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Intelligent Monitoring and Fault Diagnosis of Complex Industrial Processes or Equipment

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Deadline for manuscript submissions:
30 July 2024

Message from the Guest Editors

Dear Colleagues,

Due to the expanding processing requirements of industrial big data, the pervasive use of artificial intelligence (AI) technology has revolutionized various industries, such as manufacturing, aerospace, and vehicles, through applications like condition monitoring, fault diagnosis, and predictive maintenance. However, some critical problems remain not fully explored, including condition monitoring of complex industrial processes with time-varying working conditions, fault diagnosis for complex equipment under composite failure modes, optimal decision-making for predictive maintenance, etc. Topics of this Special Issue include, but are not limited to, the following:

- Intelligent condition monitoring for complex industrial processes
- AI-based anomaly detection for complex industrial processes
- Intelligent fault diagnosis for complex equipment or components
- Multi-sensor data fusion with artificial intelligence algorithms
- Fault prognostics for complex industrial processes
- Degradation modeling and remaining useful life prediction
- Predictive maintenance decision-making for complex systems
- Self-data-driven diagnosis approaches

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Message from the Editor-in-Chief

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