



## Advanced Fiber-Reinforced Concrete Composites

Guest Editor:

**Prof. Dr. Bang Yeon Lee**

School of Architecture, Chonnam  
National University, 77  
Yongbong-ro, Buk-gu, Gwangju  
61186, Korea

Deadline for manuscript  
submissions:

**closed (15 July 2021)**

### Message from the Guest Editor

Dear Colleagues,

Fiber-reinforced concrete is recognized as a high-performance construction material because of its high toughness levels under compressive and tensile loads. Therefore, it is widely used in high-rise buildings, tunnels, bridges, and pre-cast structures. Societal demands have increased the need for advanced fiber-reinforced concrete composites with ultra-high performance or multifunctionality, such as self-healing, self-sensing, self-cleaning, and self-regulating.

This Special Issue focuses on the emerging concepts that allow the design of new or improved fiber-reinforced concrete composites, as well as on the characterization of the properties of advanced fiber-reinforced concrete composites.

Potential topics include, but are not limited to:

- Advanced and multifunctional fiber-reinforced concrete composites
- Ultra-high-performance fiber-reinforced concretes
- Advanced fiber-reinforced cement-free composites
- Nano-fiber-reinforced concrete composites
- Characterization of properties
- Strain-hardening behavior
- Multiple microcracks
- Fiber-bridging behavior
- Structural application of advanced fiber-reinforced concrete composites





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](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)