Special Issue

Advances in Fuel Cells: Materials, Technologies, and Applications

Message from the Guest Editors

Dear Colleague, Zero-carbon science and new energy technologies have attracted intense attention, including high-value utilization of CO2, fuel cells, energy storage devices, etc. Rational design of advanced nanomaterials is crucial to enhance reaction kinetics and energy conversion/storage efficiency. In view of the dynamic developments in zero-carbon science and new energy technologies, this Special Issue aims to publish exciting achievements related to electrode materials, synthetic methods, and performance breakthroughs for energy and environmental technologies. This issue includes the below-listed and associated topics: (i) Hydrogen fuel cell/Ammonia fuel cell/Solid oxide fuel cell/Solid oxide electrolytic cell.
(ii) Electrocatalytic/photocatalytic CO2 reduction.
(iii) Water splitting and metal-air batteries, including oxygen reduction reaction (ORR), oxygen evolution reaction (OER) and hydrogen evolution reaction (HER), etc.
(iv) All-solid-state sodium Li/Na batteries and wide-temperature batteries.
(v) Aqueous Zn-based batteries.
(vi) Supercapacitor.
(vii) Advanced materials for energy conversion/storage.

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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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