Bidirectional SSCB for residential DC microgrids with reduced voltage and current stress during fault interruption

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Clustering and outlier analysis for key performance indicators in battery energy storage systems applications

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Comparison of decoupling control strategies for multiple active bridge DC-DC converter

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Cooperative control of flywheel energy storage system and diesel generator for frequency regulation of microgrids using digital FIR filters

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DC fast charging of electric vehicles: a review on architecture and power conversion technology

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EV-Permanent magnet synchronous motor control strategy evaluation based on digital twin concept

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FCS-model predictive control of a quadratic buck converter for more efficient data centers

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Maximum power point tracking algorithm for step-up/down partial power converters with improved performance around zero partiality

Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227506

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A novel isolated Buck-Boost DC-DC converter with wide range of voltage regulations

Afshari, Hossein; **Husev, Oleksandr**; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227443

Operation of the step-up/down bidirectional partial power converter near zero series voltage

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Performance analysis of protection methods in residential DC microgrids

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A three-level voltage-source gate driver for SiC MOSFETs in synchronous rectification mode

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