

Application of boundary conduction mode control in galvanically isolated buck-boost converter

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Dual-Mode magnetically integrated photovoltaic microconverter with adaptive mode change and global maximum power point tracking

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Effect of parasitic components in voltage drop and design consideration of the switched impedance inverter

Hasan Babayi Nozadian, Mohsen; Vinnikov, Dmitri; Mashinchi Maheri, Hamed IET power electronics 2025 / p. 1-15 <https://doi.org/10.1049/pel2.70024> <https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/pel2.70024>

An embedded half-bridge Γ -Z-source inverter with reduced voltage stress on capacitors

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Half-bridge trans-Z-source inverter with high boost factor

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High-performance buck-boost partial power quasi-Z-source series resonance converter

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Impact of transformer turns ratio on the power losses and efficiency of the wide range isolated buck–boost converter for photovoltaic applications

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Impedance network-based diode-clamped multilevel inverter voltage balancing with cascaded voltage multiplier

Ebrahimi, Ali; Babaei, Ebrahim; Mousavi, S. M. J.; Mashinchi Maheri, Hamed; **Jalakas, Tanel** 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/RTUCON60080.2023.10413166>

Light-load efficiency improvement of galvanically isolated quasi-Z-source DC-DC converter for photovoltaic applications

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A new high step-up NPC-based switched-capacitor seven-level grid-tied inverter for PV applications

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A new high step-up switched-capacitor/inductor based DC-DC converter

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A new transformer-less single switch boost DC-DC converter with lower stress

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Performance benchmarking of Si and GaN MOSFETs in isolated buck-boost DC-DC converter

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Power loss model and efficiency analysis of the quasi-Z-Source isolated buck-boost converter with wide input voltage and load range

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A single-phase high-frequency isolated quasi-Z-source AC-AC converter without commutation problem and step-change frequency operation

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Topology morphing control of low-cost PV microconverters

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