

A MPPT control method for full soft-switching high step-up current-fed DC-DC converter

Kosenko, Roman; Roasto, Indrek 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 199-203 : ill <https://ieeexplore.ieee.org/document/7343153>

A simple modular active power electronic transformer

Roasto, Indrek; Strzelecki, Ryszard Proceedings : 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE) : Grand Cevahir Hotel and Convention Center, Istanbul, Turkey, 01-04 June, 2014 2014 / p. 1976-1980 : ill

Accelerated global MPPT for multimode series resonant DC-DC converter

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Florence, Italy, 14-16 July 2021 2021 <https://doi.org/10.1109/CPE-POWERENG50821.2021.9501077>

Active front-end DC grid-forming converter design with power balancing capability

Verbytskyi, Ievgen; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144688>

Active redundancy in fault tolerance : A modular switch level solution with synchronous switching

Shirodkar, Aditya; Banavath, Satish Naik; Chub, Andrii; Mandrioli, Riccardo; Ricco, Mattia 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144667> [Conference at Scopus](#)

Alalisvoolu tagasitulek - unistus või reaalsus?

Roasto, Indrek; Vinnikov, Dmitri; Blinov, Andrei; Chub, Andrii; Carvalho da Silva, Edivan Laercio Elektriala 2023 / lk. 22-25 : ill, portr https://www.ester.ee/record=b1240496*est

An improved high-power DC/DC converter for distributed power Generation [Electronic resource]

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel EPQU'09 : 10th International Conference on Electrical Power Quality and Utilisation : 15-17 September 2009, Lodz, Poland 2009 / [6] p. [CD-ROM]

An improved high-voltage IGBT-based half-bridge DC/DC converter for railway applications

Vinnikov, Dmitri; Laugis, Juhan COMPEL : The international journal for computation and mathematics in electrical and electronic engineering 2011 / p. 280-299 : ill <https://www.emerald.com/insight/content/doi/10.1108/03321641111091566/full/html>

An improved interface converter for a medium-power wind-hydrogen system

Vinnikov, Dmitri; Hõimoja, Hardi; Andrijanovič, Anna; Roasto, Indrek; Lehtla, Tõnu; Klytta, Marius 2nd International Conference on Clean Electrical Power Renewable Energy Resources Impact : Capri (Italy) June 9-11, 2009 2009 / p. 426-432 : ill <https://ieeexplore.ieee.org/document/5212019>

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 design of asymmetric quad-active-bridge converter

Chub, Andrii; Costa, Levy; Liserre, Marco IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society : proceedings : China National Convention Center, Beijing, China, 29. October - 01. November, 2017 2017 / p. 5367-5372 : ill <https://doi.org/10.1109/IECON.2017.8216930>

Analysis and evaluation of PWM and PSM shoot-through control methods for voltage-fed qZSI based DC/DC converters

Roasto, Indrek; Vinnikov, Dmitri EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T3-100 - T3-105

Analysis of a reconfigurable non-isolated DC-DC converter for DC microgrid applications

Yadav, Vinod Kumar; Chub, Andrii 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://ieeexplore.ieee.org/document/11144731> <https://doi.org/10.1109/ICDCM63994.2025.11144731>

Analysis of buck mode realization possibilities in quasi-Z-source DC-DC converters with voltage doubler rectifier

Zakis, Janis; Rankis, Ivars; Liivik, Liisa; Chub, Andrii 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 570-575 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266379>

Analysis of fault-tolerant operation capabilities of an isolated bidirectional current-source DC-DC converter

Blinov, Andrei; Kosenko, Roman; Chub, Andrii; Ivakhno, Volodymyr Energies 2019 / art. 3203, p. 14 : ill <https://doi.org/10.3390/en12163203> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of operating modes of the step-up DC/DC converter with a commutating LC-filter

Zakis, Janis; Rankis, Ivars; **Vinnikov, Dmitri** Технічна електродинаміка 2011 / p. 87-92 : ill

<https://ortus.rtu.lv/science/en/publications/11242>

Analysis of state-of-the-art converter topologies for interfacing of hydrogen buffer with renewable energy systems

Andrijanovičs, Anna; Steiks, Ingars; **Zakis, Janis**; **Vinnikov, Dmitri** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 87-94 : ill <https://ui.adsabs.harvard.edu/abs/2011SJRP...29...87A/abstract>

Analytical comparison between capacitor assisted and diode assisted cascaded quasi-Z-source inverters

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel; Strzelecki, Ryszard; Adamowicz, Marek Przegląd elektrotechniczny = Electrical review 2012 / p. 212-217 : ill

https://www.researchgate.net/publication/290652933_Analytical_comparison_between_capacitor_assisted_and_diode_assisted_cascaded_quasi-Z-source_inverters

Andrii Chub: teadustöö on põnevam kui töö ettevõttes

Chub, Andrii Mente et Manu 2022 / lk. 12-17 : fot https://www.ester.ee/record=b1242496*est

Application of an advanced repetitive controller to mitigate harmonics in MMC with APOD scheme

Madichetty, Sreedhar; Dasgupta, Abhijit; **Mishra, Sambeet**; Panigrahi, Chinmoy Kumar; Basha, Ghouse IEEE transactions on power electronics 2016 / p. 6112-6121 : ill <https://doi.org/10.1109/TPEL.2015.2501314> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Asymmetric snubberless current-fed full-bridge isolated DC-DC converters

Kosenko, Roman; **Blinov, Andrei**; **Vinnikov, Dmitri**; **Chub, Andrii** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 5-11 : ill <https://doi.org/10.2478/ecce-2018-0001>

Asymmetrical quasi-Z-source half-bridge DC-DC converters

Vinnikov, Dmitri; **Chub, Andrii**; **Liivik, Liisa** 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. 369-372 : ill <http://dx.doi.org/10.1109/CPE.2015.7231103>

Auxiliary voltage converter for Tallinn trams: stages of development

Vinnikov, Dmitri Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 19-24, 2004 2004 / p. 62-65 : ill

Bidirectional DC-DC converter for modular residential battery energy storage systems

Chub, Andrii; **Vinnikov, Dmitri**; **Kosenko, Roman**; **Liivik, Liisa**; Galkin, Ilja IEEE transactions on industrial electronics 2020 / p. 1944-1955 : ill <https://doi.org/10.1109/TIE.2019.2902828> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bidirectional DC-DC converter with extended ZVS/ZCS range for storage applications

Blinov, Andrei 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. 31-32 : ill https://www.ester.ee/record=b5183874*est

Bidirectional isolated current source DAB converter with extended ZVS/ZCS range and reduced energy circulation for storage applications

Blinov, Andrei; **Kosenko, Roman**; **Vinnikov, Dmitri**; Parsa, Leila IEEE transactions on industrial electronics 2020 / p. 10552-10563 <https://doi.org/10.1109/TIE.2019.2958291> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bidirectional isolated current-fed soft-switching secondary-modulated DC-DC converters = Isoleeritud kahesuunalised voolutoitelised pehmelülituse ja sekundaarmodulatsiooniga alalisvoolumuundurid

Kosenko, Roman 2019 <https://digi.lib.ttu.ee/11237>

Bidirectional isolated ZVS DC-DC converter with auxiliary active switch for high-power energy storage applications

Ivakhno, Volodymyr; Zamaruev, Volodymyr; Styslo, Bogdan; **Kosenko, Roman**; **Blinov, Andrei** 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 589-592 : ill <https://doi.org/10.1109/UKRCON.2017.8100315>

Bidirectional soft switching current source DC-DC converter for residential DC microgrids

Blinov, Andrei; **Kosenko, Roman**; **Chub, Andrii**; **Vinnikov, Dmitri** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6059-6064 : ill <https://doi.org/10.1109/IECON.2018.8591103>

Bidirectional soft-switching current-fed flyback converter with natural clamping for low voltage battery energy storage applications

Kosenko, Roman 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral

Bidirectional twisted single-stage single-phase buck-boost DC-AC converter

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; **Vinnikov, Dmitri;** Chopyk, Vasiliy Energies 2019 / art. 3505, 14 p. : ill <https://doi.org/10.3390/en12183505> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Block diagram modeling and simulation in a bond graph framework

Pastravanu, Adriana; Gogu, Mircea BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 221-224: ill

Boost half-bridge DC-DC converter with reconfigurable rectifier for ultra-wide input voltage range applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Siwakoti, Yam P. 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1528-1532 : ill
<https://doi.org/10.1109/APEC.2018.8341219> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Buck-boost unfold inverter as a novel solution for single-phase PV systems

Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Roncero, Carlos; Romero-Cadaval, Enrique; **Kütt, Lauri** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6116-6121 : ill
<https://doi.org/10.1109/IECON.2018.8592899>

CCM and DCM analysis of Quasi-Z-Source derived push-pull DC/DC converter

Chub, Andrii; Husev, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri Journal of microelectronics, electronic components and materials 2014 / p. 224-234 : ill [http://www.midem-drustvo.si/Journal%20papers/MIDEM_44\(2014\)3p224.pdf](http://www.midem-drustvo.si/Journal%20papers/MIDEM_44(2014)3p224.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterisation of 1200 V reverse-blocking IGBTs for naturally commutated HF-link inverter

Zinchenko, Denys; **Korkh, Oleksandr; Blinov, Andrei;** Waind, Peter; **Vinnikov, Dmitri** 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 382-387 : ill
<https://doi.org/10.1109/UKRCON.2019.8879900>

CMOS bandpass filters using immittance converters

Ööpik, Priit; Kukk, Vello BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 409-412: ill

Common-mode voltage analysis and reduction for the quasi-Z-source inverter with a split inductor

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Liivik, Elizaveta; Vinnikov, Dmitri;** Blaabjerg, Frede Applied sciences 2020 / art. 8713, 13 p. : ill <https://doi.org/10.3390/app10238713> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of boost and quasi-Z-source converters as maximum power point trackers for PV panel integrated converters

Zakis, Janis; Rankis, Ivars; Ribickis, Leonids Proceedings : 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE) : Grand Cevahir Hotel and Convention Center, Istanbul, Turkey, 01-04 June, 2014 2014 / p. 1991-1995 : ill

Comparative analysis of high power density bidirectional DC-DC converters for portable energy storage applications

Tytelmaier, Kostiantyn; Zakis, Janis; **Husev, Oleksandr; Vinnikov, Dmitri** Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 33-41 : ill <https://doi.org/10.5755/j01.eie.24.6.22287> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of semiconductor power losses of galvanically isolated quasi-Z-source and full-bridge boost DC-DC converters

