

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>

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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](#)

Cost-effective piggyback forward dc-dc converter

Matiushkin, Oleksandr; Husev, Oleksandr; Afshari, Hossein; Vinnikov, Dmitri; Strzelecki, Ryszard 2024 IEEE Applied Power Electronics Conference and Exposition (APEC) 2024 / p. 2106-2111 <https://doi.org/10.1109/APEC48139.2024.10509355> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Energy yield assessment methodology for photovoltaic microinverters

Chub, Andrii; Kosenko, Roman; Korkh, Oleksandr; Vinnikov, Dmitri; Kouro, Samir 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC 2019) Santos, Brazil, 1-4 December 2019 / p. 1178-1183 : ill <http://toc.proceedings.com/52923webtoc.pdf>

Forward-based DC-DC converter with eliminated leakage inductance problem

Matiushkin, Oleksandr; Husev, Oleksandr; Afshari, Hossein; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos IEEE transactions on industrial electronics 2025 / p. 1638-1648 <https://doi.org/10.1109/TIE.2024.3429626>

Low-cost photovoltaic microinverter with ultra-wide MPPT voltage range

Liivik, Elizaveta; Chub, Andrii; Kosenko, Roman; Vinnikov, Dmitri 2017 6th International Conference on Clean Electrical Power : Renewable Energy Resources Impact : Santa Margherita Ligure, 27-29 June 2017 / p. 46-52 : ill <https://doi.org/10.1109/ICCEP.2017.8004790>

Modeling of grid-connected quasi-Z-source series resonant topology based microinverter

Roasto, Indrek; Jalakas, Tanel; Husev, Oleksandr 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 / p. 192-195 : ill <https://doi.org/10.1109/CPE.2016.7544183>

Photovoltaic energy yield improvement in two-stage solar microinverters

Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Energies 2019 / art. 3774, 17 p. : ill <https://doi.org/10.3390/en12193774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Emerging converter topologies and control for grid connected photovoltaic systems 2021 / p. 197-213 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

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

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Korkh, Oleksandr IEEE transactions on industrial electronics 2019 / p. 3869-3880 <https://doi.org/10.1109/TIE.2018.2850036> [Tehnikaülikooli seade muudab päikesepaneelid märgatavalt tootlikumaks](#) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)