Sensors for Fault Detection and Condition Monitoring

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Message from the Guest Editor

Industrial automation (Industry 4.0), along with recent developments in artificial intelligence, has played a significant role in the enhancement of technological advancements in modern society. Fault detection and diagnosis are essential for the elimination of production losses and safety hazards due to complex automated installations. The early detection of faults in machineries can help in reducing the wear and tear of internal components, thereby enhancing their useful lifetime and reliability. Additionally, the identification of specific fault types can assist service personnel equip for preventive maintenance. Hence, recently, fault diagnosis and detection have gained the attention of several researchers. Additionally, intelligent fault diagnosis techniques that deliver instantaneous results are the need of the hour. Fault detection and diagnostic techniques involve the consumption of high volumes of data from sensors. Several types of sensors, such as piezoelectric, temperature, pressure, force, acoustic, etc., have been adopted, along with machine learning techniques utilized to identify the health condition of machinery.

For more details, please visit here.

Special Issue
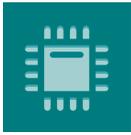
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Message from the Editor-in-Chief

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