

Black start and fault tolerant operation of isolated matrix converter for DC microgrids

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A comparison between three-phase conventional two-stage ac-dc and single-stage matrix converter approaches

Mohseni, Parham; Emiliani, Pietro; Husev, Oleksandr; Vinnikov, Dmitri; Mackay, Laurens 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227438>

DC fast charging of electric vehicles : a review on architecture and power conversion technology

Arena, Gabriele; **Emiliani, Pietro; Chub, Andrii; Vinnikov, Dmitri;** de Carne, Giovanni 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227492>

DC grid interface converter based on three-phase isolated matrix topology with phase-shift modulation

Emiliani, Pietro; Blinov, Andrei; Chub, Andrii; de Carne, Giovanni; **Vinnikov, Dmitri** 2022 IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 l. <https://doi.org/10.1109/PEDG54999.2022.9923256>

DC grid interface converter based on three-phase isolated matrix topology with phase-shift modulation

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Digital control of PFC rectifier with combined feedforward and PI regulator

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Electric power management and control in DC buildings—state-of-the-art and emerging technologies

Blinov, Andrei; Roasto, Indrek; Chub, Andrii; Emiliani, Pietro; Vinnikov, Dmitri Power Quality : Infrastructures and Control 2023 / p. 67-96 https://doi.org/10.1007/978-981-19-7956-9_3

Grid integration of DC buildings : standards, requirements and power converter topologies

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Predictive control for isolated matrix rectifier without current distortion at sector boundary

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Reactive power control for bidirectional isolated high-frequency link converter

Emiliani, Pietro; Blinov, Andrei; Pefitsis, Dimosthenis; Giannakis, Andreas; **Vinnikov, Dmitri** 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) 2022 / p. 372-376 <https://doi.org/10.1109/SPEEDAM53979.2022.9842131>

Three-phase bidirectional isolated AC-DC matrix-converter with full soft-switching range

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Three-phase four wire high-frequency link converter for residential DC grids

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