buildings

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

CITESCORE 4.4

Study on Mechanical Properties of Civil Engineering Materials

Guest Editors:

Prof. Dr. Xiaowei Gu
College of Resources and Civil Engineering, Northeastern University, Shenyang 110819, China

Prof. Dr. Jianping Liu
School of Architecture and Civil Engineering, Shenyang University of Technology, Shenyang 110870, China

Deadline for manuscript submissions:
closed (20 February 2024)

Message from the Guest Editors

Civil engineering materials play a pivotal role in ensuring the functionality and longevity of structures. These materials are subjected to a wide array of influential forces that can significantly impact their mechanical properties, leading to deterioration in stiffness, strength, and even the potential for extensive damage to critical structural components.

In this context, this Special Issue welcomes authors to contribute their scholarly work, featuring original research papers that delve into novel advancements, ongoing project case studies, and comprehensive reviews pertaining to the mechanical behavior of civil engineering materials under diverse scenarios. Whether the focus is on environmental actions, dynamic loads, or extreme conditions such as fire, explosion, or earthquake, these papers may introduce innovative design methodologies aimed at minimizing structural vulnerabilities, propose inventive rehabilitation strategies, introduce cutting-edge assessment and upgrading techniques, and elucidate controlled demolition protocols tailored for severely compromised structures.

buildings

IMPACT FACTOR 3.1

CITESCORE 4.4

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
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)

Contact Us

Buildings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/buildings
buildings@mdpi.com
𝕏@Buildings_MDPI