



*sensors*



an Open Access Journal by MDPI

## Fault Diagnosis and Vibration Signal Processing in Rotor Systems

Guest Editors:

**Dr. Yongfeng Yang**

**Prof. Dr. Jin Zhou**

**Prof. Dr. Rafael Morales**

**Dr. Alexandre Presas**

**Dr. Saleh Mobayen**

Deadline for manuscript  
submissions:

**25 September 2024**

### Message from the Guest Editors

Dear Colleagues,

Rotor systems are kernel components of rotating machinery and are applied in most industrial fields, such as aero-engines, gas turbines, steam turbines, generators, electric motors, and mechanical manufacturing. Vibration is integral to these rotating systems, especially in high-speed rotating systems, and the almost all the faults may show special characteristic compared with regular work.

The aim of this Special Issue is to compile original research and review articles on the topics of fault diagnosis and related vibration signal processing. Topics of interest in this session include, but are not limited to

- Vibration of wind power system with faults
- Dynamic modeling of rotor systems
- Improvement of theoretical methods rotor systems
- Simulation methods for rotor systems
- Vibration and stability control of rotor systems
- Intelligent sensing and signal analysis for rotor systems
- Intelligent fault diagnosis for rotor systems
- Rotor systems with magnetic bearings



[mdpi.com/si/156602](https://mdpi.com/si/156602)

**Special** Issue



*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## Author Benefits

**Open Access** : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility**: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank**: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)