Special Issue

Innovative Solutions for Enhancing Seismic Resilience of Buildings

Message from the Guest Editors

Despite the history of destructive earthquakes, many countries still rely on outdated and traditional construction techniques for their buildings, leaving them susceptible to significant structural damage, collapses, and disruption of services in an earthquake event. This vulnerability can lead to loss of life, significant economic losses, and interrupting emergency response efforts. To mitigate these adverse impacts, transitioning from traditional construction methods to more advanced technologies and alternatives is essential. One such strategy is developing innovative solutions that enhance the seismic resilience of buildings against extreme events, like severe earthquakes. This will help to minimize the detrimental effects of earthquakes, control damage, avoid structural collapse, and preserve human life. This Special Issue focuses on innovative seismic solutions with a low-damage concept. We welcome papers on topics including, but not limited to, the following:

- Low-damage systems;
- Passive, active, and semi-active control methods;
- Self-centering systems;
- Rocking systems;
- Innovative dampers.

Guest Editors

Dr. Himan Hojat Jalali

Department of Civil Engineering, The University of Texas at Arlington, Arlington, TX 76019, USA

Dr. Arman Mamazizi

Civil Engineering Department, Toronto Metropolitan University, 350 Victoria St.—YNG-900, Toronto, ON M5B 2K3, Canada

Deadline for manuscript submissions

31 July 2026



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/204981

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

mdpi.com/journal/buildings





an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4





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.

Editor-in-Chief

Prof. Dr. David Arditi

Construction Engineering and Management Program, Department of Civil, Architectural, and Environmental Engineering, Illinois Institute of Technology, 3201 South Dearborn Street, Chicago, IL 60616, USA

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).