

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.eester.ee/record=b5291755*est

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 activ 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.eester.ee/record=b5183874*est

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

Janson, Kuno; Järvik, 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

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.eester.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.eester.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 (RTU CON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUON.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]: III

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.aripaev.ee/uudised/2007/03/18/ttu-patendiportfell-taienes>

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