

Special Issue

Sustainable Cementitious Materials for Civil and Transportation Engineering

Message from the Guest Editors

Concrete has become the most widely used construction material since its invention. Growing concerns over the greenhouse emissions profile of the Portland cement and concrete industry have led to a very high level of recent interest in the development of low-carbon construction materials. The construction industry has been under pressure to shift towards sustainability by developing alternative low-carbon cement and concrete materials. Therefore, the special issue aims to focus on state-of-the-art progress, developments, and new trends on the physical and chemical mechanisms, fresh and hardened properties, long term performance and durability of sustainable cementitious materials with low carbon emissions for civil and transportation engineering. Both original research and review articles are welcome. In particular, the topics of interest include but are not limited to:

- Low carbon cementitious binders
- Carbonation enhanced concrete
- Low-carbon cement and concrete technology based on non-Portland cement systems, such as alkali-activated materials or geopolymeric materials
- Recycled aggregate concrete
- Green admixtures for cement and concrete
- Durability of low-carbon concrete

Guest Editors

Dr. Junjie Wang
Prof. Dr. Jianhe Xie
Dr. Yongliang Liu

Deadline for manuscript submissions

closed (20 November 2024)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 7.0
Indexed in PubMed



mdpi.com/si/105233

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 3.7
CiteScore 7.0
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



About the Journal

Message from the Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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)