

About possibility of improvement of energetic characteristics of two-stage DC/DC converter with separated commutation
Ivakhno, Volodymyr; Zamaruev, Vladimir; Lastovka, A.; **Blinov, Andrei; Vinnikov, Dmitri** Технічна електродинаміка 2011 / p. 88-92
: ill

AC-DC converter with parametric reactive power compensation

Janson, Kuno; Järvik, Jaan Special Edition of IEEE Transactions on Industrial Electronics on High Power Factor Rectifiers 1997 / [18] p <https://ieeexplore.ieee.org/document/767062>

Active front end converters with voltage balancing capability

Verbytskyi, Ievgen; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Kyselova, Anna 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p
<https://doi.org/10.1109/RTUCON62997.2024.10830902>

An indirect model predictive current control (CCS-MPC) for grid-connected single-phase three-level NPC quasi-Z-source PV inverter

Pires Pimentel, Sergio 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 29-30 : ill
https://www.ester.ee/record=b5183874*est

Analysis and comparison of high-frequency link converter topologies

Korkh, Oleksandr 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 156-161 : ill
http://ise.elnet.ee/record=b2950098~S2*est

Analysis of oscillation suppression methods in the AC-AC stage of high frequency link converters

Korkh, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 5 p. : ill
<https://doi.org/10.1109/RTUCON48111.2019.8982259>

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

Artificial Intelligence in the hierarchical control of ac, dc and hybrid ac/dc microgrids : A review

Gutiérrez-Escalona, J.; Roncero-Clemente, C.; **Husev, Oleksandr; Matiushkin, Oleksandr**; Blaabjerg, Frede IEEE Access 2024 / p. 157227-157246 <https://doi.org/10.1109/ACCESS.2024.3486382> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Asymmetrical PWM control of galvanically isolated impedance-source series resonant DC-DC converters

Vinnikov, Dmitri; Zakis, Janis; Chub, Andrii; Liivik, Elizaveta 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 341-346 : ill <https://doi.org/10.1109/CPE.2016.7544211>

Bidirectional soft-switching dc-dc converter for battery energy storage systems

Blinov, Andrei; Kosenko, Roman; Chub, Andrii; Vinnikov, Dmitri IET power electronics 2018 / p. 2000-2009 : ill
<https://doi.org/10.1049/iet-pel.2018.5054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Carrier based modulation with capacitor balancing for three-level neutral-point-clamped qZS inverter

Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Husev, Oleksandr; Vinnikov, Dmitri** 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 57-62 : ill <http://dx.doi.org/10.1109/CPE.2015.7231049>

Circuit diagrams of AC-DC line-frequency resonant converters with alternation of parallel and series resonant mode

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5th International Conference : Electrical Power Quality and Utilisation : September 15-17, 1999, Cracow, Poland : EPQU'99 : proceedings 1999 / p. 479-484 : ill

Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; **Husev, Oleksandr**; Lytvyn, Oksana; **Matiushkin, Oleksandr** Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CM voltage compensator for DC/DC converters [Electronic resource]

Smolenski, Robert; Jamut, Marcin; Bojarski, Jacek; **Blinov, Andrei; Vinnikov, Dmitri** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 264-268 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6601167>

Comparative analysis of qZS-based bidirectional DC-DC converter for storage energy application

Matiushkin, Oleksandr; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; Kroics, Kaspars; Veligorskyi, Oleksandr; Zakis, Janis Technological Innovation for Smart Systems : 8th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2017, Costa de Caparica, Portugal, May 3–5, 2017 : proceedings 2017 / p. 409-418
http://dx.doi.org/10.1007/978-3-319-56077-9_40

Comparative evaluation of common-ground converters for dual-purpose application

Hemmati Shahsavari, Tala; Rahimpour, Saeed; Vosoughi Kurdkandi, Naser; Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri** Energies 2023 / art. 2977 <https://doi.org/10.3390/en16072977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison and verification of boost control methods for full soft-switching bidirectional current-fed isolated full-bridge DC-DC converter [Online resource]

