



Nonlinear Vibrations

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Structural vibrations could play an important role in the performance of many engineering systems, with typical amplitudes ranging from meters to a few nanometers. Experimental observation indicates that the structural vibrations behave linearly at very small amplitudes, but nonlinearities occur with increasing amplitudes. Due to the large displacements and motions, structural nonlinearity becomes important when more accurate measurement and control are needed. Identifying, modelling and controlling nonlinear vibrations are becoming increasingly important in a range of engineering applications such as mechanical, structural, civil, aeronautical, ocean, electrical, and control systems. Papers (including analytical, computational, and experimental methods) are invited to make contributions to enrich the knowledge of structural nonlinear vibration.

Keywords

- nonlinear vibration
- vibration control
- geometric nonlinearity
- bifurcations
- chaos





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Message from the Editor-in-Chief

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