

Code development of a DSP-FPGA based control platform for power electronics applications

Minambres-Marcos, Victor; **Roasto, Indrek**; Szczepankowski, P.; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Barrero-Gonzalez, Fermin 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2890-2895 : ill <https://doi.org/10.1109/ICIT.2015.7125524> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

An economical optimization for the participation of a residential microgrid in flexibility markets providing ancillary services

Alvi, Anas Abdullah; Gonzalez-Romera, Eva; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Milanes-Montero, Maria Isabel; Barrero-Gonzalez, Fermin 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604394>

Experimental evaluation of a new carrier-based modulation method for a three-level T-type quasi-impedance-source inverter

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; Barrero-Gonzalez, Fermin; **Husev, Oleksandr**; **Gonzalez-Romera, Eva**; **Milanes-Montero, Maria Isabel** IET power electronics 2022 / p. 337-348 <https://doi.org/10.1049/pel2.12234> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility study of three-phase modular converter for dual-purpose application in DC and AC microgrids

Roncero-Clemente, Carlos; **Husev, Oleksandr**; **Matiushkin, Oleksandr**; Gutierrez-Escalona, Javier; Barrero-Gonzalez, Fermin; **Vinnikov, Dmitri**; Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2024 / p. 1348-1358 <https://doi.org/10.1109/JESTPE.2023.3247960> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Grid-connected single-phase 3L-T-type qZS inverter for renewable energy

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Ruiz-Cortes, Mercedes; Romero-Cadaval, Enrique; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5003-5007 : ill <https://doi.org/10.1109/IECON.2019.8926888> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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Roncero-Clemente, Carlos; **Husev, Oleksandr**; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva; Milanes-Montero, Maria Isabel; Romero-Cadaval, Enrique 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 114-119 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161512>

Improvements on the carrier-based control method for a three-level T-type, quasi-impedance-source inverter

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Model-free deep reinforcement learning-based current control for the dual-purpose dc-dc/ac power converter

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr**; **Matiushkin, Oleksandr**; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604305>

Quasi-Z source T-type power converter for PV based commercial and industrial nanogrids with active functions strategy

Barrero-Gonzalez, Fermin; Roncero-Clemente, Carlos; Milanes-Montero, Maria Isabel; Gonzalez-Romera, Eva; Romero-Cadaval, Enrique; **Husev, Oleksandr** Electronics 2020 / art. 1233, 18 p. : ill <https://doi.org/10.3390/electronics9081233> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-phase power electronics transformer with active functions for smart grid

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Three-level T-type qZ source inverter as grid-following unit for distributed energy resources

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr**; Barrero-Gonzalez, Fermin; Llor, Ana M.; Fernao Pires, Vitor IEEE journal of emerging and selected topics in power electronics 2022 / p. 7772-7785 <https://doi.org/10.1109/JESTPE.2022.3193258> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)