Special Issue

Advances in Engineering Structural Systems

Message from the Guest Editors

Modern engineering structural systems tend to exceed all normal standards of size, complexity and technology. These large-scale complex or unique structures are inherently vulnerable to extreme climatic hazards which are exacerbated by climate change. New performance-based design methodologies against multi-hazards, innovative inspection and monitoring technologies enhanced by AI have been emerged and applied through the development of these projects across their life-cycle processes, e.g., design, construction and operation, to ensure their high reliability and resilience under extreme environmental conditions. This special collection aims to highlight the development of performance-based analysis and design methodologies and to understand the mechanics and dynamics of existing and new engineering structural systems under extreme natural hazards. This call is an invitation to broader structural engineering communities to contribute related to this topic. Keywords:

- performance-based design
- multi-hazard resistant design
- structural mechanics and dynamics
- extreme environment
- structural reliability and resilience
- AI aided inspection and construction

Guest Editors

Prof. Dr. Mingfeng Huang

Institute of Structural Engineering, Zhejiang University, Hangzhou 310058, China

Dr. Haiwei Xu

College of Civil Engineering and Architecture, Zhejiang University, Hangzhou 310058, China

Deadline for manuscript submissions

closed (31 January 2023)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/si/110746

Applied Sciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.3

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

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

High Visibility:

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

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)