

A MPPT control method for full soft-switching high step-up current-fed DC-DC converter

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Global MPPT for interleaved buck-boost DC-DC converter

Matiushkin, Aleksandr; Husev, Aleksandr; Fesenko, Artem; **Vinnikov, Dmitri** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 7 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316589>

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

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; **Sidorov, Vadim;** Lindvest, Andre IEEE journal of emerging and selected topics in power electronics 2023 / p. 2259-2280: ill <https://doi.org/10.1109/JESTPE.2021.3137521> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Implementation of MPPT hill climbing technique for forward based DC-DC converter

Matiushkin, Aleksandr; Husev, Aleksandr; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604422>

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

Yadav, Neelesh; Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri IEEE journal of emerging and selected topics in power electronics 2024 / p. 1984-1994 <https://doi.org/10.1109/JESTPE.2024.3354843>

Induction generator with direct control and a limited number of measurements on the side of the converter connected to the power grid

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An MPPT algorithm for PV systems based on a simplified photo-diode model

Restrepo, Carlos; Gonzalez-Castano, Catalina; Munoz, Javier; **Chub, Andrii;** Vidal-Idiarte, Enric; Giral, Roberto IEEE Access 2021 / p. 33189-33202 <https://doi.org/10.1109/ACCESS.2021.3061340> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Solar optiverter - a novel hybrid approach to the photovoltaic module level power electronics

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Step-up/down partial power converter with enhanced MPPT efficiency around zero partiality

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