Special Issue

Microstructure and Tribological Properties of Alloys

Message from the Guest Editors

Alloys are indispensable materials in the construction of engineering machinery and equipment. The tribological properties of alloy materials are directly linked to the stability and service life of mechanical equipment. Moreover, micro-nano-sized alloys or metallic additives play a pivotal role in modifying lubricating oils and greases. The microstructure of alloys and the crystalline evolution during their service life are of utmost importance for comprehending their tribological behavior. This Special Issue centers on the microstructure and tribological properties of alloy materials. It warmly welcomes submissions related to the microstructure and tribological research of diverse structural and functional metallic materials. These materials include, but are not restricted to, commonly used steels, copper alloys, aluminum alloys, titanium alloys, high-entropy alloys, and metal matrix composites. Both research articles and review papers are highly encouraged.

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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.

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