Kosenko, Roman; Liivik, Liisa; Chub, Andrii; Velihorskyi, Oleksandr Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2015 / p. 5-12 : ill <https://doi.org/10.1515/ecce-2015-0001>

Comparative power quality analysis of right and left shunt UPQC topologies

Kumar, Pradeep; **Gupta, Pradeep Kumar** Proceedings of the International Conference on Systems, Control and Automation (ICSCA 2023) 2025 / p. 607-624 https://doi.org/10.1007/978-981-97-7384-8_52

Comparative study of capacitor-assisted extended boost qZSIs operating in continuous conduction mode

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 297-300 : ill

Comparative study of rectifier topologies for quasi-Z-source derived push-pull converter

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri Elektronika ir elektrotehnika = Electronics and electrical engineering 2014 / p. 29-34 : ill <https://doi.org/10.5755/j01.eie.20.6.7264> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of soft switching methods of DC-AC full bridge high-frequency link converter

Korkh, Oleksandr; Blinov, Andrei; Kosenko, Roman; 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.2018.8659898>

Comparison of the power losses in 1700V Si IGBT and SiC MOSFET modules including reverse conduction [Electronic resource]

Rabkowski, Jacek; Platek, Tadeusz EPE'15 ECCE Europe : 8-10 September 2015, Geneva, Switzerland : 17th European Conference on Power Electronics and Applications 2015 / [10] p. : ill. [USB] <http://dx.doi.org/10.1109/EPE.2015.7309444>

Comparison of voltage buck control methods for series resonant converter

Sidorov, Vadim 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 55-56 : ill https://www.ester.ee/record=b5457278*est

Compensation topologies in IPT Systems : standards, requirements, classification, analysis, comparison and application

Shevchenko, Viktor; Husev, Oleksandr; Strzelecki, Ryszard IEEE Access 2019 / art. 2937891, p. 120559–120580 : ill <https://doi.org/10.1109/ACCESS.2019.2937891> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comprehensive comparative analysis of impedance-source networks for DC and AC application

Husev, Oleksandr; Shults, Tatiana; Vinnikov, Dmitri; Chub, Andrii Electronics 2019 / 21 p. : ill <https://doi.org/10.3390/electronics8040405> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Control methodology of the rolling stock auxiliary power supply

Roasto, Indrek; Vinnikov, Dmitri 4th International Symposium Topical Problems of Education in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 15-20, 2007 2007 / p. 122-125 : ill

Control of quasi-Z-source dc-dc converter by the overlap of active states : new possibilities and limitations

Roasto, Indrek; Liivik, Liisa; Vinnikov, Dmitri BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 217-220 : ill

Control strategies of ultracapacitors

Roasto, Indrek; Lehtla, Tõnu; Rosin, Argo 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 85-88

Controller design for interleaved bidirectional dc-dc converter with coupled inductors

Tytelmaier, Kostiantyn; Husev, Oleksandr; Veligorskyi, Oleksandr; Khomenko, Maksym; Khomenko, Oleh 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 570-573 : ill <https://doi.org/10.1109/UKRCON.2017.8100306>

Cooling methods for high voltage IGBTs

Blinov, Andrei; Vinnikov, Dmitri 6th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : [Kuressaare, January 12-17, 2009] 2009 / p. 134-139 : ill

Critical parameter analysis and design of the Quasi-Z-Source inverter

Liu, Wenjie; Yang, Yongheng; Liivik, Elizaveta; Vinnikov, Dmitri; Blaabjerg, Frede 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 474-480 : ill <https://doi.org/10.1109/UKRCON.2019.8879831>

Current-fed dual inductor push-pull partial power converter

Abdelrahim Abdelghafour, Omar Mohamed; Vinnikov, Dmitri; Chub, Andrii; Blinov, Andrei 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 327-332 <https://doi.org/10.1109/PEMC51159.2022.9962937>

Cycle-skipping technique based on sigma-delta modulation in series resonant DC transformer

Pittala, Lohith Kumar; Chub, Andrii; Sidorov, Vadim; Khan, Salman; Ricco, Mattia; Mandrioli, Riccardo 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <http://ieeexplore.ieee.org/document/11144699> <https://doi.org/10.1109/ICDCM63994.2025.11144699>

DC current source mode in converter with alternating of parallel and series resonance [Electronic resource]

Janson, Kuno; Järvik, Jaan; Sepping, Eino EPE 2003 : 10th European Conference on Power Electronics and Applications : 2-4 September 2003, Toulouse, France 2003 / p. 1-7 : ill. [CD-ROM]

DC-DC перетворювач з широким діапазоном забезпечення режиму природної комутації в нулях напруги

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr; Zamaruev, Volodymyr; Styslo, Bogdan Вісник НТУ "Харківський

політехнічний інститут". Серія: Електричні машини та електромеханічне перетворення енергії = Bulletin of the NTU "Kharkiv Polytechnic Institute". Series: Electrical Machines and Electromechanical Energy Conversion 2019 / с. 14-19 : in <https://doi.org/10.20998/2409-9295.2019.20.02>

Dead-beat-based model predictive current control for the dual-purpose dc-dc/ac PWM modular power converter

Roncero-Clemente, Carlos; Escalona, Javier-Gutierrez; Pires, V. Fernao; **Matiushkin, Oleksandr**; Milanés-Montero, Maria Isabel; Romero-Cadaval, Enrique 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604328>

Design and Control of Bidirectional Step-Up/Down Partial Power Converters for DC Microgrid Applications = Alalisvoolu mikrovõrkudele osavõimsuse töötusega kahesuunalise tõste-langetusmuunduri projekteerimine ja juhtimine

Hassanpour, Naser 2025 https://www.ester.ee/record=b5746961*est <https://digikogu.taltech.ee/et/Item/daec7687-5e83-467e-8e6a-45b1e4a15a64> <https://doi.org/10.23658/taltech.30/2025>

Design and development of 3.3 kV IGBT based three-level DC/DC converter

Vinnikov, Dmitri; Roasto, Indrek Electrical engineering research report 2009 / [6] p

Design and development of the middle-frequency isolation transformer for the high-voltage DC/DC converter [Electronic resource]

Vinnikov, Dmitri; Lehtla, Tõnu; Strzelecki, Ryszard; **Galkin, Ilja** The 4th International Scientific Conference of The Military Technical College [Korby El-Kobbah, Cairo, Egypt] : 27-29 May 2008. Proceedings of the 6th ICEENG Conference : 27-29 May, 2008 2008 / p. EE045 [CD-ROM] https://iceeng.journals.ekb.eg/article_34344_6860ebd9ad2e69cac2e12bfe8d5546c.pdf

Design and development of three-level half-bridge NPC converter with dual 3.3 kV IGBT modules

Jalakas, Tanel; Vinnikov, Dmitri; Roasto, Indrek 6th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : [Kuressaare, January 12-17, 2009] 2009 / p. 43-48 : ill

Design and evaluation of a base module of active power electronic transformer

Roasto, Indrek; Minambres-Marcos, Victor; Romero-Cadaval, Enrique; Strzelecki, Ryszard 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. 384-389 : ill <http://dx.doi.org/10.1109/CPE.2015.7231106>

Design and experimental validation of a single-stage PV string inverter with optimal number of interleaved buck-boost cells

Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri**; Strzelecki, Ryszard; Kołodziejek, Piotr Energies 2021 / art. 2448, p., 17 p. : ill <https://doi.org/10.3390/en14092448> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and implementation of dual-mode LLC resonant converter for charging 400 V and 800 V onboard plug-in electric vehicles

Vinusha, Bussa; Kalpana, R.; Kishan, Dharavath; **Chub, Andrii** 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 6 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027270>

Design issues of SSCBs for residential DC microgrid

Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830826>

Design of a simple modular active power electronic transformer

Strzelecki, Ryszard; **Roasto, Indrek**; Romero-Cadaval, Enrique Proceedings : IECON 2014 - 40th Annual Conference of the IEEE Industrial Electronics Society : Sheraton Hotel Dallas, Dallas, TX, USA, 30. October-01. November, 2014 2014 / p. 1410-1415 : ill <https://doi.org/10.1109/IECON.2014.7048686> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Design of high frequency transformer for isolated bridge-type PFC converter

Zinchenko, Denys; Blinov, Andrei; Vinnikov, Dmitri; Ormison, Andres 2020 IEEE 4th International Conference on Intelligent Energy and Power Systems (IEPS), 06.07.2020 - 10.07.2020, Istanbul, Turkey 2020 / 8 p. : ill <https://doi.org/10.1109/IEPS51250.2020.9263134>

Design of LCL-filter for grid-connected buck-boost inverter based on unfolding circuit

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Kütt, Lauri 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818248>

Design of multiphase single-switch impedance-source converters

Chub, Andrii; Vinnikov, Dmitri; Liivik, Liisa; Jalakas, Tanel; Blinov, Andrei IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 3718-3724 : ill <https://doi.org/10.1109/IECON.2018.8591361>

Determination methods for controller parameters of back-to-back converters in electric power grids

Beg, Nauman; **Rahmoun, Ahmad; Armstorfer, Andreas; Rosin, Argo; Biechl, Helmuth** PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 157-164 : ill <https://doi.org/10.1109/PQ.2016.7724106>

Development and application of energy producing solar pavement in Estonia

Jalakas, Tanel; Chub, Andrii; Vinnikov, Dmitri; Spalatu, Nicolae; Gudkova, Viktoria; Krunks, Malle; Mere, Arvo; Lahi, Allan 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / 5 p. : ill <https://doi.org/10.1109/RTUCON56726.2022.9978908>

Development of 50-kW isolated DC/DC converter with high-voltage IGBTs

Vinnikov, Dmitri; Jalakas, Tanel; Laugis, Juhan Przegląd elektrotechniczny 2007 / p. 103-107

Development of 50-kW isolated DC/DC converter with high-voltage IGBTs [Electronic resource]

Jalakas, Tanel; Vinnikov, Dmitri; Laugis, Juhan Proceedings of 5th International Conference 2007 : Compatibility in Power Electronics : 29 May - 1 June 2007, Gdynia, Poland 2007 / [6] p. [CD-ROM]

Development of auxiliary power supply for tram

Vinnikov, Dmitri; Lehtla, Madis BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 389-390 : ill

Development of single-loop current sensorless control for bidirectional three-phase PWM rectifier

Suzdalenko, Alexander; **Zakis, Janis; Husev, Oleksandr** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 211-214 : ill

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

Distance control of electric drives and power converters via internet : concept of e-laboratory [Electronic resource]

Vodovozov, Valery; Raud, Zoja EUROCON 2009 : International IEEE Conference devoted to the 150-anniversary of Alexander S.Popov : May 18-23, 2009 Saint Petersburg, Russia 2009 / p. 804-809 [CD-ROM]

