

Special Issue

Towards Sustainable Low-Carbon Concrete

Message from the Guest Editors

This Special Issue, “Towards Sustainable Low-Carbon Concrete”, seeks to explore and highlight innovative research and advancements in the development of low-carbon concrete. As the construction industry faces increasing pressure to reduce its carbon footprint, the quest for sustainable building materials has become more critical than ever. Concrete, being the most widely used construction material, plays a pivotal role in this endeavor. This issue aims to showcase cutting-edge research, novel formulations, and case studies that demonstrate significant reductions in carbon emissions associated with concrete production, use, and end-of-life stages. Topics of interest include, but are not limited to, alternative cementitious materials, carbon capture and utilization in concrete, enhancements in concrete recycling processes, and lifecycle assessments of concrete structures. Through this compilation, we aim to provide a comprehensive overview of current trends, challenges, and future directions in the pursuit of sustainable, low-carbon concrete.

Guest Editors

Dr. Jiaxiang Lin

School of Civil and Transportation Engineering, Guangdong University of Technology, Guangzhou 510006, China

Prof. Dr. Prabir K. Sarker

School of Civil and Mechanical Engineering, Curtin University, Perth, WA 6102, Australia

Deadline for manuscript submissions

closed (20 June 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/202813

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)