Special Issue

Advanced Materials for Sustainable Energy Storage and Conversion Systems

Message from the Guest Editors

In order to meet the future needs for energy storage, sustainable and novel material systems with high energy densities, readily available raw materials, and safety are required. Additionally, investigations of new types of battery materials that are sustainable, environmentally friendly, high-energy-density, and lightweight are essential to advance such technologies. In line with this, the cell performance, enhanced safety, and monitoring management of this technology are also essential in terms of practical applications. In this Special Issue, we encourage authors and invite all forms of contributions (full papers, communications, and perspectives) to sustainable energy storage and conversion systems, metal-ion, metal-air battery, and redox flow battery technologies, and supercapacitors. Topics can range from advanced materials innovation, fabrication, interfacial phenomena and reaction kinetics and mechanisms to new designs and characterizations, safety issues, and the recycling of materials. Both basic and applied research on energy storage technologies in experimental or computational/theoretical methods is welcome.

Guest Editors

Dr. Kumaran Vediappan

Dr. Baskaran Rangasamy

Dr. Chenrayan Senthil

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

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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