Title: Ruan Xinbo grid-connected inverter
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This book focuses on control techniques for LCL-type grid-connected inverters to improve system stability, control performance and suppression ability of grid current harmonics.

Phase-locked loop (PLL) is essential for the grid-connected inverter to ensure grid synchronization. Since the PLL introduces an negative-resistive admittance to be in parallel with the...

As an interface between DPGSs and a power grid, a grid-connected inverter plays an important role in injecting high-quality power into the grid [1]. In the grid-connected inverter, a...

Xinbo Ruan is affiliated with Nanjing University of Aeronautics and Astronautics in China. Their research spans various aspects of electrical engineering with a particular focus on power electronics and ...

A novel double-input contactless resonant converter (DICRC) for the grid & renewable energy wireless power transmission (WPT) system is proposed in this paper. By the analysis of power flow, it is ...

Xu, S. Xie, and T. Tang, "Active damping-based control for grid-connected LCL-filtered inverter with injected grid current feedback only," IEEE Trans. Ind. Electron., vol. 61, no. 9, pp. 4746-4758, Sep. ...

With the transformation of global energy structure and the improvement of environmental awareness, grid connected inverters based on grid-forming (GFM) control are receiving increasing attention.

Control Techniques for LCL-Type Grid-Connected Inverters by Xinbo Ruan, Xuehua Wang, Donghua Pan, Dongsheng Yang, Weiwei Li, Chenlei Bao, 2018, Springer Nature edition, in English

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