Special Issue

Application of AI Technologies in Pipeline Health Monitoring and Energy Prediction

Message from the Guest Editors

Artificial intelligence (AI) has achieved remarkable success in a wide variety of fields in the last few years. For pipeline health monitoring, AI has been widely employed in the residual life prediction of defected pipes, e.g., dented or corroded pipes. For energy engineering, AI makes it easier to deal with high-dimensional features, complex scenarios, large-scale datasets, etc. With the growing demand for cleaner and renewable energy, we believe that AI techniques will help to provide more reliable support for new energy production, management, and marketing. Above all, investigations on new methods or new applications within these topics will be carried out in Energies.

Keywords

- Artificial neural networks/integrity assessment/structural health inspection or monitoring
- Machine learning/forecast method/renewable energy
- Energy demand and production prediction by AI
- AI support for energy management and policy decision
- Machine learning for energy prediction
- Evolutionary algorithms for energy prediction and optimization
- Nondestructive testing/structural health monitoring.

Guest Editors

Dr. Xin Ma

Dr. Xiaoben Liu

Dr. Pei Du

Dr. Jingwei Cheng

Deadline for manuscript submissions

closed (7 February 2023)

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)