Kosenko, Roman; Chub, Andrii; Blinov, Andrei 2016 II International Young Scientists Forum on Applied Physics and Engineering (YSF-2016) : forum proceedings 2016 / p. 6-9 : ill <https://doi.org/10.1109/YSF.2016.7753748>

Comparison of impedance-source networks for two and multilevel buck-boost inverter applications

Husev, Oleksandr; Blaabjerg, Frede; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Siwakoti, Yam P.; Strzelecki, Ryszard IEEE transactions on power electronics 2016 / p. 7564-7579 : ill <https://doi.org/10.1109/TPEL.2016.2569437> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of isolated boost full bridge converters for power factor correction application

Zinchenko, Denys; Blinov, Andrei; Vinnikov, Dmitri 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 7 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982361>

Comparison of three MPPT algorithms for three-level neutral-point-clamped qZ-Source inverter [Electronic resource]

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Minambres-Marcos, Victor; **Stepenko, Serhii**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 80-85 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6601133>

Concept of universal AC/DC-DC EV onboard battery charger with minimal redundancy and high-power density

Mohseni, Parham 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 73-74 : ill https://www.ester.ee/record=b5504019*est

Configurable PCB to teach DC-DC converters in power electronics

Roasto, Indrek 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 19-20 : ill https://www.ester.ee/record=b5291755*est

Control scheme of a Three-Phase Three-Level NPC qZ-Source inverter with LCL filter for RES applications

Roncero-Sanches, Pedro; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr; Makovenko, Elena** Proceedings of the IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society : Florence, Italy, October 24-27 2016 2016 / p. 6540-6547 <https://doi.org/10.1109/IECON.2016.7793338> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Current sensorless control for half-bridge based AC/DC PFC converter with consideration of conduction losses

Suzdalenko, Alexander; **Chub, Andrii** International journal of circuit theory and applications 2016 / p. 2072-2084 : ill <https://doi.org/10.1002/cta.2212> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Damping characteristics of interconnected power systems with wind-photovoltaic-thermal-bundled power transmitted by AC/DC systems

He, Ping; Li, Zhao; Zheng, Mingming; **Wen, Fushuan**; Ji, Yugi; Wu, Xinxin Journal of energy engineering 2021 / p. 04021029-1-04021029-10 : ill [https://doi.org/10.1061/\(ASCE\)EY.1943-7897.0000765](https://doi.org/10.1061/(ASCE)EY.1943-7897.0000765) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DC grid interface converter based on three-phase isolated matrix topology with phase-shift modulation

Emiliani, Pietro; Blinov, Andrei; Chub, Andrii; de Carne, Giovanni; **Vinnikov, Dmitri** 2022 IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 l. <https://doi.org/10.1109/PEDG54999.2022.9923256>

Digital control strategy for interleaved quasi-Z-source inverter with active power decoupling

Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Makovenko, Elena** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 3725-3730 : ill

Dimmable LED drivers operating in discontinuous conduction mode

Tetervenk, Oleg; **Milaševski, Irena** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 27-33 : ill

Dual-Mode magnetically integrated photovoltaic microconverter with adaptive mode change and global maximum power point tracking

Mashinchii Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Rosin, Argo; Babaei, Ebrahim IET renewable power generation 2021 / p. 86-98 <https://doi.org/10.1049/rpg2.12007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Dual-purpose converters for DC or AC grid as energy transition solution : perspectives and challenges

Husev, Oleksandr; Vinnikov, Dmitri; Kouro, Samir; Blaabjerg, Frede; Roncero-Clemente, Carlos IEEE industrial electronics magazine 2024 / p. 46-57 <https://doi.org/10.1109/MIE.2022.3230219> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Editorial : special issue on impedance-source converter topologies and applications

