

Artificial Intelligence in the hierarchical control of ac, dc and hybrid ac/dc microgrids : A review

Gutiérrez-Escalona, J.; Roncero-Clemente, C.; Husev, Oleksandr; Matiushkin, Oleksandr; Blaabjerg, Frede IEEE Access 2024 / p. 157227-157246 <https://doi.org/10.1109/ACCESS.2024.3486382> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; Vinnikov, Dmitri; Chopyk, Vasilii 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](#)

Buck-boost unfolded inverter as a novel solution for single-phase PV systems

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Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; Husev, Oleksandr; Lytvyn, Oksana; Matiushkin, Oleksandr Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of buck-boost inverters based on unfolding circuit versus H5, H6, HERIC topologies

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Comparative evaluation of common-ground converters for dual-purpose application

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Comparative evaluation of dual-purpose converters suitable for application in dc and ac grids

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Comparative evaluation of the air core magnetic design for MHz+ switching frequency

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

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Comprehensive comparison of isolated high step-up dc-dc converters for low power application

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Design of LCL-filter for grid-connected buck-boost inverter based on unfolding circuit

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

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Reinforcement Learning-based Energy Management Strategy for Flexible Hybrid ac/dc Microgrid

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A review of hybrid converter topologies

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