Special Issue

Laser Surface Engineering for Tribology

Message from the Guest Editors

Tribology is still facing various challenges in terms of reducing friction and wear and enhancing energy efficiency and sustainability of machinery. By changing the surface structure or producing a new film, the mechanical, physical, and chemical properties of contact surfaces can be improved, so as to reduce friction and wear. The new development in laser surface engineering is widely applied for tribology, including laser texture, laser deposition, laser cladding, laser modification, and so on. Furthermore, some innovations of laser surface engineering for tribology have been applied in industry, such as brakes, bearings, and steel rolls. For promoting further development in this area, we expect this Special Issue can serve to highlight the major trends and state-of-the-art research. We welcome contributions from both academic research. and application-oriented approaches particularly involving laser surface engineering for tribology.

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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.

Editor-in-Chief

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