

Special Issue

Surface Modification of Magnesium, Aluminum Alloys, and Steel

Message from the Guest Editors

Given that modern industry is driven by economic and environmental factors, it faces a pressing need to improve efficiency, safety, and reliability. Despite the constant development of new materials, advanced high-strength steels, aluminum alloys, and magnesium remain key materials in this competitive scenario, mainly due to their balanced performance, especially low costs, excellent strength-to-weight ratio, high strength corrosion, good machinability, and competitive processing costs. This Special Issue aims to encourage the dissemination of high-quality research on the relationship between mechanical properties and processing methods, microstructural properties, and chemical composition. The thematic area is wide and aims to include interesting and innovative research that contributes to the development of this interdisciplinary field of scientific research.

- Surface treatment
- Coatings
- Coating resistance
- Layer adhesion
- Corrosion resistance
- Material science
- Industrial design
- Design of experiments
- Industrial processes
- Manufacturing engineering

Guest Editors

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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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