Photovoltaic panel tracking control algorithm

Overview

This work aims to present a new artificial intelligence-based algorithm applied to solar trackers that consider bifacial panels to enhance energy generation. However, several factors need consideration to further optimize this process. Solar panel tracking algorithms are pivotal in optimizing solar power generation by continuously adjusting panel orientation to follow the sun's path, resulting in increased energy yield and reduced costs. The performance status of an automatic solar tracking system depends on various factors. This article presents the design and implementation of an automatic solar panel tracking control system based on the STC89C52 microcontroller.

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gle with environmental variability, sensor noise, and scalability limitations. This paper proposes a novel intelligent

adaptive control framework for solar trackers, leveraging advanced machine learning, ...

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How Solar Tracking Algorithms Maximize Solar Energy Capture

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Solar Tracking Control Algorithm Based on Artificial Intelligence

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