

Special Issue

Seismic Resistant Design and Analysis for Building Structures and Infrastructure Systems

Message from the Guest Editor

This Special Issue aims to present current research on the evaluation of the seismic behavior/performance of structures such as buildings and infrastructures via numerical and experimental approaches. In addition, applications of seismic risk assessment methodologies for designing structures are also included. The scope of this Special Issue covers advanced computational technologies and numerical models to perform detailed nonlinear static and/or dynamic analyses of realistic structural systems including soil–structure interaction (SSI). Contributions that involve a significant earthquake engineering component are especially welcome. Example topics of interest include the following:

- Seismic behavior/performance of buildings/infrastructures through numerical analysis and/or dynamic load tests;
- Evaluation of dynamic soil–structure interaction behavior;
- Seismic risk assessment technology for single/multiple seismic hazards;
- Probabilistic and deterministic methods in earthquake engineering assessments and design;
- Advanced seismic design technology.

Guest Editor

Prof. Dr. Mintaek Yoo

Railroad Structure Research Team, Korea Railroad Research Institute,
176 Cheoldobangmulgwan-ro, Uiwang-si, Gyeonggi-do 16105, Republic of Korea

Deadline for manuscript submissions

20 December 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/217728

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

mdpi.com/journal/

[appls](https://appls.mdpi.com)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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 - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)