Special Issue

Element 1 for Sustainable Decarbonization and Net-Zero Economy: Progress in Generation, Storage, Distribution and End-Use Technologies

Message from the Guest Editor

This Special Issue aims to focus on recent technology advancements in the key areas of production, storage, distribution and utilization. Economically producing, safely distributing and efficiently utilizing hydrogen are critical to realizing its potential in achieving global carbon reduction targets. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following:

- Electrolyzer technologies such as PEM, alkaline and solid oxide, including the reversible SOCs;
- Sorption-based hydrogen storage materials; traditional high pressure and cryogenic storage solutions; hydrogen embrittlement;
- Hydrogen-enabling harsh environment materials;
- Hydrogen leakage detection and suppression;
- Hydrogen combustion engines and fuel cells for passenger, long-haul and heavy-duty transportation; hydrogen-based heating and cooking equipment in the building industry;
- Hydrogen-fueled cogeneration and trigeneration technologies;
- Integrated microgrid technologies involving hydrogen;
- Techno economics of hydrogen technologies.

I look forward to receiving your contributions.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2024)

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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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