# Special Issue

# Recent Advances in Green Hydrogen Production and Hydrogen-Based Energy Storage Technology

## Message from the Guest Editors

Renewable energy (RE) has garnered significant attention and promotion as a green and sustainable energy source. However, the reliability and availability of RE still encounter several challenges. Hydrogen, as an energy storage and conversion solution, being both an energy source and a material, presents a promising approach to addressing these issues concerning RE. This Special Issue aims to collect cutting-edge research and developments in hydrogen energy from researchers on reports of their latest endeavors in advancing this field. Topics include, but are not limited to, the following:

- Design and optimization of electrolysis stacks;
- Control strategies of electrolysis hydrogen production systems;
- Improvement of electrolysis systems' dynamic performance;
- High-efficiency gas–liquid two-phase mass transfer in electrolyzer stacks;
- Technical and economic analyses of hydrogen-based energy storage systems;
- Green hydrogen replacement in chemical (such as ammonia and coal) and metallurgy industries;
- Other relative aspects.

## Guest Editors

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## Deadline for manuscript submissions

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## Editor-in-Chief

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