Special Issue

Solar Energy Storage: Materials, Devices, Designs and Systems Level

Message from the Guest Editor

For this Special Issue, we encourage the submission of relevant papers (communications, full research articles, review articles) on designs that implement solar energy storage focusing on device (materials, processes, device architectures and structures) and system level (microgrids), aiming at better performance and a lower cost. We encourage the submission of papers exploring material, device, and system levels. Potential topics include but are not limited to:

- Solar/battery combination or architecture;
- Solar/supercapacitor combination or architecture;
- High-efficiency solar cells (silicon, thin films, perovskites, organic);
- High-energy and -power-density energy storage (batteries: lithium-ion, solid-state, beyond Li-ion; supercapacitors: EDLC, pseudo, hybrid; Li-ion capacitors);
- Solar storage and battery charging algorithms for performance optimization;
- System-level design, operation, and control of solar-storage for microgrid optimization.

Guest Editor

Dr. Ashim Gurung

Department of Electrical Engineering and Computer Science, 1250 8th st, South Dakota State University, Brookings, SD 57007, USA

Deadline for manuscript submissions

closed (31 August 2022)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/73672

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)