Special Issue

Advances in Earthquake Engineering and Seismic Resilience

Message from the Guest Editor

This Special Issue highlights recent progress in earthquake engineering and seismic resilience. We invite contributions on innovative engineering techniques, performance-based seismic design, and advanced structural solutions for earthquake-resistant infrastructure. Topics of interest include the following:

- Advanced composite materials for retrofitting;
- Seismic load analysis of construction materials;
- Damage detection and condition assessment;
- Damage limitation design and sustainability;
- Innovative seismic-resilient structural design;
- Systems for damage minimization and recovery post-earthquake;
- Integrated seismic retrofitting and strengthening techniques;
- Novel resilient structural systems;
- Performance-based seismic design;
- Seismic hazard and risk mitigation;
- Multi-level seismic performance of critical infrastructure;
- Seismic resilience assessment;
- Seismic safety and retrofit of existing structures;
- Seismic vulnerability assessment;
- Structural health monitoring.
- Innovative vibration control devices (e.g., tuned mass dampers, negative stiffness devices, inerters, KDampers)

Guest Editor

Dr. Konstantinos A. Kapasakalis

Institute of Structural Analysis and Antiseismic Research, School of Civil Engineering, National Technical University of Athens, Zografou Campus, GR-157 80 Athens, Greece

Deadline for manuscript submissions

20 September 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/233862

Applied Sciences
Editorial Office
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 5.5

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