



an Open Access Journal by MDPI

Advanced Modeling and Control of Hydropower Generation Systems

Guest Editors:

Prof. Dr. Xiaodong Yu

College of Water Conservancy and Hydropower Engineering, Hohai University, Nanjing 210024, China

Prof. Dr. Jian Zhang

College of Water Conservancy and Hydropower Engineering, Hohai University, Nanjing 210024, China

Deadline for manuscript submissions: closed (24 January 2024)



Message from the Guest Editors

Dear Colleagues,

Hydropower is the largest source of renewable energy and plays a critical role in decarbonizing the power system. Nowadays, the proportion of hydropower in modern power systems is increasing, and many scholars are devoting significant attention to hydropower generation systems. This Special Issue aims to present the most recent advances related to the theory and/or application of the various topics and technologies of hydropower generation systems. All submissions within the scope of the listed keywords are welcome.

- Hydropower generation system;
- Pumped storage power station;
- Advanced modelling and simulation;
- Optimal operation;
- Hydro-turbine;
- Surge tank;
- Stability analysis;
- Regulation quality;
- Performance evaluation;
- Control strategy;
- Hydropower unit condition monitoring and fault diagnosis;
- Wind-photovoltaic-hydropower system.

Prof. Dr. Xiaodong Yu Prof. Dr. Jian Zhang *Guest Editors*



mdpi.com/si/127662





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

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

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.

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)

Contact Us

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