Special Issue

Application of Artificial Intelligence and Deep Learning in Carbon Capture and Utilisation and Storage

Message from the Guest Editor

Achieving the world's current energy utilization is intermingled with the development of carbon capture technologies. These technologies are usually costly and have a high economic penalty. The predictive model development for energy transition and carbon capture technologies is currently challenging and limited by computer power and is therefore one of the most crucial research topics for future designers and engineers. This Special Issue of *Energies* mainly focuses on the application of deep learning and artificial intelligence models in the control and prediction of the behavior of the industrial units mainly working in carbon capture technologies. Original research and review papers which aim to overcome the limitations of these technologies and computational power in the development and deployment of carbon from capture to storage are welcome. We hope to help facilitate the clean energy transition as well as the application of benign energy technologies in the future.

Guest Editor

Dr. Bahamin Bazoovar

Centre for Advanced Powertrain and Fuels, Department of Mechanical and Aerospace Engineering, College of Engineering, Design and Physical Sciences, Brunel University, London UB8 3PH, UK

Deadline for manuscript submissions

closed (11 June 2025)



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/173782

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



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)

