

**Comparative study of possible implementations of the flexible power electronic interface for wide-range high step-up applications in DC microgrid**

**Khan, Salman; Chub, Andrii; Vinnikov, Dmitri;** Kasper, Matthias; Deboy, Gerald 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604370>

**FCB-MPC-based cycle skipping control for soft-switched isolated AC-DC converter with reduced inductors in PFC stage**

**Mohseni, Parham;** Husev, Oleksandr; **Vinnikov, Dmitri;** Kasper, Matthias; **Deboy, Gerald;** Kurdkandi, Naser Vosoughi 2025 IECON – 51st Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <https://doi.org/10.1109/IECON58223.2025.11221499>

**Novel concept of universal AC/DC-DC onboard battery charger for electric vehicles**

**Mohseni, Parham;** Husev, Oleksandr; **Vinnikov, Dmitri;** Kasper, Matthias; Deboy, Gerald 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144698>

**Reliability evaluation of the universal power electronic interface converter for PV applications**

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**Wide voltage gain current-fed isolated buck-boost series-resonant DC-DC converter with active clamp for DC microgrid applications**

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<https://ieeexplore.ieee.org/document/11144687>