

This review critically examines the integration of Artificial Intelligence (AI) and Deep Reinforcement Learning (DRL) into smart microgrid platforms, focusing on their role in optimizing ...

The concept of microgrids (MGs) as compact power systems, incorporating distributed energy resources, generating units, storage systems, and loads, is widely acknowledged in the ...

Artificial intelligence powered intelligent energy management framework for hydrogen storage and dispatch in smart microgrids Article Open access 18 November 2025

An AI-powered microgrid platform that generates on-site energy, forecasts demand, intelligently balances loads, and stores low-cost energy for use during peak hours.

Develop a framework for dynamic formation of networked microgrids for optimized operations under both normal and emergency conditions. This project.

Adaptive Neuro-Symbolic Planning for smart agriculture microgrid orchestration in hybrid quantum-classical pipelines Introduction: The Learning Journey That Sparked This Exploration It ...

The additional layer of intelligent functionality on Microgrids, enabling real-time and transactive (2-way) information and energy flows between consumers and providers characterizes a Smart MicroGrid ...

With 800 million people living without electricity worldwide and many more facing energy insecurity due to climate change, smart microgrids are a powerful technology to revolutionize the way we produce, ...

Electric interoperability and smart metering technologies were behind others at 4% of global AI-related patents. "Recent growth is concentrated in AI-enabled technologies--particularly ...

The proposed framework effectively integrates quantum-inspired AI, intelligent microgrid management, and autonomous robotics, offering a novel approach to energy coordination in cyber ...

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