Special Issue

Advances in Sustainable Development of Power Systems with Artificial Intelligence

Message from the Guest Editors

This Special Issue aims to bridge this gap with new advances in the applications of artificial intelligence in power systems planning and operations. The topics include, but not limited to, the following:

- Knowledge-data complementary framework for power system planning and operations;
- Model-data combined driven technology in power system planning and operations;
- Physics-informed neural networks in power system planning and operations;
- Human-in-the-loop artificial intelligence framework for power system planning and operations;
- Deep learning-based renewable energy generation estimations and available power analysis;
- Deep reinforcement learning-based power system operations;
- Meta learning and federated learning in power system planning and operations;
- Artificial intelligence-based power system market and multi-agent games;
- Artificial intelligence-based power system stability analysis and control;
- Explainable machine learning in power systems planning and operations;
- Other advances in the sustainable development of power systems with artificial intelligence.

Guest Editors

Prof. Dr. Pei Zhang

Dr. Zhao Liu

Dr. Zhenhuan Ding

Deadline for manuscript submissions

closed (31 December 2023)



Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 7.7



mdpi.com/si/146871

Sustainability Editorial Office 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 7.7



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. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full 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. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

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, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank:

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

