



materials



an Open Access Journal by MDPI

Green and Sustainable Concrete Materials

Guest Editor:

Dr. Yifeng Ling

School of Qilu Transportation,
Shandong University, Jinan
250002, China

Deadline for manuscript
submissions:

closed (20 October 2023)

Message from the Guest Editor

Dear Colleagues,

Concrete is the most widely used construction material in the world, and is typically produced using Portland cement (PC) as a binder. The PC manufacturing process produces high carbon dioxide emissions due to the calcination of limestone and the combustion of fossil fuels, making its use in concrete construction a critical environmental issue. On the other hand, with the rising demand for a more cost-effective concrete binder, an alternative source to PC is needed. To date, new green and sustainable concrete systems, such as geopolymer concrete, magnesium phosphate concrete, and concrete containing supplementary cementitious materials, have been extensively explored in concrete research.

This Special Issue aims to highlight current advances in concrete research on environmentally friendly or cost-effective concretes, as well as waste recycling. Papers should focus on, but are not limited to: the properties, evaluation, novel manufacturing/experimental techniques, analytical methods, microstructure, modeling, design, production, and practical applications of new binders/aggregates in concrete.

Dr. Yifeng Ling
Guest Editor



mdpi.com/si/163797

Special Issue



an Open Access Journal by MDPI

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

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.

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 & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)