

# Special Issue

## Development and Structural Applications of Green High-Performance Fiber-Reinforced Concrete

### Message from the Guest Editors

Green high-performance fiber-reinforced concrete (G-HPFRC) has great potential for application in infrastructure construction and repair, attributed to its high ductility and excellent durability. G-HPFRC has become the preferred material for large-span bridges, high-rise buildings and key tunnel linings. Accordingly, this Special Issue invites research papers focused on the development and structural applications of G-HPFRC. This Special Issue, titled *Development and Structural Applications of Green High-Performance Fiber-Reinforced Concrete*, will provide new knowledge for G-HPFRC. Original research, theoretical and experimental studies, case studies, and comprehensive review papers are invited for possible publication. Relevant topics to this Special Issue include, but are not limited to, the following subjects:

- Engineered cementitious composite (ECC);
- Ultra-high performance concrete (UHPC);
- Concrete durability and mechanical properties;
- Performance of concrete structures;
- Concrete 3D printing technology.

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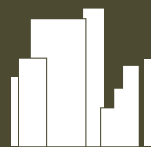
### Guest Editors

Dr. Qiao Liao  
Dr. Pengfei Men  
Dr. Wenxiang Cao

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### Deadline for manuscript submissions

30 June 2026



## Buildings

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## About the Journal

### Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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### Editor-in-Chief

Prof. Dr. David Arditi

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#### Journal Rank:

JCR - Q2 (Construction and Building Technology) /  
CiteScore - Q1 (Architecture)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).