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Title: Single-phase inverter repetitive control

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A novel fractional-order repetitive control based on phase angle information interpolation is proposed for single-phase LCL-type inverters in this paper.

A reduced infinite-order repetitive control (RIORC) is presented for a single phase grid-connected PWM inverter in this paper. The RIORC is equivalent to 2<sup>th</sup> order repetitive ...

To this end, we first introduce the modelling of a single-phase inverter. Then, a first-order repetitive control is developed for the ...

Repetitive control (RC) is a widely used control technique in single-phase vehicle-to-grid (V2G) inverters to effectively reduce current harmonics. However, the

Finally, the experimental results show that the high-order repetitive control obtains better steady-state performance of single-phase inverter system and reduces the harmonics. The results of this research are as follows:

First, the mathematical model of the system is obtained based on the frequency domain modeling method of the minimum phase system. Then, a composite controller ...

For improve the dynamic and static characteristics of traditional repetitive control when applied to single-phase inverters and optimize the utilization rate

The modelling of a single-phase inverter is first introduced; then a first-order repetitive control is developed for the proposed grid ...

The modelling of a single-phase inverter is first introduced; then a first-order repetitive control is developed for the proposed grid-connected inverter.

In this paper, a novel dual closed-loop repetitive control strategy based on grid current feedback is proposed for single-phase grid-connected inverters with LCL filters.

The primary focus of this paper is the design and evaluation of a control strategy for an LCL single-phase grid-connected inverter. Specifically, we present a detailed description ...

To this end, we first introduce the modelling of a single-phase inverter. Then, a first-order repetitive control is developed for the proposed grid-connected inverter.

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