Special Issue

Advances in Laser Processing Technology of Materials— Second Edition

Message from the Guest Editors

This Special Issue invites potential authors to contribute articles and reviews that encompass the broad spectrum of laser-material interactions and the applications of laser technologies. Contributions dealing with laser processing of dielectrics, ceramics, and biomaterials are especially welcome. Authors are encouraged to submit research articles that advance our understanding of the underlying physics, chemistry, and mechanics of laser-material interactions, either through new models or extensive simulations. These articles may explore topics from the most conventional applications such as laser ablation, welding, and surface modification to the most recent ones, such as additive manufacturing, the synthesis of nanomaterials, micro- and nano-manufacturing, and more. Additionally, we welcome reviews that synthesize existing knowledge in laser processing technology, offering valuable perspectives on the current state of the field and potential future directions. By fostering collaboration and knowledge exchange, it aims to contribute to the ongoing progress of laser processing technology.

Guest Editors

Prof. Dr. Annalisa Volpe

- 1. Department of Physics "M. Merlin", Polytechnic University of Bari, Via G. Amendola 173, 70125 Bari, Italy
- 2. National Research Council (CNR), Institute for Photonics and Nanotechnologies (IFN), Via G. Amendola, 173, 70125 Bari, Italy

Dr. Raffaele De Palo

- 1. Department of Physics "M. Merlin", Polytechnic University of Bari, Via G. Amendola 173, 70125 Bari, Italy
- 2. National Research Council (CNR), Institute for Photonics and Nanotechnologies (IFN), Via G. Amendola, 173, 70125 Bari, Italy 3. PolySense Lab, Polytechnic University of Bari, Via G. Amendola 173, 70125 Bari, Italy

Deadline for manuscript submissions

20 October 2025



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/236053

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)