

Special Issue

Novel Approaches for Structural Health Monitoring

Message from the Guest Editor

The thirty-plus years of progress in the field of structural health monitoring (SHM) have left a paramount impact on our everyday lives. Be it for the monitoring of fixed- and rotary-wing aircrafts or for the predictive maintenance of long-span bridges or wind farms, SHM has shaped the framework of many engineering fields. However, old unsolved problematics as well as new challenges exist. Unmodeled nonlinearities, ineffective sensor placement, and the effects of confounding influences due to operational and environmental variability still harm the effectiveness of state-of-art SHM apparatuses. Unprecedented conditions such as stricter safety requirements, and ageing civil infrastructure pose new challenges for confrontation. Therefore, the aim of this Special Issue is to gather the main contributions of academics and practitioners in civil, aerospace, and mechanical engineering to provide a common ground for structural health monitoring. Studies concerning nondestructive testing, machine learning, signal processing, sensor fusion, vibration-based techniques, and related fields are all welcome, both numerical and experimental.

Guest Editor

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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.

Editor-in-Chief

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