

Special Issue

Electrochemical Analysis and Advanced Materials for Electrodes in Fuel Cells and Electrolyzers

Message from the Guest Editors

Fuel cells and electrolyzers are pivotal in advancing electrochemical energy conversion technologies, driven by the goal of achieving a carbon-neutral society by 2050. This Special Issue explores the synthesis, characterization, and integration of novel advanced materials into electrodes. Key materials include nanostructured catalysts, binders, ionomers, and gas diffusion layers, which improve catalytic activity and durability. These properties are essential for improving the efficiency and robustness of fuel cells and electrolyzers. By presenting breakthroughs in advanced materials for electrodes, this Special Issue fosters interdisciplinary collaboration among researchers, industry experts, and policymakers. These advancements contribute to the global effort to develop sustainable energy technologies essential for achieving carbon neutrality and a cleaner, greener future.

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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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