Special Issue

Integration of Fluid Renewable Energy and Integrated Energy Systems: From Traditional Hydropower to Emerging Ocean Energy Technologies

Message from the Guest Editors

This Special Issue aims to compile high-impact research on technological breakthroughs and grid integration challenges for fluid renewable energy within modern multi-energy networks. By bridging traditional hydropower expertise with emerging marine technologies, we will address scalability, environmental synergy, and digitalization pathways for sustainable energy transitions. The scope aligns with the journal's focus on renewable energy systems, grid stability and storage solutions. Research areas may include the following:

- Hydropower and PSH Innovations: Couple field analysis, stable operation and control, efficiency upgrades, ecological retrofitting, small-scale systems, and hybrid pumped storage designs.
- Marine Energy Harvesting: Tidal/wave converter optimization, ocean thermal energy conversion (OTEC), and durability in harsh environments.
- Grid Integration and Flexibility: Role in ancillary services, multi-energy complementarity, and stability control with variable renewables.
- Digitalization and AI: Predictive maintenance, smart grid interoperability, and digital twin applications.

Guest Editors

Dr. Chen Feng

Prof. Dr. Yuquan Zhang

Dr. Changliang Ye

Dr. Chengyi Li

Deadline for manuscript submissions

15 March 2026

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/251473

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 guestedited 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