Special Issue

New Materials, Catalyst and Advances in Hydrogen Energy Production

Message from the Guest Editors

This Special Issue focuses on advancing the sustainable production, integration, and application of hydrogen across the energy system. We welcome contributions that address materials development, catalytic and electrochemical pathways, system integration with renewable energy sources, techno-economic and life cycle analyses, and emerging applications in industry, transportation, and energy storage. **We welcome contributions on topics including (but not limited to) the following:**

- Innovative and low-cost catalysts;
- Nanomaterials and photocatalysts;
- High-efficiency electrolysers and low-temperature reforming;
- Biomass gasification and seawater electrolysis;
- Solar-driven hydrogen production and geologic hydrogen;
- Ammonia synthesis and fuel cell technologies;
- AI-assisted process optimization and hydrogen sensing;
- Policy, regulation, and urban hydrogen infrastructure;
- Hydrogen storage, handling, and safety;

Perspectives on the current and future hydrogen economy.

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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

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