Special Issue

Machinery Condition Monitoring and Intelligent Fault Diagnosis

Message from the Guest Editors

Machinery condition monitoring and intelligent fault diagnosis have recently come to play a crucial role in automatic and intelligent industrial production processes. Based on machine learning, deep learning, and artificial intelligence, intelligent fault diagnosis has been proposed and achieved remarkable improvements, especially in the face of unknown nonlinear machine behavior and non-stationary data. This Special Issue includes, but is not limited to, the following topics:

- failure mechanisms modeling for mechanical equipment;
- monitoring signal processing for mechanical equipment;
- intelligent feature extraction for condition monitoring;
- intelligent early fault detection and diagnosis;
- few-shot sample learning for fault detection;
- transfer-learning-based methods for fault diagnosis;
- interpretable deep learning for fault diagnosis;
- hybrid models of data-driven and model-based approaches
- sensor data fusion for fault diagnosis;
- measurement methods, technologies, and systems for fault diagnosis.

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Deadline for manuscript submissions

closed (30 November 2024)

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/179348

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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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