Vinnikov, Dmitri; Li, Yuan; Abu-Rub, Haitham IEEE Transactions on Power Electronics 2016 / p. 7417-7418 <https://doi.org/10.1109/TPEL.2016.2577418> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Efficiency improvement from topology modification of the single-switch isolated quasi-Z-source DC-DC converter [Online resource]

Liivik, Elizaveta; Chub, Andrii; Vinnikov, Dmitri 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [7] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763118>

Efficiency improvement of step-up series resonant DC-DC converter in buck operating mode

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316574>

Efficiency study of the single-phase solar qZS-based inverter

Husev, Oleksandr; Stepenko, Serhii; Vinnikov, Dmitri; Roncero, Carlos; Santasheva, Elena; Romero-Cadaval, Enrique IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 4399-4404 <https://doi.org/10.1109/IECON.2019.8926655> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

EV battery charging converters with wide output DC voltage range

Nadeem, Mohammad Mahad; Blinov, Andrei; Vinnikov, Dmitri 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10412960>

Evaluation of GaN HEMTs for high-voltage stage of isolated DC-DC converters

Chub, Andrii; Zdanowski, Mariusz; Blinov, Andrei; Rabkowski, Jacek 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 375-379 : ill <https://doi.org/10.1109/CPE.2016.7544217>

Experimental efficiency and thermal parameters evaluation in Full-SiC Quasi-Z-Source inverter

Pimentel, Sergio Pires; Husev, Oleksandr; Vinnikov, Dmitri; Pires Pimentel, Sergio; Prystupa, Anatoliy 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982288>

Experimental verification of two-stage power converter with current-fed soft-switching front-end for battery storage applications

Kosenko, Roman; Blinov, Andrei; Korkh, Oleksandr 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 1599-1608 : ill <https://ieeexplore.ieee.org/document/8515580>

Fault-tolerant approach for photovoltaic module-level power electronic applications

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Malinowski, Mariusz 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 438-444 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161599>

Fault-tolerant high step-up DC-DC converters

Chub, Andrii 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 67-68 : ill https://www.ester.ee/record=b5291755*est

FCB-MPC-based cycle skipping control for soft-switched isolated AC-DC converter with reduced inductors in PFC stage

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald; Kurdkandi, Naser Vosoughi 2025 IECON – 51st Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <http://doi.org/10.1109/IECON58223.2025.11221499>

Feasibility study of cascading of full soft-switching current-fed naturally clamped DC-DC converters

Kosenko, Roman; Chub, Andrii; Blinov, Andrei 2016 10th International Conference on Compatibility, Power Electronics and

Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 384-389 : ill <https://doi.org/10.1109/CPE.2016.7544219>

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](#)

Four level inverter's DC bus voltage balancing with 3-Terminal DAB converter

Grabarek, Maciej; Strzelecki, Ryszard; Tomasov, Valentin S.; **Vinnikov, Dmitri** 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 396-401 : ill <https://doi.org/10.1109/CPE.2016.7544221>

Full soft-switching bidirectional isolated current-fed dual inductor push-pull DC-DC converter for battery energy storage applications [Online resource]

Kosenko, Roman; Zakis, Janis; Blinov, Andrei; Chub, Andrii; Veligorskyi, Oleksandr 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon) : October 13, 14, 2016 : conference proceedings 2016 / [8] p. : ill <https://doi.org/10.1109/RTUCon.2016.7763138>

Full-soft-switching high step-up bidirectional isolated current-fed push-pull DC-DC converter for battery energy storage applications [Online resource]

Kosenko, Roman; Chub, Andrii; Blinov, Andrei Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics Society : Florence (Italy), October 24-27, 2016 2016 / p. 6548-6553 : ill <https://doi.org/10.1109/IECON.2016.7794014>
[Conference Proceedings at Scopus](#) [Article at scopus](#) [Article at WOS](#)

High power factor AC-DC diode interfaces for drive systems with a voltage-source inverter using optimum re-rectification of the ripple power