Effect of droop control curves on the efficiency of dual-active bridge converters

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IECON 2023- 49th Annual Conference of the IEEE Industrial Electronics Society IECON Proceedings (Industrial Electronics Conference) 2023 / 6 p
<https://doi.org/10.1109/IECON51785.2023.10312056> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Effects of PV microgeneration on rural LV network voltage quality - harmonics and unbalance

Hürmeýdan, Semih; Rosin, Argo; Vinnal, Toomas PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 97-100 : ill
<https://doi.org/10.1109/PQ.2016.7724096>

Effects of PV microgeneration on rural LV network voltage quality [Online resource]

Hürmeýdan, Semih; Rosin, Argo; Vinnal, Toomas; Jagomägi, Andri 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [4] p. : ill
<https://doi.org/10.1109/RTUCON.2016.7763083>

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](#)

Electric vehicle fast charger high voltage input multiport converter topology analysis [Electronic resource]

Jalakas, Tanel; Roasto, Indrek; Vinnikov, Dmitri CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 326-331 : ill [CD-ROM]

Electric vehicle multiport fast charger based on the concept of active power electronic transformer

Jalakas, Tanel; Roasto, Indrek; Gallardo-Lozano, Javier; Romero-Cadaval, Enrique 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 3 2014 / p. 2168-2176 : ill

Emerging converter topologies and control for grid connected photovoltaic systems

2021 <https://doi.org/10.3390/books978-3-03943-910-2>

Energiasalvestid ja -salvestustehnoloogiad

Rosin, Argo; Link, Siim; Hõimoja, Hardi; Drovtar, Imre 2015 http://www.ester.ee/record=b4484414*est

Energia tootev teekatend nüüd ka Eestis

Jalakas, Tanel; Chub, Andrii; Vinnikov, Dmitri; Spalatu, Nicolae; Gudkova, Viktoria; **Krunks, Malle; Mere, Arvo; Lahi, Allan;** Lindvest, Andre Elektriala 2023 / lk. 14-16 : portr., fot https://www.ester.ee/record=b1240496*est

Energy router based energy management system for nearly zero energy buildings

Najafzadeh, Mahdiyyeh; Roasto, Indrek; Jalakas, Tanel 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/RTUCON48111.2019.8982366>

Enhanced control strategy for three-level T-type converters in hybrid power-to-X systems

Sassonker Elkayam, Moria; **Vinnikov, Dmitri** Applied sciences 2025 / art. 2409 <https://doi.org/10.3390/app15052409>

Enhanced switched impedance inverter with tapped inductor

Nozadian, Mohsen Hasan Babayi; **Hassanpour, Naser; Khan, Salman** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604411>

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](#)

Evaluation of different high-voltage switch solutions for high-power converters used in rolling stock [Electronic resource]

Vinnikov, Dmitri; Laugis, Juhan; Jalakas, Tanel ISIE08 : 2008 IEEE International Symposium on Industrial Electronics : 30 June - 2 July 2008, Cambridge, United Kingdom 2008 / p. 214-219 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4677124>

Evaluation of different loss calculation methods for high-voltage IGBT-s under small load conditions

Jalakas, Tanel; Vinnikov, Dmitri; Laugis, Juhan EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 50 <https://ieeexplore.ieee.org/document/4635442>

Evaluation of different loss calculation methods for high-voltage IGBT-s under small load conditions [Electronic resource]

Jalakas, Tanel; Vinnikov, Dmitri; Laugis, Juhan EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 1286-1290 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4635442>

Evaluation of low- and high-voltage GaN transistors in soft-switching DC-DC converter

Blinov, Andrei; Kosenko, Roman; Chub, Andrii 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 544-547 : ill <https://doi.org/10.1109/UKRCON.2017.8100299>

Evaluative analysis of 2- and 3-level DC/DC converters for high-voltage high-power applications [Electronic resource]

Vinnikov, Dmitri; Egorov, Mikhail; Strzelecki, Ryszard 6th International Conference-Workshop Compatibility and Power Electronics : May 20-22, 2009 : CPE 2009 : conference proceedings 2009 / p. 432-437 [CD-ROM]

Experimental analysis of wide input voltage range qZS-derived push-pull DC/DC converter for PMSG-based wind turbines

Blinov, Andrei; Vinnikov, Dmitri; Husev, Oleksandr; Chub, Andrii PCIM Europe 2013 : International Exhibition and Conference for Power Electronics, Intelligent Motion, Renewable Energy and Energy Management, Nuremberg, 14.-16. May 2013 : proceedings 2013 / p. 1435-1444 : ill

Experimental comparison of two-level full-SiC and three-level Si-SiC quasi-Z-source inverters for PV applications

Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Pires Pimentel, Sergio; Santasheva, Elena** Energies 2019 / 2509 ; 17 p. : ill <https://doi.org/10.3390/en12132509> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Experimental comparison of two-level full-SiC and three-level Si-SiC quasi-Z-source inverters for PV applications

Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Pimentel, Sergio Pires; Santasheva, Elena** Emerging converter topologies and control for grid connected photovoltaic systems 2021 / P. 121-137 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

Experimental study of high step-up quasi-Z-source DC-DC converter with synchronous rectification

Liivik, Liisa; Chub, Andrii; Vinnikov, Dmitri; Zakis, Janis 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. 409-414 : ill <http://dx.doi.org/10.1109/CPE.2015.7231110>

Experimental verification of a two-stage bidirectional DC/DC converter with separated commutation and asymmetrical

structure of current-source stage

Ivakhno, Volodymyr; Zamaruiev, Volodymyr; Styslo, Bogdan; **Blinov, Andrei** 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 369-374 : ill <https://doi.org/10.1109/UKRCON.2019.8879821>

Experimental verification of light electric vehicle charger multiport topology

Jalakas, Tanel; Zakis, Janis 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. 415-418 : ill <http://dx.doi.org/10.1109/CPE.2015.7231111>

Extended boost quasi-Z-source inverters : possibilities and challenges

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel; Ott, Silver Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 51-56 : ill https://www.researchgate.net/publication/229042778_Extended_Boost_Quasi-Z_Source_Inverters_Possibilities_and_Challenges

Exterior-rotor permanent magnet synchronous machine with toroidal windings for unmanned aerial vehicles

Nukki, Rene; Kilk, Aleksander; Kallaste, Ants; Vaimann, Toomas; Tiimus, Kristjan PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 215-220 : ill

Fault detection and protection system for the power converters with high-voltage IGBTs [Electronic resource]

Vinnikov, Dmitri; Roasto, Indrek; Lehtla, Tõnu ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta 2008 / p. 922-925 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4675005>

Fault-tolerant bidirectional series resonant DC-DC converter with minimum number of components

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Malinowski, Mariusz 2019 IEEE Energy Conversion Congress and Exposition, ECCE, 2019-09-29 - 2019-10-03, Baltimore, MD, USA 2019 / p. 1359-1363 <https://doi.org/10.1109/ECCE.2019.8912292>

Fault-tolerant soft-switching current-fed DC-DC converter

Zinchenko, Denys; Kosenko, Roman; Blinov, Andrei; Vinnikov, Dmitri 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 437-440 : ill <https://doi.org/10.1109/UKRCON.2019.8879973>

Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-Type inverter

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard** Energies 2020 / art. 4535, 16 p. : ill <https://doi.org/10.3390/en13174535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-type inverter

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard** Industrial and Technological Applications of Power Electronics Systems 2021 / p. 315-330 <https://doi.org/10.3390/en13174535>

Feasibility study of inductor coupling in three-level neutral-point-clamped quasi-Z-source DC/AC converter

Zakis, Janis; Husev, Oleksandr; Strzelecki, Ryszard PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 273-276 : ill

Feasibility study of interleaving approach for buck-boost inverter with unfolding circuit

Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr; Khandakji, Kamal; Velihorskyi, Oleksandr** 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 415-419 : ill <https://doi.org/10.1109/UKRCON.2019.8879966>

Feasibility study of interleaving approach for Quasi-Z-Source inverter

Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Fesenko, Artem; Matiushkin, Oleksandr Electronics 2020 / art. 277, 11 p. : ill <https://doi.org/10.3390/electronics9020277> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility study of Si and SiC MOSFETs in high-gain DC/DC converter for renewable energy applications

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Rang, Toomas Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5975-5978 : ill <https://doi.org/10.1109/IECON.2013.6700115> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Floating high step-down stacked dc-dc converter based on buck-boost cells [Electronic resource]

Tibola, Gabriel; Duarte, Jorge; **Blinov, Andrei** EPE'15 ECCE Europe : 8-10 September 2015, Geneva, Switzerland : 17th European Conference on Power Electronics and Applications 2015 / p. 1-10 : ill. [USB] <http://dx.doi.org/10.1109/EPE.2015.7309181>

Four novel PWM shoot-through control methods for impedance source DC-DC converters

Vinnikov, Dmitri; Roasto, Indrek; Liivik, Liisa; Blinov, Andrei Journal of power electronics 2015 / p. 299-308 : ill <https://doi.org/10.6113/JPE.2015.15.2.299> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A full bridge series-series resonant IPT system optimized for charging electric vehicle batteries across an extensive

range

Kishan, Dharavath; Vinod, Marupuru; **Chub, Andrii** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604397>

Full soft-switching bidirectional current-fed DC-DC converter

Chub, Andrii; Kosenko, Roman; Blinov, Andrei; Ivakhno, Volodymyr; Zamaruev, Volodymyr; Styslo, Bogdan 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 189-194 : ill

Full soft-switching high step-up current-fed DC-DC converters with reduced conduction losses

Kosenko, Roman; Husev, Oleksandr; Chub, Andrii 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 170-175 : ill
<http://dx.doi.org/10.1109/PowerEng.2015.7266313>

Full soft-switching high step-up DC-DC converter for photovoltaic applications

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 4 2014 / p. 2951-2957 : ill

Galvanically isolated quasi-Z-source DC-DC converter with a novel ZVS and ZCS technique

Husev, Oleksandr; Liivik, Liisa; Blaabjerg, Frede; Chub, Andrii; Vinnikov, Dmitri; Roasto, Indrek IEEE transactions on industrial electronics 2015 / p. 7547-7556 : ill <https://doi.org/10.1109/TIE.2015.2455522> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Galvanically isolated quasi-Z-source DC-DC converters with combined energy transfer for renewable energy sources integration

Chub, Andrii; Vinnikov, Dmitri; Jalakas, Tanel 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2896-2900 : ill <https://doi.org/10.1109/ICIT.2015.7125525> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Global MPPT for interleaved buck-boost DC-DC converter

