

## Special Issue

# Performance and Durability of Reinforced Concrete Structures

### Message from the Guest Editors

As is well known, reinforced concrete (RC) structures are widely used in civil engineering. With the increase in service time, the bearing performance of RC structures will be affected by many factors, such as corrosion, fatigue damage, etc. In addition, disasters such as earthquakes and fires can significantly weaken the service performance of RC structures. In order to accurately evaluate the service performance of RC structures, it is necessary to conduct comprehensive research on their durability. At present, many research studies have been carried out to reveal the durability of RC structures under various adverse factors such as high temperature, corrosion, carbonization, fatigue damage, etc. However, as human exploration space gradually expands from land to sea, the harsher service environment has an adverse impact on the durability of RC structures. This Special Issue aims to publish research papers and reviews on the evolution of the service performance and durability of RC structures under the influence of multiple factors.

### Guest Editors

Dr. Xuanyi Xue

Dr. Zhilu Wang

Dr. Neng Wang

Dr. Fei Wang

### Deadline for manuscript submissions

20 September 2025



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/207936](https://mdpi.com/si/207936)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto: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)