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Advanced Research on Fuel Cells and Hydrogen Energy Conversion

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Message from the Guest Editors

Hydrogen is regarded as the ultimate energy source among several candidates since it has zero emissions and high utilization efficiency. For fuel cells, we are facing a series of technical challenges. Critical materials such as membrane, catalyst and membrane electrode assembly still require further low-cost and large-scale preparation solutions. Flow fields, cooling plates and assembled stacks need further optimal designs to solve the problems of hydrothermal management and performance uniformity. Additionally, in different application scenarios, fuel cell system construction and control strategy also need to be proposed, updated and optimized according to actual requirements. With numerical simulation, experimental characterization and policy planning, more original and meaningful work is giving contributions to the competitiveness improvement of hydrogen energy.

This Special Issue welcomes extensive topics on **hydrogen energy conversion technologies**, including **fuel cells, electrolysis, hydrogen internal combustion engines**, etc. Numerical and experimental studies on advanced fuel cell technologies are especially encouraged.



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Special Issue



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Message from the Editor-in-Chief

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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