

## Special Issue

# Transformation in the Building Design and Construction Industry: Smart Technologies, Sustainable Practices, and Artificial Intelligence Applications

### Message from the Guest Editors

The construction industry is undergoing a profound transformation with the advent of smart technologies, sustainable practices, and the integration of artificial intelligence. This Special Issue aims to bring together multidisciplinary scholars, researchers, and practitioners to present original research, review articles, and case studies addressing the intersection of smart, sustainability, and AI approaches in construction materials, infrastructures, and buildings. Topics of interest include, but are not limited to, the following:

- Artificial intelligence (AI) in assessment, design, management, and construction technologies;
- Smart/sustainable construction materials and technologies;
- Robotics and automation in construction processes;
- Life cycle assessment (LCA) and environmental impact analysis;
- Durability in material and construction;
- Energy management and efficiency solutions in construction and infrastructure;
- Building information modeling (BIM);
- Natural disaster risk assessment, management, and reduction strategies.

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### Guest Editors

Dr. Shaghayegh Karimzadeh

Dr. António Aguiar Costa

Dr. Omid Hassanshahi

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### Deadline for manuscript submissions

31 December 2025



## 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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### Author Benefits

#### High Visibility:

indexed within SCIE (Web of Science), Scopus, Ei Compendex, Inspec, and other databases.

#### 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 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).