Special Issue

Nonlinear Dynamics and Applications to Structural Engineering

Message from the Guest Editor

This Special Issue aims to collect original research articles and comprehensive reviews that consider any analytical, computational, or experimental aspect of nonlinear dynamics, paying special attention to engineering structures. Topics include but are not limited to continuous and discrete systems; composite, smart, lattice, or tensegrity structures; control, bifurcation, and synchronization phenomena; nonlinear responses of periodically or stochastically loaded structures; parametric excitation; periodic, quasiperiodic, and chaotic motion: fractional and nonlinear damping; dynamical integrity; analytical and numerical methods for nonlinear analysis; and geometrically exact beam models. Papers focused on numerical or experimental applications in any field of engineering, ranging from macro- to nanoscale, will also be highly appreciated.

- nonlinear dynamic response
- structural dynamics
- chaotic dynamics
- engineering systems and structures
- geometrically exact beam models
- bifurcation and stability
- dynamical integrity

Guest Editor

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Deadline for manuscript submissions

closed (20 November 2022)



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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