

Enhancing grid-forming converters control in hybrid AC/DC microgrids using bidirectional virtual inertia support

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Abid, Abderahmane; Zaid, Sherif A.; Alghamdi, T. A. H.; Salama, Hossam S.

Processes 2024 / art. 139 <https://doi.org/10.3390/pr12010139> <https://www.mdpi.com/2227-9717/12/1/139/htm> [Journal metrics at Scopus](#)
[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Model-free predictive control for improved performance and robustness of three-phase quasi Z-source inverters

Abid, Abderahmane; **Bakeer, Abualkasim Ahmed Ali;** Albalawi, Hani; Bouzidi, Mansour; Lashab, Abderezak; **Chub, Andrii;** Zaid,

Sherif A. IEEE Access 2024 / p. 87850-87863 <https://doi.org/10.1109/ACCESS.2024.3417397> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimized modulation scheme for four-leg quasi Z-source inverter : reducing power loss and improving output quality

Abid, Abderahmane; **Bakeer, Abualkasim Ahmed Ali;** Albalawi, Hani; Zellouma, Laid; Bouzidi, Mansour; Lashab, Abderezak;

Rabhi, Boualaga; **Chub, Andrii** IEEE Access 2023 / p. 94125-94137 <https://doi.org/10.1109/ACCESS.2023.3305263> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Robust operation of four-leg voltage source inverter using model-free predictive control

Bakeer, Abualkasim Ahmed Ali; Abid, Abderahmane; Albalawi, Hani A.; Magdy, Gaber; **Chub, Andrii;** Zaid, Sherif A. Journal of

Electrical Engineering & Technology 2025 / p. 685-702 <https://doi.org/10.1007/s42835-024-02018-z>