

## Special Issue

# Advanced Vibro-Acoustic Technology: Intelligent Algorithms, Smart Materials and Dynamics

### Message from the Guest Editors

Vibro-acoustics energy and control are promising in the modern industry, as they can support self-powered sensors in the Environment Internet of Things (EIOT) and abate the unnecessary vibration and noise for improvement of equipment performance. The development of functional and smart materials brings new, favorable features in vibro-acoustics energy and control, resulting in many revolutionary progresses. This Special Issue aims to collect the latest research advances focused on, but not limited to, the following themes:

- Innovative functional and smart materials for vibration/acoustics energy harvesting and control;
- Analyses of vibration/acoustics energy harvesting and control using functional and smart materials;
- Fluid–solid interaction, flow-induced noise in energy harvesting or control using functional and smart materials;
- Innovative vibration/acoustics control algorithms for functional and smart materials;
- Experimental investigation of functional and smart materials for vibro-acoustics energy harvesting or control;
- Functional and smart materials for vibration/acoustics energy harvesting or control in aerospace, marine, civil engineering, etc.

---

### Guest Editors

Dr. Kai Yang

School of Aerospace Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Prof. Dr. Junlei Wang

School of Mechanical and Power Engineering, Zhengzhou University, Zhengzhou 450001, China

---

### Deadline for manuscript submissions

closed (10 July 2025)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/125756](https://mdpi.com/si/125756)

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

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

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





# 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 )