

Special Issue

Laser Surface Treatment: Processes and Applications

Message from the Guest Editors

This Special Issue aims to consolidate the latest findings related to the preparation and protection of material surfaces and to provide an opportunity for researchers to publish the latest results, reviews, methods and failure reports to understand or solve the problem of material surface treatment through laser-related techniques. We welcome submissions of original, high-quality papers and critical reviews. This scope of this Special Issue will serve as a forum for papers in the following areas:

- Wear and corrosion resistance of laser-related coatings;
- New technology and application of laser surface treatment;
- Understanding the degradation mechanisms of coatings through friction, wear or other dynamic loading conditions and corrosion;
- Control of oxides during laser cladding;
- Computer modeling, simulation to predict coating properties, performance, durability and reliability in service environments;
- The microscopic mechanism of the effect of laser technology on the surface damage, defects and dislocations of materials.

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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