Special Issue

Advances in Laser Surface Modification of Materials

Message from the Guest Editors

This Special Issue provides an opportunity to explore advances in the field of laser surface modification of materials and to boost scientific knowledge and progress. In this Special Issue, we welcome high-quality reviews, articles and short communications, whose topics include, but are not limited to, the following:

- Fundamentals of laser-material interactions.
- Influence of laser parameters/strategy on the material's surface.
- Recent developments in laser surface modification related to different techniques, such as laser surface texturing, laser shock peening, laser hardening, laser ablation, laser polishing, laser surface melting, laser surface alloying, laser cladding, etc.
- Novel approaches/technologies for modifying the surface and properties of materials.
- Surface integrity evaluation after laser surface modification.
- Architectural design of innovative solutions through laser surface modification.
- Advanced manufacturing strategies.
- Hybrid manufacturing using laser technologies.

Guest Editors

Dr. Bruno Guimarães

R&D Department, Palbit S.A., Palhal-Rua das Tílias S/n, 3850-582 Branca, Albergaria-a-Velha, Portugal

Dr. Georgina Miranda

CICECO, Aveiro Institute of Materials, Department of Materials and Ceramic Engineering, University of Aveiro, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions

closed (30 June 2025)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/204151

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applisci@mdbi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

