Special Issue

Smart Energy Solutions with Artificial Intelligence and Machine Learning

Message from the Guest Editor

The global energy landscape is undergoing a profound transformation driven by the urgent need for sustainability, efficiency, and resilience. At the heart of this transition is the growing integration of smart technologies, particularly artificial intelligence (AI) and machine learning (ML), into energy systems. With the increasing dissemination of renewable energy sources, electric vehicles, and smart grids, the complexity and data volume of energy systems have surged, making AI and ML indispensable tools for managing this complexity effectively.

This Special Issue aims to explore cutting-edge research and innovative applications of AI and ML in the energy sector. It seeks to highlight how these technologies can enhance system performance, improve reliability, support decision-making, and enable the development of smart, sustainable, and autonomous energy infrastructures. Contributions that blend theory with practical implementation and demonstrate real-world impact are particularly welcome.

Guest Editor

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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.

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