

Special Issue

Intelligent Maintenance of Machines with Big-Data Era

Message from the Guest Editors

Due to the huge potential value of big data for machines, intelligent maintenance has been a hot topic in prognostics and health management. The referenced methodologies and technologies include advanced measurement and data collection, intelligent health monitoring and fault diagnosis, remaining useful life prediction and prognostics, maintenance optimization, etc. This Special Issue aims to collect the latest research achievements regarding intelligent maintenance of machines. The potential scopes are suggested but not limited to the following:

- Digital twin modeling of mechanical systems;
- Intelligent fault diagnosis with limited data;
- Transfer learning-based fault diagnosis of machines;
- Large-scale diagnosis foundation models;
- Data-driven remaining useful life prediction;
- Data-model-fusion prognostics of machines;
- Health assessment and maintenance asset optimization;
- Intelligent maintenance and repairment decision making

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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.

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