Matiushkin, Oleksandr; Husev, Oleksandr; Fesenko, Artem; **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 / 7 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316589>

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](#)

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

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva; Milanés-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>

Grid-frequency Vienna rectifier and isolated current-source DC-DC converters for efficient off-board charging of electric vehicles

Rabkowski, Jacek; **Blinov, Andrei; Zinchenko, Denys;** Wrona, Grzegorz; Zdanowski, Mariusz 2020 22nd European Conference on Power Electronics and Applications (EPE'20 ECCE Europe), Lyon, France, 7-11 Sept. 2020 2020 / 10 p. : ill
<https://doi.org/10.23919/EPE20ECCEurope43536.2020.9215772>

High power factor converter for normalizing flicker of arc furnaces

Janson, Kuno; Järvik, Jaan Power Quality '98 : [International Conference, June 18-20, 1998] : Hyderabad, India / The Institute of Electrical and Electronics Engineers, Inc 1998 / p. 111-116: ill <https://ieeexplore.ieee.org/document/710363>

High-performance quasi-Z-source series resonant DC-DC converter for photovoltaic module-level power electronics applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Roasto, Indrek IEEE transactions on power electronics 2017 / p. 3634-3650 : ill
<https://doi.org/10.1109/TPEL.2016.2591726> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-voltage pulse transformer for IOT modulators

Jalakas, Tanel; Janson, Kuno; Mölder, Heigo; Roasto, Indrek IET electric power applications 2020 / p. 2348-2354
<https://doi.org/10.1049/iet-epa.2019.0877> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-voltage switch realization possibilities for the 3.0 kV DC fed voltage converters

Vinnikov, Dmitri ELECO'2007 : 5th International Conference on Electrical and Electronics Engineering : 5-9 December 2007, Bursa, Turkey 2007 / ? p

HVDC connection of offshore wind power plants

Elahi, H.; Kilter, Jako; Ebner, G. 2015

Hybrid DC–DC converters with topology morphing control and post-fault operation capability

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Blinov, Andrei; Liivik, Elizaveta Electrimacs 2019 : Selected Papers, Vol. 1 2020 / p. 433-445 https://doi.org/10.1007/978-3-030-37161-6_33 [Conference proceeding at Scopus](#) [Article at Scopus](#)

Hybrid PWM for step-up series resonant DC-DC converter integrated with bridgeless rectifier

Bakeer, Abualkasim Ahmed Ali 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2022 / p. 61-62 : ill https://www.ester.ee/record=b5457278*est

Ilmus eestikeelne raamat energiasalvestistest

Ehitaja 2015 / lk. 34 : ill

Impact of component losses on the voltage boost properties and efficiency of the QZS-converter family

Roasto, Indrek; Vinnikov, Dmitri COMPEL : The international journal for computation and mathematics in electrical and electronic engineering 2012 / p. 1945-1963 : ill <https://www.emerald.com/insight/content/doi/10.1108/03321641211267227/full/html>

Impedance network-based diode-clamped multilevel inverter voltage balancing with cascaded voltage multiplier

Ebrahimi, Ali; Babaei, Ebrahim; Mousavi, S. M. J.; Mashinchi Maheri, Hamed; Jalakas, Tanel 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/RTUCON60080.2023.10413166>

Impedance-source galvanically isolated DC/DC converters : state of the art and future challenges

Liivik, Liisa; Chub, Andrii; Vinnikov, Dmitri 2014 55th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings 2014 / p. 67-74 : ill

Implementation of Digital Twins for electrical energy conversion systems in selected case studies

Rassõlkin, Anton; Orosz, Tamas; Demidova, Galina; Kuts, Vladimir; Rjabtšikov, Viktor; Vaimann, Toomas; Kallaste, Ants Proceedings of the Estonian Academy of Sciences 2021 / p. 19-39 : ill <https://doi.org/10.3176/proc.2021.1.03> https://doi.org/wp-content/plugins/kirj/pub/proc-1-2021-19-39_20210201183802.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Improved switched-inductor quasi-switched-boost inverter with low input current ripple

Chub, Andrii; Liivik, Liisa; Zakis, Janis; Vinnikov, Dmitri 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 221-226 : ill

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

Barrero-Gonzalez, Fermin; Roncero-Clemente, Carlos; Milanes-Montero, Maria Isabel; Husev, Oleksandr Electronics 2019 / art. 677, 12 p. : ill <https://doi.org/10.3390/electronics8060677> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indirect model predictive control for inverter connected to distorted grid with significant computation delay

Husev, Oleksandr; Pimentel, Sergio Pires; Vinnikov, Dmitri; Kütt, Lauri; Rodriguez, Jose IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 6483-6488 : ill <https://doi.org/10.1109/IECON.2019.8927279>

Inductor Current Ripple Analysis and Reduction for Quasi-Z-Source Inverters with An Improved ZSVM6 Strategy

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; Vinnikov, Dmitri; Blaabjerg, Frede IEEE transactions on power electronics 2021 / p. 7693-7704 <https://doi.org/10.1109/TPEL.2020.3043102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Input voltage range extension methods in the series-resonant DC-DC converters

Chub, Andrii; Vinnikov, Dmitri; Lai, Jih-Sheng 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC 2019) Santos, Brazil, 1-4 December 2019 2019 / p. 1493-1499 <http://toc.proceedings.com/52923webtoc.pdf>

Input-parallel output-series connection of isolated quasi-Z-source DC-DC converters

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 277-284 : ill

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

Interlock delay time and its influence on the operability and efficiency of high-power DC/DC converters

Vinnikov, Dmitri; Bolgov, Viktor Przegląd elektrotechniczny = Electrical review 2009 / 10, p. 222-227 : ill

https://www.researchgate.net/publication/291967052_Interlock_Delay_Time_and_its_Influence_on_the_Operability_and_Efficiency_of_High-Power_DCDC_Converters

Interlock delay time minimization and its impact on the high-voltage half-bridge DC/DC converter

Jalakas, Tanel; Vinnikov, Dmitri; Lehtla, Tõnu; Bolgov, Viktor 6th International Conference-Workshop Compatibility and Power Electronics : May 20-22, 2009 : CPE 2009 : conference proceedings 2009 / p. 438-443 [CD-ROM]

Interlock delay time minimization and its impact on the high-voltage half-bridge DC/DC converter [Electronic resource]

Jalakas, Tanel; Vinnikov, Dmitri; Lehtla, Tõnu; Bolgov, Viktor 2009 Compatibility and Power Electronics CPE 2009 : 6th International Conference-Workshop 2009 / p. 438-443 : ill. [CD-ROM]

Investigation of radiated emissions of a galvanically isolated qZS DC-DC converter

Jalakas, Tanel; Jarkovoi, Marek; Roasto, Indrek; Zakis, Janis; Garganev, Alexander 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 176-181 : ill

<http://dx.doi.org/10.1109/PowerEng.2015.7266314>

Isolated high step-up current-fed DC-DC converter with low input current ripple and wide full-soft-switching capability

Mohseni, Parham; Pourjafar, Saeed; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri IEEE transactions on industry applications 2025 / 11 p <https://doi.org/10.1109/TIA.2025.3544985>

Isolated matrix converters = Isoleeritud maatriksmuundurid

Korkh, Oleksandr 2021 https://www.ester.ee/record=b5395693*est <https://digikogu.taltech.ee/et/Item/34baf9fc-42aa-45ce-b071-3b8886c7903e> <https://doi.org/10.23658/taltech.4/2021>

Jõuelektroonika

Vodovozov, Valery; Jansikene, Raik 2008 http://www.ester.ee/record=b2394527*est

Jõuelektroonika : laboratoorsete tööde juhendid

Jalakas, Tanel; Jansikene, Raik 2008 http://www.ester.ee/record=b2375029*est

Jõuelektroonika edendab päikeseenergiahooneid

Horisont 2022 / lk. 4 : fot https://www.ester.ee/record=b1072243*est

Jõumuundurite vedelikjahutussüsteemidest

Blinov, Andrei Elektriala 2010 / 1, lk. 24-26 : ill https://artiklid.elnet.ee/record=b1948837*est

Kergröõbassöidukite ajamid ja juhtimine

Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis 2008

http://www.ester.ee/record=b2394445*est

LC circuit with parallel and series resonance alternation in switch-mode converters = Paralleel- ja järjestikresonantsi vaheldumisega LC ahel lülitussageduslikes muundurites

Šklovski, Jevgeni 2007 https://www.ester.ee/record=b2238343*est

Loss reduction method for the isolated qZS-based DC/DC converter

Zakis, Janis; Rankis, Ivars; Liivik, Liisa Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 13-18 : ill

Mathematical models of cascaded quasi-impedance source converter

Vinnikov, Dmitri; Roasto, Indrek; Zakis, Janis Технічна електродинаміка 2010 / 1, p. 59-64 : ill

<https://ortus.rtu.lv/science/lv/publications/11212>

Maximum boost control for interleaved single-phase quasi-Z-source inverter

Roncero-Clemente, Carlos; **Stepenko, Serhii; Husev, Oleksandr**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society : proceedings : China National Convention Center, Beijing, China, 29. October - 01. November, 2017 2017 / p. 7698-7703 : ill <https://doi.org/10.1109/IECON.2017.8217349>

Middle-frequency isolation transformer design issues for the high-voltage DC/DC converter

Vinnikov, Dmitri; Laugis, Juhan; Galkin, Ilja PESC 08 : 39th IEEE Annual Power Electronics Specialists Conference : Rhodes, Greece, 15-19 June 2008 : book of one page paper summaries 2008 / p. 304 : ill <https://ieeexplore.ieee.org/document/4592226>

Middle-frequency isolation transformer design issues for the high-voltage DC/DC converter

Vinnikov, Dmitri; Laugis, Juhan; Galkin, Ilja Proceedings of 2008 IEEE 39th Annual Power Electronics Specialists Conference : PESC 2008 : Rhodes, Greece, 15-19 June 2008 2008 / p. 1930-1936 <https://ieeexplore.ieee.org/document/4592226>

Model predictive control of photovoltaic bidirectional dc-dc converter with coupled inductors

Khomenko, Maksym; Veligorskyi, Oleksandr; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; Yershov, Roman 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 578-583 : ill <https://doi.org/10.1109/UKRCON.2017.8100308>

Model-based diagnosis of power converters

Vodovozov, Valery; Raud, Zoja; Vinnikov, Dmitri Технічна електродинаміка 2009 / Тематический выпуск: Силова електроніка та енергоефективність. 2, с. 38-43

