Special Issue

Advances in Wear-Resistant Coatings

Message from the Guest Editors

Wear-resistant coatings have advantages over low friction coefficients, large load-bearing capacities, wide temperature ranges, etc. Coating preparation technology has also reached a new level. Exploring new coating materials has facilitated the discovery of multifunctional coatings for applications in aerospace, civil machinery, and other fields. The scope of this Special Issue will include, but is not limited to, the following fundamental and applied research topics:

- Research developments in new organic, inorganic, and composite coatings;
- Coating technology and processes: sol–gel, hydrothermal, laser, plasma, thermal spray, electroplating, chemical deposition, physical vapor deposition, chemical vapor deposition, chromating, fluorozirconating, fluorotitanating, phosphating, bluing, black oxide coating formation, anodizing, etc.;
- Dry-wear-resistant coatings;
- High-temperature wear-resistant coatings;
- Wear-corrosion-resistant coatings;
- Test methods for determining the wear-resistant levels of coatings in various environments;
- The modeling and simulation of coating processing and wear;
- Nanostructured composite coatings and wear characterization.

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Deadline for manuscript submissions

31 December 2025

Coatings

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.4

mdpi.com/si/185961

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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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