Significance of Particle Swarm Optimization in Microgrids

Paul et al. introduced a quantum particle swarm optimization (QPSO) framework for optimizing grid-connected microgrids by minimizing both operational costs and carbon emissions ...

The model is solved using a multi-objective Particle Swarm Optimization (MOPSO) algorithm, which is well-suited for its fast convergence and ability to efficiently identify the Pareto ...

In this paper, particle swarm optimization and genetic algorithms are applied for the optimization of a network of microgrids based on renewable energy and dies

The Particle Swarm Optimization (PSO) algorithm stands out in the realm of optimization techniques due to its remarkable computational efficiency, swift execution pace, and reduced ...

In this review, the capabilities of swarm intelligence-based algorithms such as ant colony optimization (ACO), particle swarm optimization (PSO), artificial bee colony (ABC), and fish swarm ...

This study introduces a quantum particle swarm optimization (QPSO)-based framework to address the dual challenges of operational cost minimization and emission reduction in grid-connected microgrids.

To address the aforementioned issues, this paper proposes a Multi-Objective Particle Swarm Optimization with Multi-Strategy (IMOPSO) for solving microgrid optimization dispatch models ...

To offer an optimal solution for managing microgrids with hybrid renewable energy sources (HRESs) while taking microgrid reserve margins into account, the particle swarm ...

As a crucial component of smart grid optimization, the optimal dispatch of microgrids is of great significance for reducing energy consumption and environmental pollution.

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