Special Issue

Advances in Road Pavements

Message from the Guest Editors

Despite being a fundamental part of transportation infrastructures, road pavements face ongoing challenges related to durability, sustainability, and performance under varying environmental conditions. This Special Issue seeks to address these challenges by showcasing innovative research and technological advancements in road pavements science and engineering. We invite original contributions describing new research, case studies, projects, reviews and state-of-the-art discussions on the following and related topics:

- Advancements in pavement design;
- Novel construction methods and materials;
- Pavement-related safety issues;
- Innovative surface treatments;
- Pavement behavior modelling and simulation;
- New mobility challenges in urban pavement design;
- Pavement surface characteristics and ride quality;
- Sustainable approaches in pavement design;
- Pavement monitoring methods;
- New maintenance and rehabilitation techniques and technologies.

Guest Editors

Dr. Emanuele Toraldo

Department of Civil and Environmental Engineering, Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milan, Italy

Dr. Misagh Ketabdari

Department of Civil and Environmental Engineering, Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milan, Italy

Deadline for manuscript submissions

28 August 2025



an Open Access Journal by MDPI

Impact Factor 3.1 CiteScore 4.4



mdpi.com/si/201926

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).