Special Issue

Tribological Behavior of Surface-Modified Metallic Components

Message from the Guest Editor

Surface layer modification of metallic materials in order to improve their performance has been known and used for decades in many different fields of engineering. Its application increases durability and reliability of elements of machines and tools as well as medical implants. As the technology, materials and analysis techniques progress, new methods of surface modification are also developed. The knowledge of tribological behavior and wear mechanisms of components with modified surface layers is continuously enhanced. The application of modern research techniques, imaging, and signal analysis allows for a better understanding of processes occurring during friction and for describing wear mechanisms of materials. This Special Issue aims to present the latest trends in new coatings for tribological use, advances in techniques of application and research as well as indepth analysis of wear mechanisms. We are pleased to invite you to submit original, high-quality scientific articles, short communications, and state-of-the-art reviews for this Special Issue. Both theoretical and experimental contributions can be submitted.

Guest Editor

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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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