

Air-core coupled inductor based modular solid-state circuit breaker with reduced components for DC buildings

Pogulaguntla, Aditya; Dsa, Daniel; Yagna, Griddaluru Venkata; Banavath, Satish Naik; **Carvalho da Silva, Edivan Laercio; Chub, Andrii; Vinnikov, Dmitri** IEEE journal of emerging and selected topics in power electronics 2024 / 12 p
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Comparative evaluation of dual-purpose converters suitable for application in dc and ac grids

Husev, Oleksandr; Matiushkin, Oleksandr; Jalakas, Tanel; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in power electronics 2024 / p. 1337-1347 <https://doi.org/10.1109/JESTPE.2023.3243857>

Comparison of performance of phase-shift and asymmetrical pulse width modulation techniques for the novel galvanically isolated buck-boost dc-dc converter for photovoltaic applications

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Distributed price-based power management for multibuses DC nanogrids EEMS

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Feasibility study of three-phase modular converter for dual-purpose application in DC and AC microgrids

Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr;** Gutierrez-Escalona, Javier; Barrero-Gonzalez, Fermin; **Vinnikov, Dmitri;** Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2024 / p. 1348-1358
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Holistic cyber-physical approach for the performance evaluation of communication and control systems in DC microgrids

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Implementation of global maximum power point tracking in photovoltaic microconverters: A survey of challenges and opportunities

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Implementation of protection features for a modular bidirectional solid-state battery disconnecter

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Improved maximum power point tracking algorithm for step-up/down partial power converters operating around zero partiality

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Modified inductive multi-coil wireless power transfer approach based on Z-source network

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Novel family of flying inductor-based single-stage buck-boost inverters

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A single-phase reduced component count asymmetrical multilevel inverter topology

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Three-level T-type qZ source inverter as grid-following unit for distributed energy resources

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