Special Issue

Structural Evolution and Wear of Steels

Message from the Guest Editors

Steel, renowned for its strength, versatility, recyclability, and adaptability, is a fundamental material for a wide range of industrial uses, with its use spanning from constructions to machine components to tools. However, wear, a complicated phenomenon that weakens the structural integrity of steel and reduces its lifespan, significantly influences its long-term performance. This emphasizes the importance of comprehending wear behavior and subtle structural details for enhancing the performance of steel. Additionally, an improved understanding of steel's structural properties promotes resource efficiency and sustainability, while also optimizing engineering designs for its endurance. Moreover, as industries evolve, the demand for high-strength steels with tailored properties intensifies, amplifying the need for comprehensive research in this domain. Thus, this Special Issue delves into the critical areas of structural evaluation and wear mechanisms in steel, aiming to provide scholars with a comprehensive understanding of these interconnected aspects to advance toward safer, more resilient, and more sustainable engineering solutions.

Guest Editors

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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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