

Special Issue

Biomechanics and Damage Mechanics of Composite Materials

Message from the Guest Editors

Further studies are needed on the damage mechanics of composite structures and their deferred behavior in order to achieve general and reliable models, especially for biomedical applications and innovative materials.

The focus of this Special Issue of *Materials* is the computational modeling of composite materials and the experimental investigation of their behavior. This Special Issue will also present recent advances in this field.

Potential topics include, but are not limited to:

- new models of the damage mechanics of composite structures;
- novel approaches to the evaluation of statistical and dynamical failure of composite or hybrid structures;
- new approaches to the evaluation of the reliability over time of composite structures;
- novel experimental setups for biomechanical problems;
- constitutive models of biomedical materials; and
- new methods for optimizing the design of composite materials.

Guest Editors

Dr. Michele Perrella

Dr. Valentino Paolo Berardi

Prof. Dr. Enrico Armentani

Deadline for manuscript submissions

closed (31 January 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/44138

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)