

## Special Issue

# Physics-Informed Trainable Models and Hybrid Techniques for Diagnostics and Prognostics of Monitored Systems

### Message from the Guest Editors

Progress in machine learning algorithms and automatic training methods in the last decade have empowered scientists and researchers in many disciplines to build classification and regression models by leveraging historical data. However, in some fields, the lack of data and interpretability of such models, which are often treated as black boxes, hinder their ability to shine. This Special Issue focuses on recent developments in the area of physics-informed machine learning and hybrid modelling for system diagnostics, prognostics and health management. Contributions in both theoretical and applied works are welcome, together with review articles on specific subjects within the scope of the Special Issue. Potential topics include, but are not limited to, the following:

- Fault detection
- Failure prognosis
- Prognostics and post-prognostics methods
- Structural health management
- Uncertainty quantification
- Digital twin
- Maintenance modeling
- Building and structural engineering

If you are interested, please contact guest editor or [edward.lei@mdpi.com](mailto:edward.lei@mdpi.com) for details.

---

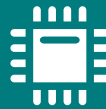
### Guest Editors

Dr. Matteo Corbetta  
Dr. Manuel Chiachio Ruano  
Dr. Juan Chiachio Ruano

---

### Deadline for manuscript submissions

closed (30 November 2023)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 9.4  
Indexed in PubMed



[mdpi.com/si/165472](https://mdpi.com/si/165472)

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

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





# Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 9.4  
Indexed in PubMed



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



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro  
Department of Electrical and Information Engineering, Politecnico di  
Bari, Via Orabona 4, 70126 Bari, 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), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)