Sakkos, Tiiu; Sarv, Vello ELECTROMOTION '99 : 3rd International Symposium on Advanced Electromechanical Motion Systems : July 8-9, 1999, Patras, Greece : proceedings. Vol. II 1999 / p. 619-624 : ill

High power factor AC-DC line-frequency resonant converter for deeply varying loads

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5 Congresso Brasileiro de Eletronica de Potencia = The 5th Brazilian Power Electronics Conference : COBEP99 : Foz do Iguagu, Parana, Brasil, 19 a 23 de setembro de 1999. Vol. 1 1999 / p. 423-428

Higher harmonics in AC-DC line-frequency resonant converter for deeply varying loads

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Electric Power Quality and Supply Reliability : June 9-12, 1999, Sagadi, Estonia : conference proceedings 1999 / p. 96-101: ill

Higher harmonics in load-adapting mains Frequency resonant converter

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 8th International Conference on Harmonics and Quality of Power, October 14-16, 1998, Athens, Greece : proceedings. Vol. 2 1998 / p. 859-864: ill <https://ieeexplore.ieee.org/document/760155>

Hysteresis current control with distributed shoot-through states for impedance source inverters

Husev, Oleksandr; Chub, Andrii; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Vinnikov, Dmitri** International journal of circuit theory and applications 2016 / p. 783-797 : ill <https://doi.org/10.1002/cta.2106> [Journal metrics at Scopus](#) [Article at Scopus](#)
[Journal metrics at WOS](#) [Article at WOS](#)

Impact of voltage instrument transformers on the accuracy of harmonic measurements in a 330 kV transmission grid

Meyer, Jan; Stiegler, Robert; Schegner, Peter; **Kilter, Jako** Instrument Transformer Measurement Forum (ITMF) : October 13-15, 2015, Feldkirch, Austria 2015

Improved modulation method for full-bridge AC-DC HF-link converter

Blinov, Andrei; Korkh, Oleksandr; Chub, Andrii; Vinnikov, Dmitri 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 1173-1177 : ill <https://doi.org/10.1109/ICIT45562.2020.9067128> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Input-parallel output-series cascading possibilities of single-switch galvanically isolated quasi-Z-source DC-DC converters

Liivik, Elizaveta; Chub, Andrii; Vinnikov, Dmitri 2016 2nd International Conference on Intelligent Energy and Power Systems (IEPS) : Kyiv, Ukraine, June 7-11, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/IEPS.2016.7521873>

Interleaved quasi-Z-source inverter with active power decoupling for kW-scale PV applications

Stepenko, Serhii 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 71-72 : ill https://www.ester.ee/record=b5183874*est

Load adapting mains frequency resonant converters for supplying electrical arc - a new way in power electronics

Janson, Kuno; Järvi, Jaan PESC '98 : Record of the 29th Annual IEEE Power Electronics Specialists Conference, Fukuoka, Japan, May 17-22, 1998. Vol. 2 1998 / p. 2090-2096: ill <https://ieeexplore.ieee.org/document/703468>

Modified inductive multi-coil wireless power transfer approach based on Z-source network

Pakhaliuk, Bohdan; Husev, Oleksandr; Shevchenko, Viktor; Zakis, Janis; Khomenko, Maksym; Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2021 / p. 4906-4917: ill <https://doi.org/10.1109/JESTPE.2020.3041565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modular MV naturally balanced converter with high-frequency isolation and no DC-Link capacitor for EV fast charging

Blinov, Andrei; Chub, Andrii; Guler, Naki; Bayhan, Sertac; Parsa, Leila; **Vinnikov, Dmitri** IEEE Transactions on Transportation Electrification 2024 / 9 p <https://doi.org/10.1109/TTE.2024.3399329>

Multicell-type current regulator based on Cuk converter for resistance welding

Verbytskyi, Ievgen; Bondarenko, Oleksandr; Vinnikov, Dmitri 2017 IEEE 58th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings : Latvia, Riga, 12-13 October, 2017 2017 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2017.8124844>

