Special Issue

Condition Monitoring and Intelligent Fault Diagnosis of Rotor System

Message from the Guest Editors

The rotor system is a fundamental component of rotating equipment such as aero-engines, wind turbines, and high-speed trains, playing a vital role in modern society. Due to the diversity of operational requirements, rotor systems frequently operate under high-speed, heavy-load, and variable conditions, inevitably leading to fatigue damage and significant economic losses or even casualties. Condition monitoring and intelligent diagnosis of rotor system components (bearings, gears, rotor shafts) are essential and meaningful. Furthermore, novel methods based on machine learning, deep learning, and transfer learning have been developed, providing effective technical solutions for evaluating rotor system conditions and identifying specific types of faults. Health monitoring and intelligent fault diagnosis constitute an interdisciplinary field thriving through dynamic intellectual exchange. The planned Special Issue of *Signal* aims to serve as a forum for researchers and industrial engineers to share the latest advancements in condition monitoring and intelligent fault diagnosis of rotor system, while addressing critical issues, challenges, and potential future trends...

Guest Editors

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Message from the Editor-in-Chief

Our primary goal is to encourage scientists and engineers to publish their theoretical results and developed methods in as much detail as possible. There is no limit to the maximum length of papers. Whenever possible, authors are encouraged to provide relevant data and developed code so that the results can be reproduced. Our goal is to provide a platform for scientists and engineers to share new approaches to signal processing in various application domains.

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