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>

Modeling of grid-connected quasi-Z-source series resonant topology based microinverter

Roasto, Indrek; Jalakas, Tanel; Husev, Oleksandr 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. 192-195 : ill <https://doi.org/10.1109/CPE.2016.7544183>

Modeling, analysis, and implementations of charging systems for vehicle electrification

Vinnikov, Dmitri; Blinov, Andrei; Rathore, Akshay Kumar Vehicle electrification in modern power grids : Disruptive perspectives on power electronics technologies and control challenges 2024 / p. 75-99 <https://doi.org/10.1016/B978-0-443-13969-7.00004-7>

Modular battery charger for light electric vehicles

Blinov, Andrei; Verbytskyi, Ievgen; **Zinchenko, Denys; Vinnikov, Dmitri**; Galkin, Ilya Energies 2020 / art. 774, 21 p. : ill <https://doi.org/10.3390/en13040774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modular self-balancing battery charger concept for cost-effective power-assist wheelchairs

Galkin, Ilya; **Blinov, Andrei**; Verbytskyi, Ievgen; **Zinchenko, Denys** Energies Special Issue Power Electronic Systems for Efficient and Sustainable Energy Supply 2019 / art. en12081526, 21 p. : ill <https://doi.org/10.3390/en12081526> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

MPPT performance enhancement of low-cost PV microconverters

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Liivik, Elizaveta; Blaabjerg, Frede; Kouro, Samir Solar energy 2019 / p. 156-166 : ill <https://doi.org/10.1016/j.solener.2019.05.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multi-cell DC-DC converter with high step-down voltage ratio [Electronic resource]

Tibola, Gabriel; Duarte, Jorge; **Blinov, Andrei** ECCE 2015 : IEEE Energy Conversion Congress & expo : Montreal, Canada, September 20-24, 2015 2015 / p. 2010-2016 : ill. [USB] <http://dx.doi.org/10.1109/ECCE.2015.7309944>

Multifunctional energy router for residential applications = Multifunktsionaalne energiaruuter eramutele

Najafzadeh, Mahdiyeh 2022 <https://doi.org/10.23658/taltech.25/2022> <https://digikogu.taltech.ee/et/Item/6914b8ca-7ca5-49d1-868a-a6de9192f8b4> https://www.ester.ee/record=b5501867*est

Multi-mode quasi-Z-source series resonant DC/DC converter for wide input voltage range applications

Vinnikov, Dmitri; Chub, Andrii; Roasto, Indrek; Liivik, Liisa Applied Power Electronics Conference and Exposition : APEC 2016 : Long Beach Convention & Entertainment Center, March 20-24, 2016 2016 / p. 2533-2539 : ill <https://doi.org/10.1109/APEC.2016.7468221> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

New bidirectional multiport DC/DC converter for interfacing of hydrogen buffer with wind turbines

Andrijanoviš, Anna; Vinnikov, Dmitri 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 2011 / p. 85-90 : ill

New converter topologies for integration of hydrogen based long-term energy storages to renewable energy systems = Uued muundurite topoloogiad vesinikul põhinevate energiasalvestite integreerimiseks taastuenergiastüsteemidesse

Andrijanoviš, Anna 2013 http://www.ester.ee/record=b2946972*est

A new five-level switched capacitor-based grid-connected inverter with common grounded feature

Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipankeh; Islam, Md. Rabiul 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA) 2021 / p. 749-754 <https://doi.org/10.1109/ICCCA52192.2021.9666335>

A new high-power DC/DC converter for residential fuel cell power systems [Electronic resource]

Vinnikov, Dmitri; Jalakas, Tanel; Roasto, Indrek 11th Spanish Portuguese Conference on Electrical Engineering (11CHLIE) : 1-4 of July 2009, Zaragoza, Spain 2009 / [6] p. [CD-ROM]

New isolated converter for interfacing PMSG based wind turbine with distribution network

Bisenieks, Lauris; Vinnikov, Dmitri; Galkin, Ilja 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 2011 / p. 100-107 : ill

New practical approach to input current shaping in AC-DC power converters

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 8
https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

New practical approach to input current shaping in AC-DC power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 154-158 : ill. [CD-ROM]
https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

New shoot-through control methods for qZSI-based DC/DC converters

Roasto, Indrek; Vinnikov, Dmitri; Zakis, Janis; Husev, Oleksandr IEEE transactions on industrial informatics 2013 / p. 640-647 : ill <https://doi.org/10.1109/TII.2012.2224353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New trends in galvanically isolated impedance-source DC-DC energy conversion

Chub, Andrii Doctoral School of Energy and Geotechnology II : closing conference of the project : Pärnu, Estonia, January 12-17, 2015 2015 / p. 49-50 : ill

New trends in the research field of matrix converters

Krievs, Oskars; Galkin, Ilja 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 127-131

Non-shoot-through mode behavior of DC/DC converters with a quasi Z source inverter

Jalakas, Tanel; Roasto, Indrek; Vinnikov, Dmitri 15th International Power Electronics and Motion Control Conference, EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia 2012 / 4 p. : ill <https://ieeexplore.ieee.org/document/6397204>

Novel concept of solar converter with universal applicability for DC and AC microgrids

Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Kouro, Samir IEEE transactions on industrial electronics 2022 / p. 4329-4341 : ill <https://doi.org/10.1109/TIE.2021.3086436> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel concept of universal AC/DC-DC onboard battery charger for electric vehicles

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144698>

Novel dual-purpose cost-effective forward-based micro-converter

Afshar, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144743>

Novel family of quasi-Z-source DC/DC converters derived from current-fed push-pull converters

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri; Blaabjerg, Frede 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 4 2014 / p. 3175-3184 : ill

Novel family of single-stage buck-boost inverters based on unfolding circuit

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; Blaabjerg, Frede; **Vinnikov, Dmitri** IEEE transactions on power electronics 2019 / p. 7662-7676 : ill <https://doi.org/10.1109/TPEL.2018.2879776> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel gramian-based structure-preserving model order reduction for power systems with high penetration of power converters

de Moraes Dias Campos, Nathalia; Sarnet, Tanel; Kilter, Jako IEEE transactions on power systems 2023 / p. 5381-5391
<https://doi.org/10.1109/TPWRS.2022.3228458> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel hysteresis power point optimizer for distributed solar power generation

Veligorskyi, Oleksandr; Husev, Oleksandr; Kosenko, Roman; Vinnikov, Dmitri Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 12-22 : ill <https://doi.org/10.2478/ecce-2018-0002>

Novel multiport DC/DC converter for distributed energy systems

Andrijanovitš, Anna 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 57-60 : ill

Novel single-stage buck-boost inverter with unfolding circuit

Matiushkin, Oleksandr; **Husev, Oleksandr**; Strzelecki, Ryszard; Ivanets, Sergey; Fesenko, Artem 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 538-543 : ill <https://doi.org/10.1109/UKRCON.2017.8100298>

On the design process of a 6-kVA quasi-Z-inverter employing SiC power devices

Zdanowski, Mariusz; Peftitsis, Dimosthenis; Piasecki, Szymon; **Rabkowski, Jacek** IEEE transactions on power electronics 2016 / p. 7499-7508 : ill <https://doi.org/10.1109/TPEL.2016.2527100>

Operation of Single-Chip MOSFET and IGBT Devices after failure due to repetitive avalanche [Electronic resource]

Blinov, Andrei; Norrga, Staffan; Tibola, Gabriel EPE'15 ECCE Europe : 8-10 September 2015, Geneva, Switzerland : 17th European Conference on Power Electronics and Applications 2015 / p. 1-9 : ill. [USB] <http://dx.doi.org/10.1109/EPE.2015.7309190>

Operation possibility of grid connected quasi-Z-source inverter with energy storage and renewable energy generation in wide power range

Kroics, Kaspars; **Zakis, Janis**; Suzdalenko, Alexander; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; Khandakji, Kamal 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 564-569 : ill <https://doi.org/10.1109/UKRCON.2017.8100303>

Operation strategy and shoot-through indirect control method for three-phase Z-source inverters

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Milanés-Montero, Maria Isabel 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 576-581 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266380>

Optimal LCL-filter study for buck-boost inverter based on unfolding circuit

Matiushkin, Oleksandr; **Husev, Oleksandr**; **Vinnikov, Dmitri**; Roncero-Clemente, Carlos Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 467-472 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161683>

Optimization and implementation of the proportional-resonant controller for grid-connected inverter with significant computation delay

Husev, Oleksandr; Roncero-Clemente, Carlos; **Makovenko, Elena**; **Pires Pimentel, Sergio**; **Vinnikov, Dmitri**; Martins, Joao IEEE transactions on industrial electronics 2020 / p. 1201 -1211 <https://doi.org/10.1109/TIE.2019.2898616> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimizing EV driving-recharge time ratio a under limited grid connection

Tsimomeny, M.; **Hõimoja, Hardi** 7th IET International Conference on Power Electronics, Machines and Drives (PEMD 2014) : Manchester, United Kingdom, 8-10 April 2014. Vol. 2 2014 / p. 903-908 : ill

Output filter for the high-voltage DC/DC converter

Müür, Margus; **Vinnikov, Dmitri** 4th International Symposium Topical Problems of Education in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 15-20, 2007 2007 / p. 118-121 : ill

Output rectifier for the high-voltage high-frequency isolated DC/DC converter

Jalakas, Tanel; **Vinnikov, Dmitri**; **Laugis, Juhan** Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2007 / p. 84-95 : ill

Output rectifier for the high-voltage high-frequency isolated DC/DC converter

Roasto, Indrek; **Vinnikov, Dmitri**; Klytta, Marius Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2007 / p. 75-83 : ill

An overview and comprehensive comparative evaluation of constant-frequency voltage buck control methods for series resonant DC-DC converters

Sidorov, Vadim; **Chub, Andrii**; **Vinnikov, Dmitri**; **Bakeer, Abualkasim Ahmed Ali** IEEE Open Journal of the Industrial Electronics Society 2021 / p. 65 - 79 <https://doi.org/10.1109/OJIES.2020.3048003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Overview of control methods of DC-AC grid connected converter

Makovenko, Elena; **Husev, Oleksandr** 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 69-71 : ill http://www.ester.ee/record=b4650094*est

Overview of impedance source networks for voltage source inverters

Shults, Tatiana; **Husev, Oleksandr**; **Zakis, Janis** 2015 16th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices (EDM 2015) : Erlagol (Altai Republic), Russia, 29 June-3 July 2015 2015 / p. 514-520 : ill

P and Q control strategy for single phase Z/qZ source inverter based on d-q frame

