Special Issue

Tribology of Diamond-Like Carbon Films: Recent Progress and Future Trends

Message from the Guest Editors

We welcome submissions on the "Tribology of Diamond-like Carbon Films: Recent Progress and Future Trends". From a tribological perspective, DLC has been used to boost the energy efficiency of fossil fuel vehicles for several decades. Recently, the demand for green energy has been rapidly increasing along with the phase-out of fossil fuel vehicles, and tribological solutions need to be provided in various environments (e.g., ablation, acid-base corrosion, electro-corrosion, ultra-high vacuum, elevated and cryogenic temperatures). Here, we hope to explore the unprecedented properties of DLC, including its tribological performance, as well as its future applications. In this issue, we cover evaluation and coating processes for structurally and elementally modified DLC and seek insights into future R&D directions to suit the changing environment. Topics of particular interest in this Special Issue include the following: - Novel processes of DLC deposition; -Structurally or elementally controlled DLC coating; -Future applications of DLC coating (e.g., corrosion, ablation, high temperature, low temperature, optics, semiconductor, etc.).

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2025)



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About the Journal

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.

Editor-in-Chief

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