Special Issue

Fire Risk in the Built Environment: Design, Simulation and Innovative Safety Measures

Message from the Guest Editors

It is our pleasure to announce this Special Issue of *Buildings*, which will focus on fire risk in the built environment: design, simulation, and innovative safety measures. To assure fire safety in our built environment, we attempt to reduce the likelihood of unwanted fire ignition, minimize the rate of fire development, control the spread of fire and smoke, evacuate the occupants, and rescue the people at risk. To achieve this, we may need to investigate: (i) the science of fire development and spread, and the chemistry of combustion; (ii) the people's behavioral reaction in case of fire and the relating management issues. This Special Issue will provide insight into some of the latest developments in fire risk by presenting state-of-the-art research, developments, and innovations. Original contributions from academia on experimental, numerical, and analytical research as well as from practice on fire risk design concerning fire dynamics, numerical simulations, building evacuation, rescue, smart fire protection measures, new fire protection materials, fire risk management as well as fire protection solutions, experiences and perspectives are encouraged.

Guest Editors

Prof. Dr. Siu Ming Lo

Department of Architecture and Civil Engineering, City University of Hong Kong, Kowloon, Hong Kong

Prof. Dr. Jian Ma

Department of Safety Engineering, Southwest Jiaotong University, Chengdu, China

Deadline for manuscript submissions

closed (31 August 2022)

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/si/109729

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

mdpi.com/journal/buildings

Buildings

an Open Access Journal by MDPI

Impact Factor 3.1
CiteScore 4.4

mdpi.com/journal/buildings

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).