

Adaptive frequency-based power management for off-grid hybrid photovoltaic converters

Gonschorowsk, Ezequiel; Cardoso, Rafael; **Carvalho da Silva, Edivan Laercio**; Stein, Carlos Marcelo De Oliveira; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric Eletronica de potencia 2024 / art. e202440
<https://doi.org/10.18618/REP.e202440>

Analysis of the use of supercapacitors and batteries as energy storage elements for off-grid hybrid photovoltaic inverters

Gonschorowski, E.; Cardoso, Rafael; **Carvalho da Silva, Edivan Laercio**; de Oliveira Stein, Carlos Marcelo; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric 2023 IEEE 8th Southern Power Electronics Conference and 17th Brazilian Power Electronics Conference (SPEC/COBEP) 2023 / 7 p <https://doi.org/10.1109/SPEC56436.2023.10407182>

Distributed price-based power management for multibuses DC nanogrids EEMS

Carvalho da Silva, Edivan Laercio; Bellinaso, Lucas V.; Cardoso, Rafael; Michels, Leandro IEEE journal of emerging and selected topics in power electronics 2022 / p. 5509-5521 <https://doi.org/10.1109/JESTPE.2022.3152101> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extended ZVS-On/ZCS-Off range for CF-DAB converter under DCM operation for residential energy storage systems

Carvalho da Silva, Edivan Laercio; Cardoso, Rafael; Felipe, Carla Aparecida; Stein, Carlos Marcelo De Oliveira; Bellinaso, Lucas Vizzotto; Michels, Leandro; **Vinnikov, Dmitri** IEEE Access 2023 / p. 119231-119243 <https://doi.org/10.1109/ACCESS.2023.3327219> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hybrid inverter and control strategy for enabling the PV generation dispatch using extra-low-voltage batteries

Meneghetti, Luiz Henrique; **Carvalho da Silva, Edivan Laercio**; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric; de Oliveira Stein, Carlos Marcelo; Cardoso, Rafael Energies 2022 / art. 7539 <https://doi.org/10.3390/en15207539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

MPC based power management for off-grid photovoltaic hybrid inverters using Li-ion batteries and supercapacitors

Gonschorowski, E.; Cardoso, Rafael; **Carvalho, Edivan Laercio**; de Oliveira Stein, Carlos Marcelo; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144663> [Conference at Scopus](#)