Special Issue

Advanced Materials for Flexible Sensors and Actuators

Message from the Guest Editors

Smart materials and structures usually exhibit multi-field electro-/magneto-/photo-/elastic coupling behavior. For example, flexoelectricity describes the contribution of the linear couplings between electric polarization and the strain gradient and between the polarization gradient and strain to the thermodynamics of a solid. This Special Issue focuses on the multi-field coupling of smart structures encompassing theoretical research and applications. The aim of this Special Issue of Materials is to cover recent research in advanced materials for flexible sensors and actuators. The scope includes, but is not limited to, general multi-field coupling theory of novel smart materials; electric modeling of multi-field coupling structures; sensing, energy generation and active control of structures with multi-field coupling effects; and fabrication, testing and analysis of multi-field coupling systems with sensors and actuators.

Guest Editors

Dr. Hua Li

School of Aeronautics and Astronautics, Zhejiang University, Hangzhou 310027, China

Dr. Mu Fan

School of Aeronautics, Nanjing University of Aeronautics and Astronautics, Nanjing, China

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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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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

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

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