

Special Issue

New Advances in Cement and Concrete Research

Message from the Guest Editor

Dear Colleagues: While a variety of chemical and mechanical phenomena in cement-based materials has been revealed, there are still challenges around sustainability and resilience. The aim of this Special Issues is to gather recent scientific progress on cement and concrete, particularly dedicated to cutting-edge techniques used for cement and concrete research that unveil new phenomena in those materials and possibly accommodate sustainability and extension of the service life of concrete structures. Specifically, this Special Issues encompasses experimental studies at the crossroads between chemistry, materials science and engineering, biology, and applied physics. Potential topics include but are not limited to the following: durability, material characterization, alkali-activated materials, UHPC, internal curing, cement-carbon nanocomposites, CO₂ sequestration, and sustainability. Furthermore, to compile comprehensive documentation, other potential studies on engineered cement and concrete, numerical study, and sensing techniques for damage quantification are welcomed for publication in this Special Issue.

Guest Editor

Prof. Dr. Gun Kim

Department of Urban and Environmental Engineering, Ulsan National Institute of Science and Technology, Ulsan 44919, Republic of Korea

Deadline for manuscript submissions

closed (10 March 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/95212

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 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)