

## Special Issue

# Structural Dynamics and Health Monitoring in Aerospace Engineering

### Message from the Guest Editors

This Special Issue aims to feature original research papers, as well as comprehensive state-of-the-art surveys, on recent scientific discoveries and technological advancements in dynamics, fault diagnosis, and health monitoring in aerospace engineering. Topics include, but are not limited to, the following:

Structural mechanics and computational method: structural models, environment–structure interactions, reliability optimization, finite element methods, and power flow method;

Vibration and control: linear and nonlinear dynamics, wave propagation, seismic dynamics, stochastic dynamics, and active and passive vibration control;

Rotordynamics: dynamic modeling and solving method, rotor–bearing–casing vibration problems, self-excited problems, and connected structure problems;

Fault diagnosis and health monitoring: structural damage identification, fault modeling and diagnosis, the optimization of sensor placement, processing noisy data, the quantification of model uncertainties, the identification of structural parameters, and lifespan prediction.

---

### Guest Editors

Dr. Qicheng Zhang

School of Energy and Power Engineering, Beihang University, Beijing 100191, China

Dr. Pingchao Yu

College of Civil Aviation, Nanjing University of Aeronautics and Astronautics, Nanjing 211106, China

---

### Deadline for manuscript submissions

closed (20 April 2026)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/209686](https://mdpi.com/si/209686)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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





# 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, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

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