

Bidirectional twisted single-stage single-phase buck-boost DC-AC converter

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; **Vinnikov, Dmitri;** Chopyk, Vasily Energies 2019 / art. 3505, 14 p. : ill <https://doi.org/10.3390/en12183505> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of grid-connected flyback-based microinverter with primary and secondary side decoupling approach

Afshari, Hossein; Husev, Oleksandr; Vinnikov, Dmitri; Matiushkin, Oleksandr; Vosoughi Kurdkandi, Naser 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon): conference proceedings 2022 / p. 1-6 <https://doi.org/10.1109/RTUCon56726.2022.9978855>

Comprehensive comparison of grid-connected flyback-based microinverter with primary and secondary side decoupling approach

Afshari, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Pourjafar, Saeed; Kurdkandi, Naser Vosoughi; **Vinnikov, Dmitri** IEEE transactions on industry applications 2024 / p. 9080-9089 <https://doi.org/10.1109/TIA.2024.3452069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and experimental validation of a single-stage PV string inverter with optimal number of interleaved buck-boost cells

Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri;** Strzelecki, Ryszard; Kołodziejek, Piotr Energies 2021 / art. 2448, p., 17 p. : ill <https://doi.org/10.3390/en14092448> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility study of interleaving approach for buck-boost inverter with unfolding circuit

Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr;** Khandakji, Kamal; Velihorskyi, Oleksandr 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 415-419 : ill <https://doi.org/10.1109/UKRCON.2019.8879966>

Novel family of single-stage buck-boost inverters based on unfolding circuit

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; Blaabjerg, Frede; **Vinnikov, Dmitri** IEEE transactions on power electronics 2019 / p. 7662-7676 : ill <https://doi.org/10.1109/TPEL.2018.2879776> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel quasi-Z-source derived inverter with unfolding circuit and battery storage

Makovenko, Elena; Husev, Oleksandr; Vinnikov, Dmitri 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 431-436 : ill <https://doi.org/10.1109/CPE.2018.8372557>

Reactive power injection capability of buck-boost inverter with unfolding circuit

Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri;** Blaabjerg, Frede IEEE transactions on power electronics 2022 / p. 11876-11886 <https://doi.org/10.1109/TPEL.2022.3179784> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-phase qZS-based PV inverter with integrated battery storage for distributed energy generation

Husev, Oleksandr; Makovenko, Elena; Vinnikov, Dmitri; Jalakas, Tanel 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 508-513 : ill <https://doi.org/10.1109/CPE.2018.8372570>