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr; Vinnikov, Dmitri** Proceedings : 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE) : Grand Cevahir Hotel and Convention Center, Istanbul, Turkey, 01-04 June, 2014 / p. 2048-2053 : ill

Paralleel- ja järjestikresonantsi parameetrilise vaheldumisega võrgusageduslik resonantsmuundur ja selle rakendamine
Janson, Kuno 2001 https://www.ester.ee/record=b1465377*est

Partial Power Processing and its Emerging Applications : Chapter 7

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Kouro, Samir Power electronics for next-generation drives and energy systems, Vol. 1: converters and control for drives 2022 / p. 211-242 https://digital-library.theiet.org/content/books/10.1049/pbpo207f_ch7

Passive modular structure of a SEPIC based DC/DC converter

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri 2014 IEEE International Conference on Intelligent Energy and Power Systems (IEPS) : conference proceedings : June 2-6, 2014, Kyiv, Ukraine 2014 / p. 81-85 : ill

Passive power decoupling approach for three-level single-phase impedance source inverter based on resonant and PID controllers

Makovenko, Elena; Husev, Oleksandr; Zakis, Janis; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 2017 / p. 516-521 : ill <https://doi.org/10.1109/CPE.2017.7915225>

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : 31st August to 3rd September 2008, Malta : conference guide 2008 / p. 37 <https://ieeexplore.ieee.org/document/4674795>

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta : [proceedings] 2008 / p. 77-80 : ill. [CD-ROM] <https://doi.org/10.1109/ICECS.2008.4674795> <https://ieeexplore.ieee.org/document/4674795>

Performance analysis of partial power converter in DC microgrid with active front-end converter

Yadav, Neelesh; Hasan, Sayeed; Galkin, Ilya; Chub, Andrii 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144718>

Performance comparison of boost and quasi-Z-source converters

Andrijanovičs, Anna; Rankis, Ivars; **Zakis, Janis** Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / p. 30-35 : ill <https://ortus.rtu.lv/science/en/publications/16524>

Performance comparison of voltage-fed and current-fed series resonant converters for high step-up DC-DC applications

Khan, Salman; Chub, Andrii; Vinnikov, Dmitri 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 6 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027290>

Performance evaluation of step-up/down current-source partial power converters for PV applications

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUON): conference proceedings 2022 / 5 p <https://doi.org/10.1109/RTUON56726.2022.9978890>

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](#)

Photovoltaic energy yield improvement in two-stage solar microinverters

Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Emerging converter topologies and control for grid connected photovoltaic systems 2021 / p. 197-213 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

Photovoltaic string converter with universal compatibility with AC and DC microgrids = Alalis- ja vahelduvvoolu mikrovõrkudega ühilduv universaalne muundur päikese-elektrijaamadele

Matiushkin, Oleksandr 2022 <https://doi.org/10.23658/taltech.27/2022> <https://digikogu.taltech.ee/et/item/b818b684-924e-4fda-b414-fe8b7adba165> https://www.ester.ee/record=b5502078*est

Power electronic converters

Vodovozov, Valery; Jansikene, Raik; Risthein, Endel 2006 http://www.ester.ee/record=b2156786*est

Power electronics : electrical energy converters

Raud, Zoja; Vodovozov, Valery 2014 https://www.ester.ee/record=b4421523*est

Power electronics : laboratory works

Jalakas, Tanel; Vodovozov, Valery; Vinnikov, Dmitri 2008 http://www.ester.ee/record=b2373811*est

Power factor correction of three-phase diode rectifiers using optimum ripple currents injection [Electronic resource]

Sakkos, Tiiu; Sarv, Vello EPE 2005 Dresden : 11th European Conference on Power Electronics and Applications : 11-14 September 2005, Dresden, Germany 2005 / [7] p. : ill. [CD-ROM] <https://ieeexplore.ieee.org/abstract/document/1665413/similar#similar>

Prediction of semiconductor losses in a high-power high-voltage DC/DC converter

Jalakas, Tanel; Vinnikov, Dmitri 4th International Symposium Topical Problems of Education in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 15-20, 2007 2007 / p. 114-117 : ill

Protection of bidirectional Step-Up/Down partial power converter against short circuit and open circuit faults and mode transition issues

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Yadav, Neelesh; Hasan, Sayeed; Vinnikov, Dmitri 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604315>

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](#)

qZS inverter as synchronverter in small-scale micro-grid

Zakis, Janis; Makovenko, Elena; Zeng, Hao; **Husev, Oleksandr; Kütt, Lauri** Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 58-62 : ill <https://doi.org/10.5755/j01.eie.24.2.20636> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

qZS-based soft-switching DC/DC converter with a series resonant LC circuit

Vinnikov, Dmitri; Zakis, Janis; Liivik, Liisa; Rankis, Ivars Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / p. 42-50 : ill

QZS-based soft-switching DC/DC converter with a series resonant LC circuit [Electronic resource]

Vinnikov, Dmitri; Zakis, Janis; Liivik, Liisa; Rankis, Ivars Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [3] p. : ill [CD-ROM]

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](#)

Quasi-Z-source based string inverter for residential photovoltaic application = Kvaasi-impedants tüüpi allikaga muundur kodumajapidamistes kasutatavatele päikesepaneelidele

Santasheva, Elena 2019 <https://digi.lib.ttu.ee/i/?12312>

Quasi-Z-source half-bridge DC-DC converter for photovoltaic applications

Vinnikov, Dmitri; Chub, Andrii; Husev, Oleksandr; Zakis, Janis 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2935-2940 : ill <https://doi.org/10.1109/ICIT.2015.7125531> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Quazi-Z-source based string inverter for residential photovoltaic application

Santasheva, Elena 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. 105-106 : ill https://www.ester.ee/record=b5183874*est

Reactive power control for bidirectional isolated high-frequency link converter

Emiliani, Pietro; Blinov, Andrei; Pefitsis, Dimosthenis; Giannakis, Andreas; Vinnikov, Dmitri 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) 2022 / p. 372-376 <https://doi.org/10.1109/SPEEDAM53979.2022.9842131>

Regenerative passive snubber circuit for high-frequency link converters

Blinov, Andrei; Verbytskyi, Ievgen; Pefitsis, Dimosthenis; Vinnikov, Dmitri IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 252 - 257 <https://doi.org/10.1109/JESTIE.2021.3066897>

Reliability evaluation of an impedance-source PV microconverter

Shen, Yanfeng; Liivik, Elizaveta; Blaabjerg, Frede; Vinnikov, Dmitri; Wang, Huai; Chub, Andrii 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. 108-110 : ill http://ise.elnet.ee/record=b2950026~S2*est

Reliability evaluation of an impedance-source PV microconverter

Shen, Yanfeng; Liivik, Elizaveta; Blaabjerg, Frede; Vinnikov, Dmitri; Wang, Huai; Chub, Andrii 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1104-1108 : ill <https://doi.org/10.1109/APEC.2018.8341154> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Reliability study of input side capacitors in impedance-source PV microconverters

Liivik, Elizaveta; Vinnikov, Dmitri; Chub, Andrii; Shen, Yanfeng IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5026-5032 : ill <https://doi.org/10.1109/IECON.2019.8927173> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Research and development of digital control systems and algorithms for high power, high voltage isolated DC/DC converters = Võimsate kõrgepingeliste alalisvoolumuundurite arvjuhtimissüsteemide ja -algoritmide uurimine ning väljatöötamine

Roasto, Indrek 2009 https://www.ester.ee/record=b2557768*est

Research and development of high-power high-voltage DC/DC converters = Võimsate kõrgepingeliste alalispingemuundurite uurimine ja välmimine

Jalakas, Tanel 2010 https://www.ester.ee/record=b2607120*est

Research and development of voltage converter for trams

Vinnikov, Dmitri; Lehtla, Madis; Joller, Jüri; Laugis, Juhan Power and Electrical Engineering International Scientific Conference 2002 / ? p

Research and development of voltage converters based on 6,5 kV IGBTs

Jalakas, Tanel; Roasto, Indrek; Müür, Margus; Vinnikov, Dmitri; Laugis, Juhan International Youth Conference on Energetics IYCE-2007 : 31 May - 02 June, 2007, Budapest, Hungary : program & abstracts 2007 / p. 153-154 : ill

Research, design and implementation of auxiliary power supplies for the light rail vehicles

Vinnikov, Dmitri; Lehtla, Tõnu 2005 https://www.ester.ee/record=b2097496*est

Research, design and implementation of galvanically isolated impedance-source DC-DC converters = Galvaaniliselt isoleeritud impedantsallikaga alalispingemuundurite uurimine, süntees ja rakendamine

Chub, Andrii 2016 <http://digi.lib.ttu.ee/ii/?6209> https://www.ester.ee/record=b4601191*est

Resonant DC transformer for grid-interactive energy efficient buildings

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Rathore, Akshay Kumar; Vinnikov, Dmitri 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604353>

Reverse power flow control possibilities of galvanically isolated impedance-source DC-DC converters

Chub, Andrii; Vinnikov, Dmitri; Liivik, Elizaveta 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 2017 / p. 522-527 : ill <https://doi.org/10.1109/CPE.2017.7915226>

Review and outlook of isolated capacitive coupling based converters

Pourjafar, Saeed; Husev, Oleksandr; Roncero-Clemente, Carlos 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p. <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604421>

A review of galvanically isolated impedance-source DC-DC converters

Chub, Andrii; Vinnikov, Dmitri; Blaabjerg, Frede; Peng, Fang Zheng IEEE transactions on power electronics 2016 / p. 2808-2828 : ill <https://doi.org/10.1109/TPEL.2015.2453128> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review of isolated matrix inverters : topologies, modulation methods and applications

Korkh, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri; Chub, Andrii Energies 2020 / art. 2394, 30 p. : ill <https://doi.org/10.3390/en13092394> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review of loss calculation reduction control methods of permanent magnet assisted reluctance drive

Melentjev, Sergei; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; Vaimann, Toomas PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 199-206 : ill <https://doi.org/10.1109/PQ.2016.7724113>

Review of novel topologies for PV applications

Makovenko, Elena; Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique Technological innovation for cyber-physical systems : 7th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2016, Costa de Caparica, Portugal, April 11-13, 2016 : proceedings 2016 / p. 369-377 : ill https://doi.org/10.1007/978-3-319-31165-4_35 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Self-adjusting resonant converters and application by high power electrical arc furnaces

Janson, Kuno; Järvik, Jaan EPE'97 : 7th European Conference on Power Electronics and Applications, 8-10 September 1997, Trondheim, Norway : proceedings. Vol. 4 1997 / p. 4.327-4.332: ill

