Special Issue

Numerical Modeling and Mechanical Properties of Fiber-Reinforced Cementitious Composites

Message from the Guest Editors

Numerical modeling and mechanical properties of fiber-reinforced cementitious composites (FRCCs) are always attractive research topics. This Special Issue provides an informative and stimulating forum to promote academic communications on this challenging topic, focusing on the development and applications of numerical and experimental methods, and algorithms for simulating and analyzing mechanical properties of FRCCs and structures made of FRCCs.

Original research papers and review articles with a focus on the numerical modeling and mechanical properties of FRCCs tailored for engineering applications are encouraged to be submitted. Topics can include, but are not limited to, the following: experimental and numerical analyses of mechanical properties of FRCCs and structures; durability of FRCCs and structures in harsh environments; the fatigue performance of FRCCs and structures; the 3D printing of FRCCs; the dynamic performance of FRCCs and structures; and multiscale models and methods for the deformation and failure analysis of FRCCs and structures.

Guest Editors

Dr. Juntao Zhu

School of Hydraulic and Civil Engineering, Zhengzhou University, Zhengzhou 450001, China

Dr. Ke Li

School of Hydraulic and Civil Engineering, Zhengzhou University, Zhengzhou 450001, China

Deadline for manuscript submissions

closed (20 May 2025)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/154882

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)

MDPI