



Studies on Behavior of Structural and Nonstructural Components Subjected to Earthquake Hazard from a Sustainability Perspective

Guest Editors:

Prof. Dr. Bu-Seog Ju

Department of Civil Engineering,
KyungHee University, Yongin-si
17104, Republic of Korea

Dr. Shinyoung Kwag

Department of Civil and
Environmental Engineering,
Hanbat National University,
Daejeon 34158, Republic of Korea

Dr. Bub-Gyu Jeon

Seismic Research and Test
Center, Pusan National
University, Yangsan, Republic of
Korea

Deadline for manuscript
submissions:

closed (28 February 2023)

Message from the Guest Editors

Dear Colleagues,

Since the 9.0-magnitude Fukushima earthquake in Japan, many engineers have recognized the need to have structural and nonstructural components remain operational or functional under beyond-design-basis events in order to mitigate earthquake damage. Therefore, this Special Issue in the Journal of Sustainability welcomes novel state-of-the-art numerical simulations such as the high fidelity finite element analysis and the experimental tests in accordance with innovative applications in the area of the piping system, electrical cabinets, electrical component/equipment, etc., of nuclear and nonnuclear power plants and critical facility structures. Topics or categories for this Special Issue include, but are not limited to, the following:

- Building–piping (or cabinet) interaction;
- Fragility analysis based on extreme events;
- Soil–structure interaction of nuclear or nonnuclear power plants;
- Seismic performance of electrical equipment (cabinet system) based on shaking table test;
- Mitigation of earthquake damage of structural or nonstructural components under beyond-design-basis events;

...





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

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

High Visibility: indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [GeoRef](#), [Inspec](#), [RePEc](#), [CAPus](#) / [SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/sustainability
sustainability@mdpi.com
X@Sus_MDPI