Special Issue

Towards Electric Motors and Drives: Condition Monitoring, Performance Prediction and Fault Diagnosis

Message from the Guest Editors

Electric motors and drives are important power systems for modern industrial equipment. Facilitated by novel design concepts and advancements in new technologies such as sensing, manufacturing, communication, management, and systems integrity, electric motors and drives have become more sophisticated than ever, making performance prediction and fault diagnosis a challenging problem to ensure reliable operations. This Special Issue welcomes the submission of new perspectives, theories and algorithms to the challenging problems of performance prediction and fault diagnosis towards electric motors and drives. Research areas may include, but are not limited to, the following topics:

- Data cleaning and data quality improvement;
- Advanced modeling techniques;
- Signal processing and feature extraction;
- Condition monitoring and health assessment;
- Data-driven intelligent fault diagnosis and performance prediction;
- Edge computation for fault diagnosis;
- Digital-twin-based diagnosis and prediction.

Guest Editors

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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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