

Special Issue

Reliability and Risk Analysis of Structures and Applications to Design and Optimization, 2nd Edition

Message from the Guest Editors

This Special Issue will highlight the latest research developments in reliability-based design, engineering, and optimization, all geared toward enhancing the safety and reliability of structures.

The scope and topics of this issue include, but are not limited to structural system reliability; methods of reliability and risk assessment of a structure or structural system; reliability modeling and prediction; time-invariant and time-variant reliability and risk analysis; random vibration; machine learning, sensitivity analysis; algorithmic developments in reliability/robust based design optimization; novel applications of structural reliability methods and risk analysis in diverse areas such as structural mechanics, construction material, and design; data-driven uncertainty quantification and risk analysis.

We welcome original research papers, and review articles with new insights and perspectives on pioneering developments and their applications, including industrial case studies.

Guest Editors

Dr. Junho Chun

School of Architecture, Syracuse University, Syracuse, NY 13244, USA

Dr. Won-Hee Kang

Centre for Infrastructure Engineering, School of Engineering, Design & Built Environment, Western Sydney University, Penrith, NSW 2751, Australia

Deadline for manuscript submissions

30 November 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/199248

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

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





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)