

DC voltage sensorless predictive control of a high-efficiency PFC single-phase rectifier based on the versatile buck-boost converter

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Holistic cyber-physical approach for the performance evaluation of communication and control systems in DC microgrids

Véliz, Antonio; Contreras, René; Riffo, Sebastián; Restrepo, Carlos; Garcés-Ruiz, Alejandro; **Chub, Andrii**; González-Castaño, Catalina; Flores-Bahamonde, Freddy IEEE journal of emerging and selected topics in power electronics 2025
<https://doi.org/10.1109/JESTPE.2025.3564851> <https://ieeexplore.ieee.org/document/10977842>

An MPPT algorithm for PV systems based on a simplified photo-diode model

Restrepo, Carlos; Gonzalez-Castano, Catalina; Munoz, Javier; **Chub, Andrii**; Vidal-Idiarte, Enric; Giral, Roberto IEEE Access 2021 / p. 33189-33202 <https://doi.org/10.1109/ACCESS.2021.3061340> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review of communication protocols and control strategies in DC microgrids : an experimental validation focus

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