

Special Issue

Advanced Techniques in Health Monitoring of Composite Structures

Message from the Guest Editors

Composite structures are susceptible to complex damage and failure modes during the manufacturing and service processes. Some typical defects of the composite structure include matrix cracking, fiber breakage, delamination, etc., which can deteriorate the integrity of the structure and cause catastrophic failures. The continuous monitoring of composite structure health conditions aids in identifying such damages early, and taking appropriate measures to prolong their service life. Advanced artificial intelligence techniques have been extensively integrated into health monitoring systems to enhance the performance of composite structures. A basic health monitoring process for composite structures covers data acquisition via sensing technologies, data-processing and analysis, and decision-making. This Special Issue aims to present recent advanced models, methods, and technologies related to the health monitoring of composite structures for structural safety and integrity.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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