

Special Issue

Advances in Electrocatalysts for Hydrogen Evolution and Fuel Cells

Message from the Guest Editors

Moving towards a sustainable zero-carbon society, water electrolyzers and fuel cells represent promising hydrogen energy storage and conversion devices. Unfortunately, the cost, activities, and stabilities of electrocatalysts for key half-reactions, i.e., the hydrogen evolution reaction (HER), the hydrogen oxidation reaction (HOR), and the oxygen reduction reaction (ORR), have seriously limited the scalability and efficiency of hydrogen energy-related technologies to date. This Special Issue aims to combine experimental, theoretical, and review articles to present the most recent advances in the topics of material synthesis, morphological characterization, modeling, reaction mechanism, catalytic performance, mass transport, electrolyzer/cell structure design, and all other aspects of hydrogen electrocatalysts.

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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.

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