Special Issue

Advanced Technologies of Welding, Surfacing, and Thermal Spraying of Modern Materials

Message from the Guest Editors

This Special Issue is a forum for the publication of articles allowing an in-depth understanding of the relationship between the structure, properties, and functions in welded joints, as well as surface layers produced using advanced welding technologies and innovative engineering materials. This work includes an overview of various types of welding techniques, including solid-state welding processes, used to join new metal alloys, composites, polymers, and ceramics from different perspectives. The impact of various process parameters, structural morphology, and changes in mechanical properties will be important issues raised in individual chapters. Weld techniques, including laser welding, electron beam welding, plasma welding, ultrasonic welding, diffusion welding, or friction stir welding, will be analysed in terms of creating satisfactory and high-quality welded joints. In addition, the purpose of this Special Issue is to present the latest developments in the field of research regarding innovative technologies and materials for the production of surface layers and coatings resistant to mechanical wear, thermal wear, and corrosion.

Guest Editors

Dr. Artur Czupryński

Prof. Dr. Marcin Adamiak

Prof. Dr. Antonín Kříž

Dr. Tünde Anna Kovács

Deadline for manuscript submissions

closed (15 December 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/108146

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

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

MDPI

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)