Special Issue

Featured Papers and Reviews of Advanced Materials for Sensing, Energy Conversion and Storage

Message from the Guest Editor

Currently sustainable energy harvesting, energy storage. and smart sensors are among the hottest topics of research in electrical power engineering and environmental monitoring. This Special Issue aims to present comprehensive reviews of the most popular advanced functional materials for energy harvesters such as energy harvesters that collect solar energy, mechanical energy, and thermal energy, and electrochemical energy storage devices, including various secondary batteries and supercapacitors. With attention to the above, insightful reviews on advanced materials for smart sensors are also highly appreciated in terms of current progress, challenges, limitations, contribution, and the objective of each direction. The integration between energy harvesters, storage devices and the as-based self-powered sensing systems represent the most popular types of sensors in the era of the Internet of Things. In the present Special Issue, we welcome contributions from any groups in the field with the aim of giving a balanced view of the current state of the art in this promising discipline.

Guest Editor

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Deadline for manuscript submissions

closed (20 May 2025)



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Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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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.

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