Special Issue

Experimental Techniques and Artificial Intelligence for the Structural Health Monitoring of Composite Materials

Message from the Guest Editors

Structural health monitoring of composite materials is a demanding task of great importance for the quality assessment and operational safety of manufactured goods.

- The study of new experimental principles, technologies, testing procedures, and setup integrations for the measurement-based evaluation of bulk materials or complex structures, either to monitor/evaluate their production processes or to follow and check their structural integrity under working conditions;
- The development of new algorithms driven by artificial intelligence or processing complex data to assess structural health.

This Special Issue invites original submissions addressing the structural health monitoring of composite materials through experimental techniques aimed at the autonomous detection and characterization of possible anomalies. Papers integrating different disciplines to produce consistent results of experimental evidence are particularly encouraged. Studies carried out in cooperation with enterprises or displaying the results of national and international projects of improving the sustainability of composite productions are welcome.

Guest Editors

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Deadline for manuscript submissions

closed (20 September 2022)

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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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