

## Special Issue

# Energy Storage, Energy Conversion, and Multifunctional Materials

### Message from the Guest Editor

In previous years, energy storage has been proven to be a key element in the operation of modern power systems and mobile user electronics. This Special Issue aims to present the state-of-the-art of energy storage systems and technologies that are mainly related to power systems and EVs, by considering the role of energy storage in its whole scale, including research and new trends, material use, manufacturing process, operational characteristics, recycling and life cycle assessment (LCA).

- Energy storage and conversion
- Batteries
- Short-term and long-term energy storage
- Stretchable energy storage
- Electric vehicles (EVs)
- Supercapacitors/ultracapacitors
- Flywheels
- Superconducting magnetic energy storage (SMES)
- Thermal energy storage
- Hydrogen storage and fuel cells
- Autonomous power systems
- Renewable energy sources
- Effect on power system reliability and resilience
- Smart grids
- Multifunctional materials
- Low-cost materials
- Life cycle assessment (LCA) of energy storage

### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2022)



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## 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.

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### Editor-in-Chief

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