Special Issue

Applied Nonlinear Dynamics and Vibration Control in Engineering Applications

Message from the Guest Editors

Nonlinear dynamics and vibration control play a crucial role in diverse engineering disciplines, ensuring the reliability, functionality, and comfort of various engineering applications. Over the past decades, a variety of techniques relevant to vibration control, wave manipulation, and energy harvesting have been developed for tackling the engineering vibration problems. However, the applications in linear vibration theory may lead to bias or even infeasibility due to the nonlinearity features, such as large deformation, contact, and friction in practices. This forms one of the greatest challenges to obtain a general representation of vibration characteristics, and remains open to be investigated until now. The scope of this Special Issue encompasses a wide range of engineering applications, including structural engineering, mechanical systems, aerospace engineering, civil engineering, and ocean engineering. Contributions are sought in the areas of theoretical developments, numerical simulations, experimental studies, and practical applications related to nonlinear dynamics and vibration control.

Guest Editors

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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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