Special Issue

Recent Developments in Tribological and Mechanical Performance of Metallic Materials and Coatings

Message from the Guest Editor

Metallic materials have long been central to research on mechanical and tribological behavior under complex conditions. Their wide use in automotive, aerospace. energy, and tooling makes improving wear resistance, friction control, and load-carrying ability a key topic. Advances in surface modification, nanostructured coatings, and improved deposition technologies offer new opportunities for optimizing properties in real conditions. The need for energy efficiency, lower environmental impact, and longer service life further drives development of advanced solutions. This Special Issue seeks original research and reviews on improving tribological and mechanical properties of metallic materials and coatings. Focus is placed on correlations between microstructure, processing, and functional performance in different conditions. It aligns with Coatings journal's goals in surface engineering and advanced coatings. Scope includes, but is not limited to:

- Metallic materials
- Tribological properties
- Mechanical performance
- Surface engineering
- Wear resistance
- Protective coatings
- Nanostructured films
- Friction and lubrication

We look forward to your contributions.

Guest Editor

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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