Special Issue

AI Fusion in Energy Systems: Neural Networks and Bayesian Approaches for EVGI and EMS Optimization

Message from the Guest Editors

We invite original research contributions that explore the convergence of electric vehicle (EV) grid integration, artificial intelligence (AI) algorithms, innovative artificial neural network, Bayesian signal processing and advanced control systems within modern energy management frameworks. This Special Issue seeks innovative methodologies that leverage AI-driven control architecture for dynamic energy management in distributed generation systems. We particularly welcome studies applying Bayesian signal processing for uncertainty modelling and real-time decision-making in EV charging and discharging schedules. Emphasis will be placed on integrated solutions that harmonize renewable energy variability with vehicle-to-grid (V2G) and grid-to-vehicle (G2V) operations. Submissions addressing scalable control systems and predictive analytics that enhance the responsiveness of energy management systems are highly encouraged. Join us in shaping the next generation of sustainable, intelligent and resilient power systems.

Guest Editors

Prof. Dr. Naoto Nagaoka

Dr. Minella Bezha

Prof. Dr. Bert de Vries

Deadline for manuscript submissions

25 May 2026

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