Special Issue

Structural Dynamics and Health Monitoring in Aerospace Engineering

Message from the Guest Editors

This Special Issue aims to feature original research papers, as well as comprehensive state-of-the-art surveys, on recent scientific discoveries and technological advancements in dynamics, fault diagnosis, and health monitoring in aerospace engineering. Topics include, but are not limited to, the following:

Structural mechanics and computational method: structural models, environment–structure interactions, reliability optimization, finite element methods, and power flow method;

Vibration and control: linear and nonlinear dynamics, wave propagation, seismic dynamics, stochastic dynamics, and active and passive vibration control;

Rotordynamics: dynamic modeling and solving method, rotor–bearing–casing vibration problems, self-excited problems, and connected structure problems;

Fault diagnosis and health monitoring: structural damage identification, fault modeling and diagnosis, the optimization of sensor placement, processing noisy data, the quantification of model uncertainties, the identification of structural parameters, and lifespan prediction.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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