Special Issue

Pumped-Storage Hydropower Plants

Message from the Guest Editor

Looking at future grids with increasing shares of intermittent renewable energy solutions, pumped hydro energy storage (PHES) plants are widely recognized as an ideal solution because of their ability to provide large storage capacity with excellent grid connection properties, high cycle efficiency range, and competitive costs. However, in order to provide primary and secondary regulation services, there is a primary need to increase the PHES operational flexibility by developing new machine designs and/or new technologies, as well as by providing hybridization with different types of energy and energy storage systems. To stimulate research areas in these fields, it is important to gather the most relevant ongoing research works on new solutions for PHES (innovative design, innovative control systems, etc.) and on their hybridization with other energy and energy storage systems (sizing algorithm, forecast model, management strategies, virtual power plant, etc.). Therefore, you are kindly invited to share your recent findings in this Special Issue.

Guest Editor

Dr. Giovanna Cavazzini

Department of Industrial Engineering, University of Padova, 35131 Padova, Italy

Deadline for manuscript submissions

closed (15 July 2019)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/19991

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, 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, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)