



Production and Utilization of Hydrogen and Future Aspects

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Message from the Guest Editors

Dear Colleagues,

This research topic is primarily to gain insights into the latest developments of sustainable hydrogen production and applications in both academia and industry, and to understand the challenges that are associated with its large-scale deployment as technologies. This research topic covers but is not limited to the following concepts:

- Hydrogen production from water splitting, using technologies such as photoelectrolysis, proton exchange membranes, intermediate and high temperature electrolysis cells, solar thermochemical hydrogen production;
- Hydrogen production from the biomass;
- Hydrogen carriers such as ammonia, methane, methanol and liquid organic hydrogen carriers (LOHC);
- Catalyst developments, component designs, and system innovations for sustainable hydrogen production;
- Technoeconomic and life-cycle analysis of the societal impacts of sustainable hydrogen production;
- Analysis and evaluation of hydrogen-based economics.





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Message from the Editor-in-Chief

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