Special Issue

Advanced Technologies for Hydrogen Production, Purification and Storage

Message from the Guest Editor

Hydrogen technologies are considered crucial to achieve sustainability for human society. A part of a fundamental role as an energy vector, hydrogen is a basic feedstock for the chemical industry. In order to advance towards decarbonization, a huge technical, economic, and scientific effort has to be done to develop and bring into our productive system hydrogen-related technologies. In this Special Issue, the complete value chain for a massive hydrogen integration on our society will be covered. Contributions are expected to be, but not exclusively, in the following areas:

- Hydrogen generation: advances in electrolysis, thermal-chemical processes, decarbonization for reforming and gasification, and pyrolysis.
- Hydrogen purification: advances in separation technologies: membranes, absorption, and adsorption concepts.
- Hydrogen storage: caverns, liquid, compressed, and their combinations, hydrates, etc.
- Hydrogen vectors: ammonia, synthetic natural gas, etc.
- Hydrogen economy: scenarios, hydrogen valleys, business models, etc.

Guest Editor

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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.

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