Special Issue

Al-Based Machinery Health Monitoring

Message from the Guest Editors

This Special Issue seeks original research articles, case studies, and review papers covering the latest advancements and future trends in Al-based machinery health monitoring. Potential topics include, but are not limited to, the following:

- Machine learning, deep learning, and hybrid techniques for fault diagnosis and prognostics.
- Advanced sensing technologies, Internet of Things (IoT) integration, and edge/cloud architectures.
- Digital twin development for real-time monitoring and "what-if" simulations.
- Remaining useful life (RUL) estimation and performance optimization.
- Applications of augmented/virtual reality in maintenance tasks.
- Industry 4.0/5.0 concepts and sustainable, energyefficient maintenance solutions.

Guest Editors

Dr. Alexandru Stanciu

National Institute for Research and Development in Informatics-ICI Bucharest, 011455 Bucharest, Romania

Dr. Rui Araúio

Institute of Systems and Robotics (ISR-UC), Department of Electrical and Computer Engineering (DEEC-UC), University of Coimbra, Pólo II, PT-3030-290 Coimbra, Portugal

Deadline for manuscript submissions

20 September 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/242992

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41616837734 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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)

