Special Issue

Computational and Experimental Modeling of Interfaces and Joints in Advanced Materials

Message from the Guest Editor

In addition to experimental research, mechanical engineering is now also focusing on assessing the behavior of various engineering structures using computational methods such as, but not limited to, the finite element method. This Special Issue of *Materials* will focus on critical findings, advances and applications of numerical and experimental methods in all mechanical engineering fields related to structural connections of advanced materials. Papers dealing with new developments in relation to theoretical, computational, experimental and modeling techniques and their applications in science and technology will be considered. Papers that cover a wide range of issues are welcome, including (but not limited to) the following topics:

- Finite element analysis;
- Computational and experimental modeling;
- Structural health monitoring;
- Interfaces and their connections;
- Connections in mechanical engineering;
- Deformation analysis;
- Geometric modeling.

Guest Editor

Dr. Rafał Grzejda

Faculty of Mechanical Engineering and Mechatronics, West Pomeranian University of Technology in Szczecin, 70-310 Szczecin, Poland

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/231617

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



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)