

Special Issue

Advances in Laser Materials Processing and Applications

Message from the Guest Editor

The laser has long outgrown any doubts regarding its usefulness. It continues to find new applications driven by evermore stringent manufacturing needs, and this has been accompanied by a continuing development of the laser itself, resulting in new irradiance regimes to be explored. It seems timely to group together leading work in the fields of laser material interactions and the beam delivery techniques that are being developed to facilitate these many applications. Hence, we wish to highlight the latest advances in these exciting areas of applied science and engineering through the compilation of this Special Issue of *Materials*.

Keywords: lasers; laser material processing; laser ablation; laser beam delivery; ultrashort pulsed laser; fiber laser; laser applications; laser machining; beam scanning; beam delivery; beam shaping; laser material interactions; composite materials; toughened glass; laser drilling; laser machining; laser welding; dense hole arrays; filamentation; high aspect ratio machining; laser structuring of materials; thin film patterning; thin film deposition; nonlinear material interactions; stereolithography; laser sintering

Guest Editor

Dr. Howard V. Snelling

Department of Physics and Mathematics, University of Hull, Hull HU6 7RX, UK

Deadline for manuscript submissions

closed (20 April 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/98851

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

[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



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

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. 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)