

Special Issue

Passive and Active Approaches for the Control of Nonlinear Vibrations in Mechanical Systems

Message from the Guest Editors

Classical control techniques such as **Input Shaping** and other linear strategies are traditionally designed for idealized, linear dynamic systems. However, many real-world mechanical systems present significant **nonlinear behaviors**, such as **clearance**, **dry friction**, and **backlash**, which can severely affect system performance, reduce positioning accuracy, and complicate the design of effective controllers. This *Special Issue* focuses on the enhancement of Input Shaping and other linear control techniques to make them suitable for such nonlinear systems. By bridging classical linear control design with modern nonlinear-aware strategies, this Special Issue aims to gather innovative contributions that push the boundaries of applied control in real, complex mechanical systems.

Guest Editors

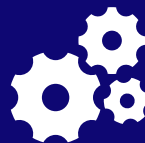
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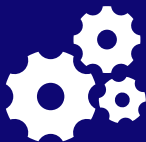


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Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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