Fuzzy quantity of DC microgrid

In this context, this paper investigates the application of fuzzy logic control as a promising approach to enhance energy management within DC microgrids.

To this end, the suggested distributed control algorithm benefits from an interval type-3 fuzzy logic system (IT3FLS). To enhance the accuracy of the approximation, a learning strategy is ...

This paper addresses the fuzzy resilient control of DC microgrids with constant power loads. The DC microgrid is subject to abrupt parameter changes which are described by the Markov ...

This article proposes a novel scalable fuzzy voltage control scheme for nonlinear direct current microgrids (DCmGs) composed of DGUs and constant power loads (CPLs) interconnected via power ...

Due to the strong nonlinearity of the DC microgrid, the analysis of its large-signal stability (LSS) is a very challenging task. This paper uses the T-S fuzzy model (TSFM) method to investigate the LSS of the ...

This paper investigates the event-driven fuzzy L ? control of direct-current (DC) microgrids subject to deception attacks, persistent bounded (PB) disturbances, premise mismatching, quantizer, ...

This paper uses the T-S fuzzy model (TSFM) method to investigate the LSS of the DC microgrid with various loads, which is connected to the AC grid.

First, a Takagi-Sugeno fuzzy DCmG model with CPL is formulated to capture nonlinear characteristics and diverse transient behaviors. Then, a scalable fuzzy control approach is developed ...

Abstract--This paper deals with fuzzy logic control based energy management system for dc and ac microgrids. AC microgrid includes renewable energy sources connected to ac load and storage facility.

In this article, an operation mode and power regulation strategy for multi-PV islanded DC microgrid based on two-layer fuzzy control are proposed to address the challenges in conventional ...

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