Special Issue

New Advancements in Computational Particle Mechanics

Message from the Guest Editor

The purpose of this Special Issue is to explore new developments in the discrete element method (DEM) for granular dynamics modeling, including but not limited to the following topics:

New numerical methods to model complex particles or address the problems which remained unresolved before.

Significant improvements to existing methods for better accuracy and efficiency or enhanced capacity.

Novel applications of computational particle mechanics to new or interdisciplinary fields.

Research on the microstructure of materials.

More accurate and convenient tools for computational particle mechanics.

Extended application of computational particle mechanics in engineering.

New insights into some critical scientific problems of granular materials based on numerical simulations.

We look forward to receiving many excellent research papers for this Special Issue. Your contributions will promote both the scientific research and industrial applications of granular materials.

Guest Editor

Dr. Xia Hua

Mechanical Engineering and Automation, Zhejiang University of Technology, Hangzhou 310014, China

Deadline for manuscript submissions

closed (20 November 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/114004

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

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)