## **Special Issue**

### Deep Learning-Based Sensors and Signal Processing for Fault Diagnosis and Remaining Useful Life Prediction

#### Message from the Guest Editors

Traditional fault diagnosis and remaining useful life prediction methods, including physical-model-based methods and expert-knowledge-based methods, rely largely on the sufficient understanding of the mechanisms of the machinery. leading to variable diagnosis results due to the complexity of modern machinery and working conditions. Deep Learning(DL)-Based methods offer new opportunities by automatically extracting features and establishing relationships between monitoring data collected from the sensors and the health state of the machines. Recently, due to the emergence of the big data era and the development of artificial intelligence, DL-based methods enable highly efficient fault diagnoses and remaining useful life predictions in intelligent industrial applications. This Special Issue therefore aims to put together original research and review articles on recent advances, technologies, solutions, applications, and new challenges in the field of DL-based methods for fault detection and diagnosis.

Guest Editors

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Dr. Lei Zhang

Prof. Dr. Andreas Terfort

Deadline for manuscript submissions closed (20 October 2023)



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#### Editor-in-Chief

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