

Special Issue

Advanced and Sustainable Low-Carbon Cement and Concrete Materials (Second Edition)

Message from the Guest Editor

This Special Issue is dedicated to recent research focused on the development of advanced building materials and components that contribute to the systematisation and dissemination of knowledge related to the long-term performance and durability of construction materials in line with sustainability and eco-efficiency. Among others, the reuse of secondary raw materials in the development of composite materials, supplementary cementitious materials and alternative binders are the focus of the studies published in this Special Issue. Thus, this Special Issue will present new developments in the field of durable advanced building materials, systems and components, and their characterisation, life prediction methods and maintenance management. It will serve as an overview of the current state of knowledge for the benefit of professionals such as materials engineers, designers and production engineers. **Keywords:**

- sustainability
- eco-efficiency
- advanced materials
- composites
- low-carbon cement
- secondary raw materials
- alternative binders
- supplementary cementitious materials

Guest Editor

Prof. Dr. Milena Pavlíková

Faculty of Civil Engineering (FSV), Czech Technical University in Prague,
Thákurova 7, 166 29 Prague, Czech Republic

Deadline for manuscript submissions

20 August 2025



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/188993

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)