

Application of hysteresis voltage control for three-level neutral point clamped voltage source inverter

Kolmakov, Nikolay; Bakhovtsev, Igor A.; **Jalakas, Tanel** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon) 2015 / p. 195-198 : ill

Impedance network impact on the controller design of the QZSI for PV applications

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Liivik, Elizaveta**; Blaabjerg, Frede 2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL), Aalborg, Denmark, November 9-12, 2020 2020 / 6 p
<https://doi.org/10.1109/COMPEL49091.2020.9265708>

MPPT and GMPPT Implementation for Buck-Boost Mode Control of quasi-Z-Source Inverter

Husev, Oleksandr; **Vinnikov, Dmitri**; Roncero-Clemente, Carlos; Blaabjerg, Frede; Strzelecki, Ryszard IEEE transactions on industrial electronics 2022 / p. 11348 - 11358 <https://doi.org/10.1109/TIE.2021.3125658> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel space vector pulse width modulation strategies for single-phase three-level NPC impedance-source inverters

Shults, Tatiana; **Husev, Oleksandr**; Blaabjerg, Frede; Roncero, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** IEEE transactions on power electronics 2019 / p. 4820-4830: ill <https://doi.org/10.1109/TPEL.2018.2859194> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance assessment of TSO-DSO using volt-var control at smart-inverters : case of Vestfold and Telemark in Norway

Astapov, Victor; Trashchenkov, Sergei; Gonzalez-Longatt, Francisco; Topic, Danijel International journal of electrical and computer engineering system 2022 / p. 48-61 <https://doi.org/10.32985/ijeces.13.1.6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review of technical solutions addressing voltage and operational challenges in a distribution grid with high penetration of intermittent RES

Astapov, Victor; Shabbir, Noman; Rosin, Argo; Kütt, Lauri; Maask, Vahur; Tiismus, Hans Energy reports 2025 / p. 1738-1760
<https://doi.org/10.1016/j.egyrs.2025.08.019>

Simulation of grid connected three-level neutral-point-clamped qZS inverter using PSCAD

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr**; **Vinnikov, Dmitri**; Stepenko, Serhii Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 14-19 : ill

The potential of distribution grid as an alternative source for reactive power control in transmission grid

Astapov, Victor; Divshali, Poria; Söder, Lennart 2018 19th International Scientific Conference on Electric Power Engineering (EPE 2018) : Brno, Czech Republic, 16-18 May, 2018 2018 / p. 64-69 : ill <https://doi.org/10.1109/EPE.2018.8396031>

Triple-Loop Control Configuration for Grid-Connected LCL-Filtered Inverters Based on Time-Domain Design

Elkayam, Moria Sassonker; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p. : ill <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227426>

Utilizing demand response in load modelling for voltage and reactive power control studies

Drovtar, Imre; **Leinakse, Madis**; Tuttelberg, Kaur; Kilter, Jako IEEE transactions on power systems 2024 / 12 p
<https://doi.org/10.1109/TPWRS.2024.3425157>

Utility-scale energy storage systems : converters and control

Stynski, Sebastian; Luo, Wensheng; **Chub, Andrii**; **Vinnikov, Dmitri** IEEE industrial electronics magazine 2020 / p. 32-52
<https://doi.org/10.1109/IE.2020.3011655> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Voltage and reactive power control in islanded microgrids without communication link

Armstorfer, Andreas; Biechl, Helmuth; **Rosin, Argo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/BEC49624.2020.9277219>