

## Special Issue

# Signal Analysis and Fault Diagnosis in Mechanical Engineering

### Message from the Guest Editors

With the development of modern industry, mechanical equipment is becoming more complex and intelligent, which often leads to higher requirements for its operational reliability. Fault diagnosis is an effective tool to ensure the operational safety of the equipment.

However, complicated operation conditions lead to complex characteristics of the condition signals of the equipment, which bring challenges for fault diagnosis techniques. In response to this, various advanced signal analysis and machine learning methods have recently been developed and applied in mechanical fault diagnosis. We sincerely invite academic researchers and specialists to contribute original research papers to this Special Issue. **Keywords:**

fault diagnosis  
health monitoring  
feature extraction  
mode decomposition  
time-frequency analysis  
machine learning  
intelligent operation and maintenance  
multivariate data analysis

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### Guest Editors

Dr. Shiqian Chen

Dr. Siliang Lu

Dr. Dong Wang

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### Deadline for manuscript submissions

closed (30 June 2023)



## Applied Sciences

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

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### 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.

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### Editor-in-Chief

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

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