Semiconductor power loss reduction and efficiency improvement techniques for the galvanically isolated quasi-Z-source DC-DC converters = Galvaaniliselt isoleeritud kvaasiimpedantsallikaga alalispingemuunduri pooljuhtide võimsuskao vähendamine ja kasuteguri suurendamine

Liivik, Liisa 2015 https://www.ester.ee/record=b4484169*est

Sensorless pressure control of centrifugal pumps [Electronic resource]

Bakman, Ilja; Vodovozov, Valery CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 304-309 : ill [CD-ROM]

SEPIC-based modular DC/DC converter

Chub, Andrii 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 53-55 : ill

A Series partial power converter based on dual active bridge converter for residentila battery energy system

Hassanpour, Naser 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 65-66 : ill
https://www.ester.ee/record=b5457278*est

Series-parallel resonant current-source DC-DC converter with wide output voltage range

Blinov, Andrei; Carvalho da Silva, Edivan Laercio; Verbytskyi, Ievgen; Vinnikov, Dmitri 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604346>

Series-resonant DC-DC interface converter for battery integration into DC microgrids

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 307-310 <https://doi.org/10.1109/PEMC51159.2022.9962929>

Sheppard-Taylor isolated high boost DC-DC converter

Chub, Andrii; Siwakoti, Yam P.; Vinnikov, Dmitri; Blaabjerg, Frede Thirty Second Annual IEEE Applied Power Electronics Conference and Exposition (APEC 2017) : March 26-30, 2017, Tampa, Florida 2017 / p. 1695-1699 : ill
<https://doi.org/10.1109/APEC.2017.7930927> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Short-circuit fault detection and remedial in full-bridge rectifier of series resonant DC-DC converter based on inductor voltage signature

Bakeer, Abualkasim Ahmed Ali; 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/RTUCON51174.2020.9316482>

Simulation study of high step-up quasi-Z-source DC-DC converter with synchronous rectification

Liivik, Liisa; Vinnikov, Dmitri; Zakis, Janis 2014 55th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings 2014 / p. 34-37 : ill

Simulation study of nonlinear PI-controller with quasi-Z-source derived push-pull converter

Chub, Andrii; Husev, Oleksandr; Vinnikov, Dmitri Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 26-31 : ill

Simulation study of the grid-connected single-phase impedance-sourced NPC inverter with different control methods

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Romero-Cadaval, Enrique; **Zakis, Janis; Vinnikov, Dmitri;** Milanes-Montero, Maria Isabel 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2949-2954 : ill <https://doi.org/10.1109/ICIT.2015.7125533> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Simulation study of the three-level boost DC-DC converter with full ZVS for PV application

Vorobei, Vasilii; **Zakis, Janis; Husev, Oleksandr;** Veligorskyi, Oleksandr; Savenko, Oleksandr ICPE 2015 - ECCE Asia : 9th International Conference on Power Electronics - ECCE Asia : "Green World with Power Electronics" : June 1-5, 2015, 63 Convention Center, Seoul, Korea 2015 / p. 2038-2043 : ill <http://dx.doi.org/10.1109/ICPE.2015.7168058>

Single switch multi-winding wireless power transfer system based on Z-source network

Kroics, Kaspars; **Husev, Oleksandr**; Pakhaliuk, Bohdan 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2465-2474 : ill <https://ieeexplore.ieee.org/document/8515602>

Single-phase three-level qZ-source inverter connected to the grid with battery storage and active power decoupling function

Makovenko, Elena; **Husev, Oleksandr**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; **Stepenko, Serhii** 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.2018.8659843>

Single-phase three-level quasi-Z-source inverter with a new boost modulation technique

Husev, Oleksandr; **Stepenko, Serhii**; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5852-5857 : ill <https://doi.org/10.1109/IECON.2012.6389127> <https://ieeexplore.ieee.org/document/6389127>

Single-stage single-phase current source inverter for standalone applications

Sohail, Umer; **Blinov, Andrei**; Østrem, Trond; Hoff, Bjarte; **Carvalho, Edivan Laercio** IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905718> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Single-switch galvanically isolated quasi-Z-source DC-DC converter

Chub, Andrii; **Vinnikov, Dmitri** 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 582-586 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266381>

Small signal model of the buck-boost bidirectional DC-AC converter based on unfolding circuit

Matiushkin, Oleksandr; **Husev, Oleksandr**; **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 / 6 p <https://doi.org/10.1109/RTUCON48111.2019.8982329>

Smart transformer universal operation

Ko, Youngjong; **Chub, Andrii**; Costa, Levy; Andresen, Markus; Liserre, Marco 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1609-1616 : ill <https://doi.org/10.1109/APEC.2018.8341232>

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](#)

Soft-switching capability analysis of a qZSI-based DC/DC converter

Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 301-304 : ill

Soft-switching current-FED flyback converter with natural clamping for low voltage battery energy storage applications

Kosenko, Roman; **Vinnikov, Dmitri** 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. 429-436 https://doi.org/10.1007/978-3-319-56077-9_42 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Soft-switching modulation method for full-bridge DC-AC HF-link inverter

Blinov, Andrei; **Korkh, Oleksandr**; **Vinnikov, Dmitri**; Galkin, Ilja; Norrga, Staffan IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 4417-4422 : ill <https://doi.org/10.1109/IECON.2019.8927186> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Some design considerations for high-power high-voltage DC/DC converter with improved power density and efficiency

Vinnikov, Dmitri The Brazilian journal of power electronics = Revista eletrônica de potência 2009 / 4, p. 297-304 <https://sobraep.org.br/site/uploads/2018/06/rvol14no4p15.pdf>

Split bobbin transformer design with adjustable leakage inductance

Rahman, Showrov 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 63-64 : ill https://www.ester.ee/record=b5457278*est

Stability analysis of the quasi-Z-source DC/DC converter based on small signal model [Electronic resource]

Husev, Oleksandr; **Vinnikov, Dmitri**; **Roasto, Indrek** SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 298-303 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264524>

Startup sequence for a grid connected single phase voltage source inverter

Roasto, Indrek; Jalakas, Tanel; Rosin, Argo 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1787-1791 : ill <https://doi.org/10.1109/ISIE.2017.8001519>

Startup strategy for grid connected PV micro inverter

Roasto, Indrek; Jalakas, Tanel BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 187-190 : ill http://www.eester.ee/record=b2150914*est

State of the art review of PV module-level power electronics

Kosenko, Roman Doctoral School of Energy and Geotechnology II : closing conference of the project : Pärnu, Estonia, January 12-17, 2015 2015 / p. 146-151 : ill

State-of-the-art review of Z-source and quasi-Z-source DC/DC converter topologies

Chub, Andrii; Husev, Oleksandr; Ivanets, Sergii 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 68-75 : ill

Step-up DC/DC converters with cascaded quasi-Z-source network

Vinnikov, Dmitri; Roasto, Indrek; Strzelecki, Ryszard; Adamowicz, Marek IEEE transactions on industrial electronics 2012 / p. 3727-3736 : ill <https://ieeexplore.ieee.org/document/6096410>

Study of MOSFET post-fault operation in fault-tolerant DC-DC converters

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / Code 181231, 5 p <https://doi.org/10.1109/ENERGYCON53164.2022.9830216>

Study of performance improvement methods for 6.5kV IGBT based two-level half-bridge converters

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr Технічна електродинаміка 2011 / p. 56-62 : ill

Study on power losses of the full soft-switching current-fed DC/DC converter with Si and GaN devices

Chub, Andrii; Rabkowski, Jacek; Blinov, Andrei; Vinnikov, Dmitri IECON 2015 - Yokohama : 41st Annual Conference of the IEEE Industrial Electronics Society : November 9-12, 2015, Pacifico Yokohama, Yokohama, Japan 2015 / p. 13-18

Switched-capacitor resonant DC-DC converter with differential power processing for stacked servers in data center applications

Dos Santos, Niwton Gabriel Feliciani; Carvalho, Edivan Laercio; Chub, Andrii IECON 2025 – 51st Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <https://doi.org/10.1109/IECON58223.2025.11221655>

Switch-mode power supplies for plasma-arc systems

Soojärvi, J.; Dragunov, V.; Tomson, Teolan BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 373-376 : ill

Switch-off behaviour of 6.5 kV IGBT modules in two-level voltage source inverter

Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri; Janson, Kuno Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2010 / p. 121-126 : ill https://www.researchgate.net/publication/258448388_Switch-Off_Behaviour_of_65_kV_IGBT_Modules_in_Two-Level_Voltage_Source_Inverter

Synchronous rectification in quasi-Z-source converters : possibilities and challenges

Liivik, Liisa; Vinnikov, Dmitri; Jalakas, Tanel 2014 IEEE International Conference on Intelligent Energy and Power Systems (IEPS) : conference proceedings : June 2-6, 2014, Kyiv, Ukraine 2014 / p. 32-35 : ill

The quasi-Z-source DC/DC converter with a series resonant circuit

Liivik, Liisa 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 135-140 : ill

Thermal management experience in GaN-based DC-DC converter

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604322>

Three-level single-phase quasi-Z source inverter with active power decoupling circuit

Makovenko, Elena; Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Vinnikov, Dmitri 18th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices : proceedings : Erlagol, Altai - 29 June - 3 July, 2017 2017 / p. 497-502 : ill <https://doi.org/10.1109/EDM.2017.7981804>

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](#)

Three-port flyback converter for photovoltaic module integration in bipolar DC microgrids

Chub, Andrii; Zinchenko, Denys; Vinnikov, Dmitri; Blinov, Andrei 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 909-914
<https://doi.org/10.1109/ICIT45562.2020.9067237> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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](#)

Topology morphing control with soft transients for multimode series resonant DC-DC converter

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2021 IEEE 22nd International Conference of Young Professionals in Electron Devices and Materials (EDM) 2021 / p. 331-336 <https://doi.org/10.1109/EDM52169.2021.9507621>

Topology-morphing photovoltaic microconverter with wide MPPT voltage window and post-fault operation capability

Vinnikov, Dmitri; Chub, Andrii; Zinchenko, Denys; Sidorov, Vadim IEEE Access 2020 / art. 9171332, p. 153941-153955 : ill
<https://doi.org/10.1109/ACCESS.2020.3017805> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Внешняя характеристика эквивалентного преобразователя

Buatšidze, Sergei 1954 https://www.ester.ee/record=b1328122*est <https://digikogu.taltech.ee/et/Item/1418ff6f-5a57-4481-8b10-9ecca4bd6cf7>

Tracking of MPP for three-level neutral-point clamped qZ-source off-grid inverter in solar applications

