Special Issue

Hydrogen and Fuel Cells: Innovations and Challenges

Message from the Guest Editors

As a green and renewable energy source, hydrogen is considered one of the most important directions for future energy development. The continuous improvement of fuel cell technology and hydrogen storage technology strengthens the integration of hydrogen energy with smart grids and vehicles to reduce holistic carbon emissions. Compared with conventional renewable energies, there are also many challenges associated with global hydrogen utilization. In this Special Issue, both original research articles and reviews are welcomed. Research areas may include (but are not limited to) the following:

- Hydrogen generation and transmission in smart grid
- Hydrogen storage and transportation for multi-energy system
- Hydrogen vehicles for resilience enhancement
- Fuel cell controlling with hydrogen fuel
- Optimal operation of the hydrogen-based microgrid
- Smart operation of hydrogen sources via artificial intelligence
- Economics of hydrogen systems in smart grid
- Carbon-emission reduction in hydrogen infrastructure
- Heat recycling of hydrogen systems
- Hydrogen energy market

Guest Editors

Dr. Hanqing Yang

Dr. Jiajia Yang

Dr. Zening Li

Dr. Zhengmao Li

Deadline for manuscript submissions

closed (15 January 2025)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/173966

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/electronics

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/journal/electronics

About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

MDPI