Special Issue

Biomechanical Energy Harvesting: Materials, Methods and Applications

Message from the Guest Editors

Biomechanical energy harvesting, which refers to harvest mechanical energy from motions of bio-organs in daily activities, has been widely explored in recent years due to its potential to provide electricity for implanted medical devices and wearable electronics. To date, various elaborately designed human-friendly energy harvesters with high flexibility and biocompatibility has been fabricated to harvest biomechanical energy from limb and organ movements. Currently, novel materials with breakthrough fabrication methods have been proposed with tremendous enthusiasm for emerging applications. This special issue aims to collect latest original research or review articles on materials, methods and applications in biomechanical energy harvesting to instantiate recent trends and challenges on this topic. Interests of the special issue cover across a broad range of biomechanical energy sources including walking, arm swinging, cardiac motion, respiration and blood circulation etc.

Guest Editors

Prof. Dr. Chaofeng LÜ

Prof. Dr. Wen-Ming Zhang

Prof. Dr. He Zhang

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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