# Special Issue

# Recent Advances on Smart Materials and Devices for Vibration Control of Structures

## Message from the Guest Editors

This Special Issue aims to share the latest knowledge and innovative applications regarding the passive, active, semi-active, and hybrid vibrational control of structures subjected to dynamic loading, due to wind and earthquakes such as buildings and bridges. Passive systems include base isolation systems (BISs), energy dissipation systems (EDSs), tuned mass dampers (TMDs) and tuned liquid dampers (TLDs). Active control systems include active-tuned mass dampers (ATMDs) and piezoelectric actuators. Semi-active systems include a magnetorheological (MR) damper, negative stiffness devices (NSDs), a magneto-rheological damper TMD (MR-TMD), variable stiffness semi-active TMD (VS-STMD), variable damper STMD (VD-STMD), and a recentering variable friction device (RVFD). Hybrid systems include active base isolation systems and semi-active MR dampers with nonlinear base isolators. Furthermore, the current frontier of research not only regards the hybridization of various control systems but also the use of techniques for identifying and localizing damage by using cutting-edge techniques including smart sensors and artificial intelligence (AI).

## Guest Editors

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## Deadline for manuscript submissions

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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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