Special Issue

Recent Advances in Green Hydrogen Production Processes

Message from the Guest Editor

The Intergovernmental Panel on Climate Change Special Report (IPCC, 2018) was addressed to governments in relation to reducing the greenhouse gas (GHG) emissions and limiting global warming to 1.5 °C above pre-industrial levels. The report stressed the need for a global shift from conventional to renewable energy due to increasing energy demand, fossil fuel scarcity, high costs, and environmental concerns. Such a transition can lay the groundwork for decarbonization targets and achieve net-zero CO2 emissions by 2050. This report addressed the production and utilization of hydrogen gas, because this is the only fuel without GHG emissions. In particular, if it is produced from renewable energy sources, including hydroelectric, wind, solar, biomass, and biogas, it is the cleanest fuel and is called green hydrogen (GH2).

In this Special Issue, original research articles and reviews are welcome. Articles on GH2 production are welcome, as well as any report containing information on GH2 production such as photofermentation, biomass fermentation, and water electrolysis, which are powered by hydroelectric, photovoltaic, wind, or geothermal energies.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2025)



Processes

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Impact Factor 2.8 CiteScore 5.5



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