

Title: Prospects for the development of smart microgrids

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Current smart grids leverage the IoT and cloud-based networks for enhanced computing. However, these approaches face challenges such as high latency, increased bandwidth usage, and ...

Our goal is to highlight the cutting-edge research shaping the future of smart energy networks, as well as to address the practical challenges and opportunities related to their deployment.

After thorough review, the paper proposes several recommendations for further research and development.

Microgrids represent a transformative paradigm in modern energy systems, enabling localized, efficient, and resilient energy management.

Objective: The objective of this paper is to explore technology trends and prospects for efficient energy management in microgrids by identifying and analyzing distinct research lines in this field.

This paper reviews the rising, applications, challenges, and future prospects in energy smart grids and smart cities systems. Several key components, such as IoT, renewable energy ...

Future research areas worth exploring for microgrids are also outlined. A microgrid, regarded as one of the cornerstones of the future smart grid, uses distributed generations and ...

Artificial intelligence (AI) has recently demonstrated immense potential for optimizing energy management in microgrids, providing efficient and reliable solutions.

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