

Accelerated global MPPT for multimode series resonant DC-DC converter

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Florence, Italy, 14-16 July 2021 2021 <https://doi.org/10.1109/CPE-POWERENG50821.2021.9501077>

Bidirectional DC circuit breaker with improved performance during commissioning and reclosing

Pogulaguntla, Aditya; Raghavendra I, Venkata; Banavath, Satish Naik; **Chub, Andrii**; Sreekanth, Thamballa; Krishnamoorthy, Harish Sarma 24th European Conference on Power Electronics and Applications (EPE'22 ECCE Europe) 2022 / p. P1-P9 <https://ieeexplore.ieee.org/document/9907667>

DC microgrid: state of art, driving force, challenges and perspectives

Husev, Oleksandr; Vinnikov, Dmitri Power Systems Research and Operation : Selected Problems III 2024 / p. 149-190 https://doi.org/10.1007/978-3-031-44772-3_8 [Article collection metrics at Scopus](#) [Article at Scopus](#)

Design of solid state circuit breaker

Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / p. 1-5 <https://doi.org/10.1109/RTUCON56726.2022.9978903>

Effect of mission profile resolution on photovoltaic energy yield prediction in Python and MATLAB

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Efficiency improvement of step-up series resonant DC-DC converter in buck operating mode

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Fault-tolerant control of a grid-connected bipolar DC microgrid with high penetration of intermittent renewable energy

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High-efficiency quad-mode parallel PV power optimizer for DC microgrids

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A new high step-up switched-capacitor/inductor based DC-DC converter

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Optimization-based power management for battery/supercapacitor hybrid energy storage system with load estimation capability in a DC microgrid

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Series-resonant DC-DC interface converter for battery integration into DC microgrids

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