

Accuracy analysis of dual active bridge simulations under different integration methods

Arena, Gabriele; **Vinnikov, Dmitri; Chub, Andrii**; de Carne, Giovanni 2022 AEIT International Annual Conference (AEIT) : October 3-5, 2022 2022 / p. 1-6 <https://doi.org/10.23919/AEIT56783.2022.9951711>

A benchmark of DC-DC converters for DC fast charging stations of electric vehicles

Mathew, Honey Mol; Arena, Gabriele; **Chub, Andrii**; De Carne, Giovanni; **Vinnikov, Dmitri**; Lukianov, Mykola 2024 9th IEEE Workshop on the Electronic Grid (eGRID) 2024 / 6 p <https://doi.org/10.1109/eGRID62045.2024.10842879>

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

Emiliani, Pietro; Blinov, Andrei; Chub, Andrii; de Carne, Giovanni; **Vinnikov, Dmitri** IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / 5 p <https://doi.org/10.1109/IECON49645.2022.9968735> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A comprehensive review on DC fast charging stations for electric vehicles: standards, power conversion technologies, architectures, energy management, and cybersecurity

Arena, Gabriele; **Chub, Andrii**; Lukianov, Mykola; Strzelecki, Ryszard; **Vinnikov, Dmitri**; de Carne, Giovanni IEEE open journal of power electronics 2024 / p. 1573-1611 <https://doi.org/10.1109/OJPEL.2024.3466936> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A coupled inductor-based SSCB with reduced components for DC microgrid protection

Pithanisetty, Prasanth; Dsa, Daniel; Banavath, Satish Naik; **Carvalho, Edivan Laercio**; De Carne, Giovanni; **Vinnikov, Dmitri** IEEE transactions on power electronics 2025 / p. 11428-11441 <https://doi.org/10.1109/TPEL.2025.3551740> [Article at Scopus](#)

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 p <https://doi.org/10.1109/PEDG54999.2022.9923256>

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

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Emiliani, Pietro; de Carne, Giovanni; **Vinnikov, Dmitri** IEEE open journal of power electronics 2022 / p. 798-823 <https://doi.org/10.1109/OJPEL.2022.3217741> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Emiliani, Pietro; Blinov, Andrei; de Carne, Giovanni; Arena, Gabriele; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227405>

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

Emiliani, Pietro; Blinov, Andrei; de Carne, Giovanni; Arena, Gabriele; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227416>