

## Special Issue

# Active, Semi-active and Passive Vibration Control

### Message from the Guest Editors

For several decades, vibration control has been a noteworthy research topic. Our daily lives can be disturbed by unwanted vibrations from the ground, marine, and aerial vehicles in which we ride or the machines and systems that we use. Vibration control can be generally divided into three categories: passive, semi-active, and active vibration control. This Special Issue aims to highlight new advances, as well as pioneering designs and applications in all research areas associated with vibration control arising from steady state or transient excitations. Submissions are encouraged but not limited to the following topics:

- Passive, semi-active, and active vibration isolation algorithms and applications;
- Tuned mass dampers or dynamic vibration absorbers;
- Shock and impact mitigation control;
- Novel structure/mechanism designs for vibration control;
- Engine mounting systems, and seat and vehicle suspension systems;
- Negative-stiffness vibration isolators;
- Bio-inspired vibration control;
- Multifunctional materials for vibration control;
- 3D-printed design for vibration control;
- Vibration-based energy harvesting devices.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2023)



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## About the Journal

### Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

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### Editors-in-Chief

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