# Microgrid Multi-Agent Technology



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Microgrid systems are built to integrate a generation mix of solar and wind renewable energy resources that are generally intermittent in nature. This paper presents a novel decentralized multi-agent ...

This study provides an overview of the agent concept and multi-agent systems, as well as reviews of recent research studies on multi-agent systems" application in microgrid control systems.

Aiming at the problems of complex distributed collaboration and strong dynamic uncertainty in microgrid energy management, this paper proposes a multi-agent rei

In this paper, in order to deal with this problem, the properties and concepts of multi-agent systems are used to model the microgrid power system, as this system has seven agents all of which have a ...

This article presents an efficient and easily implementable real-time energy management and control system based on multi-agent systems for hybrid Low-Voltage Micro-Grids (LVMGs) using ...

This paper focuses on a brief review of current MAS technology utilized in MG control. The future focuses of this technology is also predicted. The rest contents of this paper are organized as follows. ...

The proposed distributed framework employs agent-based communication, where each agent interacts only with its immediate neighbours. The authors in ref. [7] propose a co-simulation ...

This study uses a multi-agent deep reinforcement learning approach to present an AI-powered microgrid system for optimized energy trading in interconnected systems.

At the multi-agent level, we identified and created the corresponding types of agents for each component of the microgrid. Each bus of the system is managed by a net agent and connected to other nets ...