atomically smooth interfaces in layered materials, nanoscale linear bearings consisting of multiwall carbon nanotubes, miniature ball bearings formed by graphene wrapping nanodiamond particles, hydrogen-mediated superlubricity systems of diamond-like carbon surfaces, and liquid-mediated superlubricity systems such as the compound systems of diamond-like carbon surface and specific lubricant oil. This Special Issue exclusively focuses on the latest progress in the field of superlubricity, such as structural superlubricity, hydrogen-mediated superlubricity, and liquid-mediated superlubricity. Contributions from both academic and industrial research are welcome.

Guest Editor

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Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. *Lubricants* invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in *Lubricants.*

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