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Minambres-Marcos, Victor; Romero-Cadaval, Enrique; Stepenko, Serhii; **Vinnikov, Dmitri** Journal of microelectronics, electronic components and materials 2013 / p. 212-221 : ill
https://www.researchgate.net/publication/259495902_Tracking_of_MPP_for_three-level_neutral-point_clamped_qZ-source_off-grid_inverter_in_solar_applications

Traction and control of light rail vehicles

Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis 2008
http://www.ester.ee/record=b2394449*est

Trafo muutub väiksemaks ja nutikamaks : [koostööst TTÜ ja Poola Mereakadeemia teadlaste vahel]

Imeline Teadus 2014 / lk. 101

Transient response analyse of different voltage-fed qZS-family inverters

Ott, Silver; Roasto, Indrek; Vinnikov, Dmitri; Teemets, Raivo 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 195-199 : ill

Ultrakondensatoren - Energiespeicher für Schienenfahrzeuge

Roasto, Indrek 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 119-122 : ill

Universal single-phase voltage converter for illumination, heating and ventilation systems

Gevorkov, Levon 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 125-128 : ill

Wide input voltage range high step-up DC-DC converter with fault-tolerant operation capability

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Kouro, Samir 2019 IEEE International Conference on Industrial Technology, ICIT 2019 : Melbourne, Australia, 13-15 February 2019 : proceedings 2019 / p. 1099-1104 : ill <https://doi.org/10.1109/ICIT.2019.8755040>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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](#)

Wide range series resonant DC-DC converter with a reduced component count and capacitor voltage stress for distributed generation

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Blinov, Andrei; Lai, Jih-Sheng Energies 2021 / art. 2051
<https://doi.org/10.3390/en14082051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Virtual lab to study power electronic converters [Electronic resource]

Raud, Zoja; Vodovozov, Valery SPEEDAM 2010 : International Symposium on Power Electronics, Electrical Drives, Automation

and Motion : Pisa, Italy, 14th-16th June, 2010 2010 / p. 703-708 [CD-ROM]
https://www.researchgate.net/publication/241171359_Virtual_lab_to_study_power_electronic_converters

Voltage balancing circuit for modular step-down DC/DC converter

Uljans, Austris; **Zakis, Janis** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 329-332 : ill

Voltage distortion approach for output filter design for off-grid and grid-connected PWM inverters

Husev, Oleksandr; Chub, Andrii; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Vinnikov, Dmitri** Journal of power electronics 2015 / p. 278-287 : ill <https://doi.org/10.6113/JPE.2015.15.1.278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Voltage gain extension techniques for high step-up galvanically isolated DC-DC converters

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Liivik, Elizaveta; Blinov, Andrei 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 1021-1027 : ill <https://doi.org/10.1109/ICIT45562.2020.9067115> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Двухтактный квази-импедансный повышающий DC/DC преобразователь

Vinnikov, Dmitri; Husev, Oleksandr; Blinov, Andrei Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / с. 36-42 : ил

Защита тиристорного преобразователя при опрокидывании инвертора

Lootus, Jaan; Treufeld, Jüri; Tuldava, Toomas Исследование электромагнитных и электромашиных устройств управления и контроля специального назначения 1978 / с. 65-75 : илл https://www.ester.ee/record=b1346523*est
<https://digikogu.taltech.ee/et/Item/a244ed16-2990-4904-9ca3-15c6823a6050>

Индуктивный делитель напряжения как четырехполюсник с распределенными параметрами

Sillamaa, Hanno; Eiskop, Ilmar Устройства и элементы систем автоматизации научных экспериментов : Труды IX конференции по автоматическому контролю и методам электрических измерений : [9-12 сентября 1968 г. 1970 / с. 474-477 : илл https://www.ester.ee/record=b2959184*est

Индуктивный делитель напряжения как четырехполюсник с распределенными параметрами

Sillamaa, Hanno; Eiskop, Ilmar Конференция по автоматическому контролю и методам электрических измерений (9; 1968; Новосибирск). Тезисы докладов и сообщений 1968 / с. 114-115

Интегральное использование силового запираемого тиристора со встречно-параллельно включенным диодом

Pikkov, Mihhail; Saks, P.; Seleninov, Kazimir Тезисы докладов Республиканской научно-технической конференции "Современные методы и устройства радиоэлектронного оборудования", посвященной Дню радио. Секция: полупроводниковые приборы 1981 / с. 45 https://www.ester.ee/record=b1310801*est

Использование разделенной коммутации в двухзвенных преобразователях постоянного напряжения для снижения динамических потерь силовых полупроводниковых ключей

Sokol, Jevgeni; Blinov, Andrei; Vinnikov, Dmitri Энергосбережение. Энергетика. Энергоаудит 2014 / 55-69 : ил

Исследование частотных и импульсных характеристик индуктивного делителя напряжения : диссертация ... кандидата технических наук

Eiskop, Ilmar 1969 http://www.ester.ee/record=b2411163*est

Исследование электромагнитных и электромашиных устройств специального назначения

1981 https://www.ester.ee/record=b1319107*est <https://digikogu.taltech.ee/et/Item/69f32682-c927-437b-9d88-f03d45fbfd06>

Исследование электромагнитных и электромашиных устройств управления и контроля специального назначения

1978 https://www.ester.ee/record=b1522065*est <https://digikogu.taltech.ee/et/Item/5d93e987-0288-4835-b06f-b5525aea2c1b>

Исследование электромагнитных и электромашиных устройств управления и контроля специального назначения

1978 https://www.ester.ee/record=b1346523*est <https://digikogu.taltech.ee/et/Item/a244ed16-2990-4904-9ca3-15c6823a6050>

Исследование электромагнитных и электромашиных устройств управления и контроля специального назначения

1980 https://www.ester.ee/record=b1312090*est <https://digikogu.taltech.ee/et/Item/e708f6e5-a186-4ef0-893e-d61558782a2b>

Математические модели и методы анализа трансформаторных делителей напряжения : автореферат ... кандидата технических наук (05.11.05)

Jöers, Rein 1982 https://www.ester.ee/record=b2340399*est

Метод формирования кривой выходного напряжения преобразователя в приводах переменного тока

Рыбицкий Л.С.; Рутманис Л.А.; Морс Д.Г.; Лиепиньш М.М. Тезисы докладов семинара "Новые разновидности электропривода и возможности их применения" 1990 / с. 55-59: ил

Модель двухтактного квази-импедансного преобразователя для малого сигнала

Chub, Andrii Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с. 12-19 : ил

Модель двухтактного квази-импедансного преобразователя для малого сигнала [Компьют. файл]

Chub, Andrii Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [3] с. : ил [CD-ROM]

О быстродействии датчиков тока в схемах тиристорных преобразователей

Treufeld, Jüri; Egel, Ants Проектирование и расчет электромагнитных устройств специального назначения 1979 / с. 59-64 : ил https://www.ester.ee/record=b1271276*est <https://digikogu.taltech.ee/et/Item/76bd8713-dc87-4a4b-8822-f1733a47224a>

Об экспериментальных испытаниях двухтактного квази-импедансного преобразователя постоянного напряжения с полупроводниковыми элементами на основе карбида кремния

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Husev, Oleksandr Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с.51-58 : ил

Об экспериментальных испытаниях двухтактного квази-импедансного преобразователя постоянного напряжения с полупроводниковыми элементами на основе карбида кремния [Компьют. файл]

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Husev, Oleksandr Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [2] с. : ил [CD-ROM]

Обратимый двухзвенный преобразователь постоянного напряжения с разделенной коммутацией и с неизменным знаком входного и выходного напряжения

Ивахно, В.; Замаруев, В.; Стысю, Б.; Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman Вісник Національного Технічного Університету "ХПИ" 2015 / с. 402-407 : ил

Определение параметров жидкометаллического униполярного преобразователя при наличии короткозамыкающих колец

Parts, Innari XX научная конференция, посвященная 25-летию Эстонской ССР 18-22 мая 1965 г. : тезисы и резюме 1965 / с. 84 https://www.ester.ee/record=b1359832*est

Определение первичного тока жидкометаллического униполярного преобразователя

Parts, R.; Parts, Innari XX научная конференция, посвященная 25-летию Эстонской ССР 18-22 мая 1965 г. : тезисы и резюме 1965 / с. 84 https://www.ester.ee/record=b1359832*est

Оценка синфазной составляющей сигнала электромагнитного преобразователя скорости

Meister, Ants Сборник материалов к VI Таллинскому совещанию по электромагнитным расходомерам и электротехнике жидких проводников 1975 / с. 80-83 https://www.ester.ee/record=b1322170*est

Порівняння імпедансних ланок для перетворювачів з джерелом напруги

Husev, Oleksandr; Chub, Andrii; Vinnikov, Dmitri Технічна електродинаміка 2015 / с. 25-32 : іл <https://techned.org.ua/index.php/techned/article/view/926/803> Journal metrics at Scopus Article at Scopus

Проектирование и расчет электромагнитных устройств специального назначения

1979 https://www.ester.ee/record=b1271276*est <https://digikogu.taltech.ee/et/Item/76bd8713-dc87-4a4b-8822-f1733a47224a>

Разработка фазосдвигающего устройства вентильного преобразователя на базе управляемого реактора

Tingas, T.; Kuprijanov, J.; Järvik, Jaan XX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР : тезисы докладов. Часть 1 1974 / с. 165 https://www.ester.ee/record=b1306141*est

Резонансный преобразователь с параметрическим чередованием параллельного и последовательного резонанса и его переходные режимы

Janson, Kuno; Järvik, Jaan; Bolgov, Viktor 4th International Scientific Conference Efficiency and Power Quality of Electrical Supply of Industrial Enterprises : May 24-26, 2000, Mariupol, Ukraine : proceedings 2000 / с. 43-48 : ил

Сравнительный анализ повышающих преобразователей для интеграции фотоэлектрических панелей в сеть

Husev, Oleksandr; Vinnikov, Dmitri; Veligorsky, O. Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с. 28-34 : ил

Сравнительный анализ повышающих преобразователей для интеграции фотоэлектрических панелей в сеть
[Компьют. файл]

Husev, Oleksandr; Vinnikov, Dmitri; Veligorsky, O. Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [2] с. : ил [CD-ROM]

Тиристорный преобразователь напряжения : методическое руководство по курсовому проектированию

1985 https://www.ester.ee/record=b1227206*est

Экспериментальное исследование трёхуровневого инвертора напряжения с квази-импедансным звеном на входе

Stepenko, Serhii Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с. 74-83 : ил

Экспериментальное исследование трёхуровневого инвертора напряжения с квази-импедансным звеном на входе [Компьют. файл]

Stepenko, Serhii Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [3] с. : ил [CD-ROM]