Special Issue

Renewable and Sustainable Energy: Modeling, Control, Modern Optimization and Multi Criteria Decision Making

Message from the Guest Editors

The consensus among scientists is that sustainable renewable energy sources with no or very low environmental impact are the best solution. Modeling and optimization are effectively used to solve complicated processes in a short time with minimum effort. Modeling based on AI and modern optimization methods is playing a key part in the industrial revolution, being extensively used by practicing engineers to solve complicated problems. Moreover, Model predictive control (MPC) methods can achieve fast, precise, and multiobjective control tasks for renewable energy systems. By contrast, multicriteria decision making (MCDM) models provide a useful way to model several real-world problems, and they are extensively used in many engineering applications, such as energy efficiency, sustainable development, and so forth. The Special Issue provides a platform for researchers and practitioners who are experts in the area of modern optimizations, control systems, artificial intelligence, and decision making applied to renewable and sustainable energy. Topics in both science and engineering, such as: soft computing, neural networks, fuzzy logic, multicriteria decision making, are welcome.

Guest Editors

Dr. Hegazy Rezk

Dr. Mokhtar Aly

Prof. Dr. Mohammad Ali Abdelkareem

Dr. Ahmed Fathy

Deadline for manuscript submissions

closed (30 June 2022)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.8



mdpi.com/si/64444

Sustainability
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

mdpi.com/journal/ sustainability





Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.8



About the Journal

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

