



Vibration and Energy Harvesting Applications

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Deadline for manuscript
submissions:

closed (20 July 2023)

Message from the Guest Editors

Dear Colleagues,

Vibration is abundant in the environment, such as mechanical vibration, human movement, wind-induced vibration, wave fluctuations, etc. Vibration energy harvesting holds great potential to achieve the zero-carbon self-powered Internet of Things for potential applications in environment monitoring and disaster early warning systems, human health monitoring and disease diagnosis, equipment in condition monitoring and fault diagnosis, smart cities, etc. This Special Issue aims to focus on advances in the field of vibration and energy harvesting, with topics including, but not limited to, the following themes:

- Nonlinear vibration theory, dynamic modeling, and analysis methods;
- Electromechanical conversion mechanisms and functional materials;
- Vibration energy harvesting and applications;
- Self-powered drive and micro–nanorobots;
- Self-powered sensing for wearables and implants;
- Nanoenergy applications in MEMS, E-skin, and AI;
- Self-powered systems for IoT applications;
- Energy storage and self-charging power systems;
- Acoustic/mechanical metamaterials for energy utilization and harvesting;
- Vibration control, utilization, and other related topics.





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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