

Special Issue

Research and Development of Key Materials and Devices for Fuel Cells

Message from the Guest Editor

Fuel cells, with their high efficiency, zero emissions, and modular design, are the optimal choice for implementing hydrogen energy applications. However, achieving large-scale commercialization still faces severe challenges such as excessive cost, limited service life, and difficulties in performance enhancement. The most fundamental key issue lies in the R&D bottlenecks of crucial materials and equipment. Especially when these technologies (fuel cells, batteries, and capacitors) are combined to form composite power systems, while they can effectively enhance the performance of Hydrogen-Fuel-Cell Electric Vehicles (FCEVs), smart home, and smart city systems, their precise modeling, advanced control strategies, cross-technology integration, and the most basic aspects of material durability and efficiency improvement, are all key factors.

Guest Editor

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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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