Special Issue

Advances in MEMS Energy Harvester

Message from the Guest Editor

Micro-electromechanical system (MEMS) energy harvesters have garnered considerable attention as a promising technology for powering small-scale electronic devices using ambient energy sources. This Special Issue presents the latest advancements and innovations in this field, and will cover various aspects, including design, materials, fabrication techniques, and applications, with the aim of improving the efficiency, reliability, and scalability of MEMS energy harvesters. Keywords:

- Design optimization and modeling of MEMS energy harvesters;
- Novel materials and fabrication techniques for improved energy conversion efficiency;
- Integration of MEMS energy harvesters with advanced electronics and power management systems;
- Exploration of new energy sources for MEMS energy harvesting, such as solar, thermal, vibration, and electromagnetic;
- Miniaturization and packaging strategies for enhanced portability and versatility;
- Energy storage and management for MEMS energy harvesters;
- Case studies and real-world applications of MEMS energy harvesters in areas such as wireless sensor networks, wearable electronics, and Internet of Things (IoT) devices.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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