

Special Issue

Mathematics of Materials-Environments Interactions

Message from the Guest Editors

Various materials are used in the applications day to day, where materials–environments interactions are of primary importance. This Special Issue aims to be multidisciplinary, involving mathematical and computational aspects of predicting interactions between materials and environments in contact. The fundamental understanding of intermolecular interactions and modeling approaches such as quantitative structure–property relationships (QSPR), molecular dynamics (MD), finite element analysis (FEA), or novel machine learning (ML) tools is of interest. The scope of the Special Issue, however, spans across the whole modeling field, including mathematics, physics, and chemistry-based solutions (analytical, numerical and phenomenological tools).

We invite researchers to contribute to this Special Issue titled “Mathematics of Materials–Environments Interactions”, which is intended to serve as a unique multidisciplinary forum on mathematical, theoretical, computational, and experimental science and engineering.

Guest Editors

Dr. Andrey E. Krauklis

Institute for Mechanics of Materials, University of Latvia, Jelgavas Street 3, LV-1004 Riga, Latvia

Dr. Kamalakshya Mahatab

Chennai Mathematical Institute, Chennai, India

Dr. Christian Wolfgang Karl

SINTEF, Department of Materials and Nanotechnology, Forskningsveien 1, 0373 Oslo, Norway

Deadline for manuscript submissions

closed (10 July 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/95588

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)