Special Issue

Vibration Analysis of Mechanical Systems: Challenges and Prospects

Message from the Guest Editors

Vibration phenomena are the most common challenges that emerge in the analysis of mechanical systems. Despite differences in scale, they can be described by similar mathematical models. The Special Issue aims to explore problems regarding linear and nonlinear vibrations in discrete and continuous systems, which can be solved using both analytical and numerical methods. Theoretical and experimental studies, as well as comprehensive review and survey papers, are welcome. We particularly seek the submission of papers on topics including, but not limited to, the following:

- The modeling of complex dynamic objects;
- The vibration isolation of structures, machines and devices;
- Vibrations in civil engineering structures;
- Bridge and footbridge dynamics;
- Active and passive methods of vibration and noise control;
- Materials for vibration and noise damping reduction;
- Vibration measurements;
- Vibrations in biomechanical systems;
- The impact of vibration on the human body and structures;
- Wave propagation;
- Vibrations in moving continuous systems.

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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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