Special Issue

Real-Time Structural Damage and Impact Identification, and Life Prediction Using Advanced Sensor Systems and Methods

Message from the Guest Editors

Structural damage can significantly affect the service life of equipment, making the monitoring of structural damage and impact loads particularly important. Recently, there has been growing interest in intelligent condition monitoring of structures. Intelligent monitoring of structural states primarily utilizes sensors to track changes in the damage conditions of various structures, enabling the identification and warning of current damage, as well as the prediction of the structure's remaining healthy life.

This Special Issue aims to compile original research and review articles on recent advances, technologies, solutions, applications, and new challenges in the field of structural damage identification and prediction. Potential topics:

Visual impairment recognition; Online prediction of structural damage; Structural wear and life prediction; Structural health monitoring based on multi-sensor systems; Load identification and warning; Load advance prediction; Structural impact identification and early warning; Crack initiation monitoring; Crack growth prediction; Structural fatigue life monitoring; Development of new sensors for crack detection.

Guest Editors

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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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