Multiphase interleaved DC-DC converter with directly and inversely coupled inductors [Online resource]

Kroics, Kaspars; Zakis, Janis; Sirmelis, Ugis 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763102>

New active clamp circuit for current-fed galvanically isolated DC/DC converters [Electronic resource]

Zakis, Janis; Vinnikov, Dmitri; Kolosov, Valery; Vasechko, Evgen CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 353-358 : ill [CD-ROM]

New hysteresis current control for grid connected single-phase three-level quasi-Z-source inverter

Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique APEC 2014 : Twenty-Ninth Annual IEEE Applied Power Electronics Conference and Exposition : March 16–20, 2014, Fort Worth Convention Center - Fort Worth, Texas 2014 / p. 1765-1770 : ill <https://doi.org/10.1109/APEC.2014.6803544> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

New interleaved single-phase quasi-Z-source inverter with active power decoupling

Stepenko, Serhii; Roncero-Clemente, Carlos; **Husev, Oleksandr; Makovenko, Elena;** Pires Pimentel, Sergio; **Vinnikov, Dmitri** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 437-442 : ill <https://doi.org/10.1109/CPE.2018.8372558>

New theoretical approach to input current shaping in ac-dc power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Vinnal, Toomas; Järvi, Jaan Proceedings of 5th International Conference 2007 : Compatibility in Power Electronics : 29 May - 1 June 2007, Gdynia, Poland 2007 / [8] p. : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4296517>

Novel family of single-phase modified impedance-source buck-boost multilevel inverters with reduced switch count

Husev, Oleksandr; Strzelecki, Ryszard; Blaabjerg, Frede; Chopyk, Vasily; **Vinnikov, Dmitri** IEEE transactions on power electronics 2016 / p. 7580-7591 : ill <https://doi.org/10.1109/TPEL.2016.2569535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel family of universal DC-DC/AC converters

Husev, Oleksandr 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 31-32 : ill https://www.ester.ee/record=b5291755*est

Online learning-based coordination control of the interlinking converter in hybrid ac/dc microgrid

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Matiushkin, Oleksandr;** Romero-Cadaval, Enrique; Gonzalez-Romera, Eva; Martins, Joao 2025 IECON – 51st Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <http://doi.org/10.1109/IECON58223.2025.11221287>

Overcoming EMI problems in the high-power high-frequency DC/DC converters - a case study

Vinnikov, Dmitri; Laugis, Juhan Технічна електродинаміка 2006 / 5, p. 33-37 : ill

Overview of single-stage isolated AC-DC topologies for interfacing DC and AC grids

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 p. <https://doi.org/10.1109/PEDG54999.2022.9923249>

Peculiarities of multilevel power electronic converters for interfacing battery energy storages with AC loads

Bubovich, Alexander; Vorobyov, Maxim; Blinov, Andrei; Peftitsis, Dimosthenis IEEE 8th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE) 2021 / p. 1-4 <https://doi.org/10.1109/AIEEE51419.2021.9435798>

Performance improvement of PWM control methods for voltage step-down in series resonant DC–DC converters

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri Energies 2020 / art. en13174569 ; 18 p <https://doi.org/10.3390/en13174569> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

PV module level DC-DC converters with wide input voltage regulation range - implementation challenges and application benefits

Chub, Andrii 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 25-26 : ill https://www.ester.ee/record=b5183874*est

PWM for single phase 3L Z/qZ-Source inverter with balanced power losses

Roncero-Clemente, Carlos; **Husev, Oleksandr; Jalakas, Tanel**; Romero-Cadaval, Enrique; **Zakis, Janis**; Minambres-Marcos, Victor Elektronika ir elektrotehnika = Electronics and electrical engineering 2014 / p. 71-76 : ill <https://doi.org/10.5755/j01.eee.20.6.7270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Quadratic boost A-source impedance network

