Special Issue

Recent Research and Applications of Vibration Isolation and Control

Message from the Guest Editors

This Special Issue highlights the latest advancements in vibration isolation and control, a crucial field in mechanical, civil, and aerospace engineering that ensures the stability and dynamic performance of structures. The Special Issue seeks to gather high-quality and original papers that showcase innovative approaches using analytical, numerical, and experimental methods to mitigate unwanted vibrations in various applications, including road vehicles, trains, airplanes, bridges, and buildings. Additionally, it will feature practical case studies that demonstrate the real-world implementation of these solutions, emphasizing the vital role of vibration control in enhancing operational efficiency. Contributions are welcome on any aspect of vibration isolation or control, with a focus on, but not limited to, the following topics:

- Control theory;
- Nonlinear vibration;
- Stochastic dynamics;
- Uncertainty quantification;
- Structural optimization;
- System identification;
- Power flow analysis and energy transfer;
- Nonlinear energy sinks;
- Experimental techniques;
- Reduced-order modelling and simulation;

Guest Editors

Dr. Baiyang Shi

Prof. Dr. Quanmin Zhu

Dr. Wei Dai

Deadline for manuscript submissions

30 October 2025

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/216621

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)