Special Issue

Advanced Studies in Structural Mechanics and Vibration

Message from the Guest Editors

Structural mechanics and vibration analysis are critical to advancing modern engineering, underpinning the design and resilience of systems in aerospace, civil infrastructure, and emerging technologies. As engineering challenges grow more complex encompassing lightweight materials, adaptive structures, and extreme environments-the demand for deeper insights into nonlinear dynamics, multi-physics interactions, and innovative modeling has never been greater. Traditional approaches often fall short in capturing real-world complexities such as instability, chaos, and wave propagation, necessitating advanced methodologies to address these challenges. This Special Issue aims to showcase cutting-edge research that redefines structural dynamics and vibration mitigation, bridging theoretical breakthroughs with transformative engineering applications.

Guest Editors

Dr. Runchao Zhao

Dr. Zhitong Li

Prof. Dr. Yinghou Jiao

Dr. Xiang Zhang

Deadline for manuscript submissions

10 January 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/244860

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



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 multidimensional 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)

