

Capacitive vs Inductive Coupling Based DC-DC Converter Operating in MHz Switching Frequency Range

Pourjafar, Saeed; Mohseni, Parham; Husev, Oleksandr; Strezelecki, Ryszard; Matiushkin, Oleksandr 2025 IEEE Applied Power Electronics Conference and Exposition (APEC) 2025 / p. 2173-2178 <https://doi.org/10.1109/APEC48143.2025.10977156>

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](#)
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Comprehensive comparison of isolated high step-up dc-dc converters for low power application

Pourjafar, Saeed; Afshari, Hossein; Mohseni, Parham; Husev, Oleksandr; Matiushkin, Oleksandr; Shabbir, Noman IEEE open journal of power electronics 2024 / p. 1149–1161 <https://doi.org/10.1109/OJPEL.2024.3433554> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A high step-up non-isolated dc-dc converter with low voltage stress across transistor

Pourjafar, Saeed; Hemmati Shahsavar, Tala; Hashemzadeh, Seyed Majid; **Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri** IEEE transactions on industrial electronics 2024 / p. 15755-15767 <https://doi.org/10.1109/TIE.2024.3383025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Isolated high step-up current-fed DC-DC converter with low input current ripple and wide full-soft-switching capability

Mohseni, Parham; Pourjafar, Saeed; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri IEEE transactions on industry applications 2025 / 11 p <https://doi.org/10.1109/TIA.2025.3544985>

Novel isolated high step-up DC-DC converter with wide input voltage regulation range

Pourjafar, Saeed; Mohseni, Parham; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10413102>

Review and outlook of isolated capacitive coupling based converters

Pourjafar, Saeed; Husev, Oleksandr; 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-POWERENG60842.2024.10604421>