Special Issue

Advances in Fault Diagnosis and Anomaly Detection

Message from the Guest Editors

Fault diagnosis has witnessed phenomenal progress from both academia and industry over the last few decades for monitoring increasingly complex systems. Such advancements are largely attributed to the emerging industrial and energy systems operating data together with the rapid integration of machine learning, deep learning, and data science techniques with fault diagnosis.

The goal of this Special Issue is to aggregate latest research outcomes in the field of advanced fault diagnosis contributing to methodology advancement, algorithm development, and practical applications. Interested authors are invited to submit high-quality papers on topics including but not limited to:

- Statistical machine learning and dimension reduction for fault diagnosis and anomaly detection;
- Fault diagnosis based on big data, deep learning, and AI techniques;
- Model-based fault detection and diagnosis;
- Prognostics, predictive maintenance and remaining useful life (RUL) prediction;
- Applications to energy systems and industrial processes

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2023)

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).