

Special Issue

Key Technologies and Challenges of Hydraulic Machinery and Systems

Message from the Guest Editor

Hydraulic machinery and systems are the key components for the sustainable development of energy and water resources, including various transport processes of liquids. Hydropower turbines can produce electric power, while more electrical energy is consumed by pumps every year. Nowadays, key technologies and challenges in hydraulic machinery are how to develop environmentally friendly, efficient hydropower equipment and safe, stable pumped storage systems and pumps through design optimization and smart system controls. This Special Issue aims to encourage researchers to focus on the advanced technology in hydraulic machinery and propose novel technologies. The topics of interest in this Special Issue include but are not limited to the flow mechanism in hydraulic machinery, steady and unsteady analysis, fluid–structure interaction, intelligent evaluation and diagnosis technology, cavitation and multiphase flow, and machine learning applications in hydraulic machines, and so on.

Guest Editor

Dr. Peijian Zhou

College of Metrology and Measurement Engineering, China Jiliang University, Hangzhou 310018, China

Deadline for manuscript submissions

closed (29 February 2024)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/120998

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

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

Journal Rank:

CiteScore - Q1 (Control and Optimization)