Special Issue

Applications of Artificial Intelligence in the Sustainable Operation of Desalination and Renewable Energy Systems

Message from the Guest Editors

This Special Issue aims to consolidate cutting-edge research on the application of AI techniques for the sustainable operation, optimization, and performance enhancement of desalination and renewable energy technologies. We seek original research articles, review papers, case studies, and perspective pieces that explore the following:

- AI-based operational optimization for desalination systems (all types);
- Performance prediction and enhancement of renewable energy systems using AI;
- Energy consumption forecasting and optimization;
- Hybrid systems that combine renewable energy and desalination powered by AI;
- Development and implementation of ANN, ML, DL, and other AI approaches;
- Smart grid integration of renewable energy with intelligent control;
- Decision-making support systems and real-time operational control using AI;
- Sustainability assessment and life cycle analysis augmented by AI;
- Future trends, challenges, and opportunities at the intersection of AI, desalination, and renewable energy.
- This Special Issue encourages interdisciplinary approaches that bridge the gap between environmental engineering, renewable energy, water desalination, and sustainability studies.

Guest Editors

Dr. Muhammad Wajid Saleem

Department of Mechanical and Energy Engineering, Faculty of Computing, Engineering and Media, School of Engineering and Sustainable Development, De Montfort University, Dubai, United Arab Emirates

Dr. Hassan Ali

School of Chemical Engineering, University of Birmingham, Dubai, United Arab Emirates

Deadline for manuscript submissions

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/240174

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)

MDPI