



Recent Advances in Hydrogen Production and Storage

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Message from the Guest Editors

Today, probably everyone has heard about hydrogen, which is anticipated to become one of the most important energy carriers in the near future. Hydrogen can be used in a fuel (hydrogen) cell—a device that converts chemical energy from fuel (hydrogen) into electricity by chemically reacting with oxygen or another oxidizing agent.

The topics of interest for the publication include all aspects related to:

1. Hydrogen production methods:

- Conventional production methods (natural gas reforming, coal gasification);
- Renewable hydrogen production methods (solar energy, wind energy, geothermal energy, hydro energy, biomass gasification, etc.);
- Other nonconventional production methods (nuclear-based hydrogen production, ammonia cracking, aluminum-based hydrogen production, biological hydrogen production, etc.);
- Thermochemical cycles.

2. Hydrogen storage:

- Compressed gas as well as Cold/cryo-compressed gas
- Liquid H₂, slush hydrogen
- Metal hydrides (MH) as well as Complex hydride
- Adsorbent
- Liquid organics as well as Chemical hydrogen
- Construction of tanks and systems for hydrogen storage





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Message from the Editor-in-Chief

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