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Applied Nonlinear Dynamics and Vibration Control in Engineering Applications

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Message from the Guest Editors

Dear Colleagues,

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 developments, theoretical numerical simulations. experimental studies, and practical applications related to nonlinear dynamics and vibration control.



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Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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