Special Issue

Sustainability and Performance of Reinforced Concrete and Cement Composite

Message from the Guest Editor

This Special Issue delves into the forefront of innovation in reinforced concrete and cement-based composites, highlighting sustainable technologies, novel materials, and advanced performance evaluation strategies that can reshape future construction practices. Topics include but are not limited to the following:

- Eco-Friendly Materials: Development of low-carbon and alternative binders such as geopolymer cement, alkali-activated materials, and blends incorporating industrial by-products like fly ash, slag, and silica fume.
- Recycled and Circular Resources: Use of recycled aggregates, reclaimed fibers.
- High-Performance Reinforcement: Advancements in fiber-reinforced concrete (FRC), textile reinforcement, and hybrid composite systems that improve mechanical integrity, ductility, and durability under extreme conditions.
- Durability and Life-Cycle Assessment: In-depth evaluations of long-term performance, corrosion resistance, fatigue behavior, and sustainability metrics across the service life of structures.

Guest Editor

Dr. Alessio Cascardi

Dipartimento di Ingegneria Civile, University of Calabria, Via Pietro Bucci Cube37B, 87036 Arcavacata, CS, Italy

Deadline for manuscript submissions

20 February 2026



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/248286

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)