Siwakoti, Yam P.; **Blaabjerg, Frede; Chub, Andrii; Vinnikov, Dmitri** ECCE 2016 : IEEE Energy Conversion Congress & Expo : September 18-22, Milwaukee, WI : proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/ECCE.2016.7855374>

Realisation of a serial correction procedure for the output signal of an electromagnetic flow transducer

Toomet, Madis Analysis and synthesis of complicated systems and circuits with the aid of computers 1989 / p. 59-67

Reconfigurable three-switch leg multi-port boost inverters with novel modulation schemes for hybrid DC/AC microgrid systems

Reddy, M. Rama Narayana; Reddy, B. Dastagiri; Prabhakaran, Prajof; **Chub, Andrii**; Kouro, Samir IEEE Access 2025 / p. 77124-77146 <https://doi.org/10.1109/ACCESS.2025.3565791> <https://ieeexplore.ieee.org/document/10980297>

Research development of bidirectional DC-DC/AC converter

Matiushkin, Oleksandr 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 128-130 : ill https://www.ester.ee/record=b5291755*est

A review of hybrid converter topologies

Afshari, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri Energies 2022 / art. 9341 <https://doi.org/10.3390/en15249341> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review on the control strategies of hybrid nanogrid

Najafzadeh, Mahdiyyeh 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 143-144 : ill https://www.ester.ee/record=b5291755*est

Single phase three-level neutral-point-clamped quasi-Z-source inverter

Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Stepenko, Serhii IET power electronics 2015 / p. 1-10 : ill <https://doi.org/10.1049/iet-pel.2013.0904> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-phase string solar qZS-based inverter: example of multi-objective optimization design

Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Chub, Andrii**; Romero-Cadaval, Enrique IEEE transactions on industry applications 2021 / p. 3120-3130 : ill <https://doi.org/10.1109/TIA.2020.3034292> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-switch galvanically isolated step-up DC-DC converter for residential photovoltaic applications [Online resource]

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics Society : Florence (Italy), October 24-27, 2016 2016 / p. 6578-6582 : ill <https://doi.org/10.1109/IECON.2016.7793776> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Small signal modeling of interleaved quasi-z-source inverter with active power decoupling circuit

Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Makovenko, Elena; Vinnikov, Dmitri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659903>

Snubberless boost full-bridge converters: analysis of soft switching performance and limitations

Blinov, Andrei; Kosenko, Roman; Chub, Andrii; Vinnikov, Dmitri International journal of circuit theory and applications 2019 / p. 1-25 : ill <https://doi.org/10.1002/cta.2626> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Steady-state analysis of qZS-derived push-pull DC/DC converter with wide input voltage regulation range [Electronic

resource]

Husev, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri; Chub, Andrii CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 320-325 : ill [CD-ROM]

Stromrichter mit der parametrischen Blindleistungskompensation und Strombegrenzung (PKB-Stromrichter) - eine billige netzfreundliche Schaltung für die Gleichstrom-Lichtbogenöfen

Janson, Kuno; Järvik, Jaan 4. Internationaler Workshop Oberschwingungen und Flicker, 22.-24. März 1995 / Veranstalter: Institut für Elektrische Anlagen, Technische Universität Graz, Austria 1995 / Bl. [108-118]: Ill

Study methods of AC-DC line-frequency resonant converters with alternation of parallel and series resonant mode

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 5th International Conference : Electrical Power Quality and Utilisation : September 15-17, 1999, Cracow, Poland : EPQU'99 : proceedings 1999 / p. 475-478 : ill

Zero-current switching impedance-source DC-DC converter

Korkh, Oleksandr; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5051-5056 <https://doi.org/10.1109/IECON.2019.8927614> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Three-level three-phase quasi-Z-source neutral-point-clamped inverter with novel modulation technique for photovoltaic application

Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Vinnikov, Dmitri; Jalakas, Tanel Electric power systems research 2016 / p. 10-21 : ill <https://doi.org/10.1016/j.epsr.2015.08.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Three-mode reconfigurable rectifier for DC-DC converters with wide input voltage range

Chub, Andrii; Vinnikov, Dmitri; Kouro, Samir; Malinowski, Mariusz IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 4429-4435 <https://doi.org/10.1109/IECON.2019.8926994> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A three-phase full soft-switching current-fed naturally clamped DC-DC converter for high-power energy storage applications

Chub, Andrii; Kosenko, Roman; Blinov, Andrei 2016 2nd International Conference on Intelligent Energy and Power Systems (IEPS) : Kyiv, Ukraine, June 7-11, 2016 : conference proceedings 2016 / [5] p. : ill <https://doi.org/10.1109/IEPS.2016.7521884>

A three-phase full soft-switching current-fed naturally clamped DC-DC converter for high-power fuel cell applications

Kosenko, Roman; Chub, Andrii; Blinov, Andrei 2016 2nd International Conference on Intelligent Energy and Power Systems (IEPS) : Kyiv, Ukraine, June 7-11, 2016 : conference proceedings 2016 / [5] p. : ill <https://doi.org/10.1109/IEPS.2016.7521882>

Time dependency of current harmonics for switch-mode power supplies

Iqbal, Muhammad Naveed; Kütt, Lauri; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton; Demidova, Galina Applied sciences 2020 / art. 7806, 12 p. : ill <https://doi.org/10.3390/app10217806> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

TTÜ patendiportfell täienes : Tehnikülikool kaitses kahe leiutise patenti

Koppel, Mart Enn Äripäev 2007 / 19. märts, lk. 33 <https://www.aripeev.ee/uudised/2007/03/18/ttu-patendiportfell-taienes>

Universal interlinking converter for prosumer DC buildings : Operation with different DC grid types

Carvalho, Edivan Laercio; Mandrioli, Riccardo; Pittala, Lohith Kumar; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144648> [Conference at Scopus](#)

Utilization of electric vehicles connected to distribution substations for peak shaving of utility network loads

Mägi, Marek Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 47-54 : ill

Wide input voltage range operation of the series resonant DC-DC converter with bridgeless boost rectifier

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri; Rosin, Argo Energies 2020 / p. 4220-4237 <https://doi.org/10.3390/en13164220> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Voltage control tuning of a single-phase grid-Connected 3L qZS-based inverter for PV application

Pires Pimentel, Sergio; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Makovenko, Elena 2018 IEEE 38th International Conference on Electronics and Nanotechnology (ELNANO 2018) : Kyiv, Ukraine, 24-26 April 2018 2018 / p. 692-698 : ill <https://doi.org/10.1109/ELNANO.2018.8477438>

Voltage step-down methods for series resonant DC-DC converters

Sidorov, Vadim 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 141-142 : ill https://www.ester.ee/record=b5291755*est

Voltage step-up PWM methods for series resonant DC-DC converter

Bakeer, Abualkasim Ahmed Ali 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 123-124 : ill
https://www.ester.ee/record=b5291755*est

Источник стабилизированного тока для многократного анодного окисления полупроводников

Gavrilov, Aleksei; Košelap, Andrei Электрофизические свойства полупроводниковых и диэлектрических материалов 1988 / с. 94-99

Патент N 2033682 на изобретение (Российская Федерация) : Преобразователь переменного напряжения в переменное со ступенчатым регулированием : зарегистрировано в Государственном реестре изобретений 20 апреля 1995 г. RU 2033682 C1

Vinnal, Toomas; Janson, Kuno; Järvik, Jaan 1995

Преобразователи тока индукционного типа для систем регулирования и защиты тиристорных преобразователей

Kõnnusaar, Kalju; Matšak, A. Тезисы докладов республиканской научно-технической конференции, посвященной Дню радио, Таллин, 1977 1977 / с. 42 https://www.ester.ee/record=b1313776*est