



## Machine Learning in Vibration and Acoustics

Guest Editors:

### Dr. Chengjin Qin

State Key Laboratory of  
Mechanical System and  
Vibration, Shanghai Jiao Tong  
University, Shanghai 200240,  
China

### Dr. Liang Yu

School of Civil Aviation,  
Northwestern Polytechnical  
University, Xi'an 710072, China

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### Message from the Guest Editors

The modern industry has increasingly high requirements for the reliability and quality of equipment and products. As we all know, vibration and sound contain rich information about the operation process of equipment and products, which are often used to monitor and analyze the state of the system. Over the past two decades, machine learning has been widely used in various fields of engineering due to its ability to learn complex problems. We are interested in articles on the latest research progress and achievements of machine learning in vibration and acoustics. Potential topics include but are not limited to the following:

- Advanced vibration and sound data mining technology;
- Advanced condition monitoring based on vibration and sound;
- Advanced machine-learning-based diagnosis and health assessment methods;
- PHM based on vibration and acoustic information;
- Acoustic distributed and multisensor intelligent processing;
- Acoustic measurements and array signal processing;
- Aeroacoustic signal processing;
- Aero-engine acoustic testing and signal processing;
- Aeroacoustic detection and security.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)