Special Issue

Recent Achievements and Future Developments in Surface Texture Control of Tribological Properties

Message from the Guest Editors

Surface texture has been proven to have the ability to improve the friction, lubrication, vibration and biological performance of mechanical components by preparing a macro-/micro-structure array with specific shapes, arrangements, and sizes on the contact surfaces through appropriate processing techniques, to realize the desired surface properties, without changing the material properties and chemical composition of the matrix itself. However, effective systematic design methods, performance prediction theories, and intelligent diagnosis and optimization algorithms have not yet been developed since the 1960s. This Special Issue aims to report the latest achievements of surface texture in the above-mentioned fields, and provide some constructive and forward-looking directions for the future development of surface texture.

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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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