Special Issue

Advanced Analysis and Techniques of Wave Energy Conversion and Integrated Storage

Message from the Guest Editors

Wave energy converter (WEC) technologies that capture the vast power of ocean waves have been developing as a strong supplement in the world's renewable energy portfolio. However, several major challenges such as cost, conversion efficiency, and reliability remain and delay the commercialization of WEC devices in the renewable generation market. Nevertheless, there are new market opportunities emerging in support of the Blue Economy which provide unique end user needs that WEC technologies can be well suited to meet. Special topics of interest include but are not limited to:

- Control strategies for wave power smoothing and dispatching;
- Development of advanced power-take off (PTO) systems;
- High speed unidirectional rotational energy conversion;
- Novel gearing/coupling mechanisms;
- Wave energy storage and grid integration;
- Hybrid renewable energy frameworks that integrate WEC systems;
- WEC applications and designs that can support the Blue Economy.

Guest Editors

Prof. Bora Karayaka

College of Engineering and Technology, Western Carolina University, Cullowhee, NC 28723, USA

Dr. Nathan Michael Tom

National Renewable Energy Laboratory, 15013 Denver W Pkwy, Golden, CO 80401, USA

Deadline for manuscript submissions

closed (25 May 2022)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/67021

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

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)