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Advanced Models on Structural Fatigue Monitoring

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Deadline for manuscript
submissions:
closed (28 February 2022)

Message from the Guest Editors

Fatigue is one of the main causes of materials failure. For this reason, it is crucial to develop methodologies capable of predicting fatigue failure during the design process or of detecting it during the service life. We invite researchers to participate in this Special Issue with relevant works that contribute to updating the state-of-the-art about fatigue loading modelling, fatigue material characterization, fatigue failure determination, fatigue failure criteria, cycle counting techniques, fatigue damage accumulation models, and other relevant approaches focused on understanding the fatigue failure process. We also invite researchers to contribute to this Special Issue with papers focused on improving the state-of-the-art related to measurement techniques (accelerations, displacements, strains, etc.), signal processing (filtering, Fourier transformations, windows functions, etc.), stress estimation, damage accumulation and detection, finite element model updating technics, and other topics related to the fatigue monitoring of real structures in service.



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Special Issue



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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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