Special Issue

Condition Assessment and Reliability Analysis Enabled by Structural Health Monitoring Sensors

Message from the Guest Editor

Condition assessment and reliability analysis, which are enabled by structural health monitoring (SHM) sensors, are now crucial in engineering structures. SHM involves deploying advanced sensors, e.g., FBG, RFID, MEMS, and piezoelectric sensors, etc., to continuously monitor the performance of structures. These sensors can detect the external load, environmental parameters, and structural responses, providing real-time data that help engineers identify potential problems before major or catastrophic damage is caused to the structure. The integration of SHM with data analytics and machine learning enables the performance of predictive maintenance, reducing operational costs and enhancing safety. However, challenges remain. Therefore, this Special Issue aims to publish original research and review articles that present recent advances, technologies, solutions, applications, and challenges in the field of condition assessment and reliability analysis, when enabled by SHM sensors. For more information, please click: mdpi.com/si/234562

Guest Editor

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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