

A new low-distorting single-phase diode rectifier employing optimum ripple-power conversion

Sakkos, Tiit; Sarv, Vello 5th International Conference : Electric Power Quality and Supply Reliability : August 23-26, 2006, Viimsi, Estonia : conference proceedings 2006 / p. 23-26 : ill

Active and reactive power control of DFIG using optimized fractional order-PI controller

Javed, Umar; Arshad, Muhammad Asad; **Shabbir, Noman; Kütt, Lauri; Rassõlkin, Anton** 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 398-404 <https://doi.org/10.1109/PEMC48073.2021.9432608>

Active equal-C GIC-based band-pass filters

Kukk, Vello BEC : Baltic Electronics Conference : proceedings of the 4th Biennial Conference, October 9-14, 1994, Tallinn (Estonia). 2 1994 / p. 479-482: ill https://www.ester.ee/record=b2150914*est

Active redundancy in isolated DC-DC converters: A modular solution for fault tolerance

Shirodkar, Aditya; Banavath, Satish Naik; **Yadav, Neelesh; Chub, Andrii**; Mandrioli, Riccardo 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 5 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027280>

Adaptive frequency-based power management for off-grid hybrid photovoltaic converters

Gonschorowsk, Ezequiel; Cardoso, Rafael; **Carvalho da Silva, Edivan Laercio; Stein, Carlos Marcelo De Oliveira**; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric Eletronica de potencia 2024 / art. e202440 <https://doi.org/10.18618/REP.e202440>

Advanced course of power electronics : laboratory works

Jalakas, Tanel; Vodovozov, Valery; Vinnikov, Dmitri 2008 https://www.ester.ee/record=b2375135*est

Ainulaadne pingemuundur taastuenergeetikale

Roasto, Indrek Mente et Manu 2009 / 22. mai, lk. 2 : fot https://www.ester.ee/record=b1242496*est

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

Vinnikov, Dmitri; Laugis, Juhan Fourth International Conference and Exhibition on Ecological Vehicles & Renewable Energies : March 26-29, 2009, Monaco : one-page abstract proceeding 2009 / [1] p

Analysis of broken rotor bar diagnostic techniques for inverter fed induction motor faults

Sardar, Muhammad Usman 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 39-40 : ill https://www.ester.ee/record=b5570906*est

Analysis of holdup time for DC grid-forming isolated active front-end converters

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / p. 1-6 <https://doi.org/10.1109/IECON49645.2022.9969075> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Analysis of medium and low voltage frequency converters applications

Ahven, Arne; Kaldoja, Enno The 4th Research Symposium of Young Scientists : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 73-74

Analysis of new bidirectional DC-DC converter based on current doubler rectifier

Beldjajev, Viktor; Roasto, Indrek 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. 234-237 : ill

Analysis of operating modes of the novel isolated interface converter for PMSG based wind turbines

Bisenieks, Lauris; Vinnikov, Dmitri; Zakis, Janis POWERENG2011 : proceedings of the 2011 International Conference on Power Engineering, Energy and Electrical Drives : Torremolinos (Málaga), Spain, May 11-13, 2011 2011 / [8] p.: ill <https://ieeexplore.ieee.org/document/6036538>

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

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

Analysis of series partial power converter in transient and steady-state operation modes

Hassanpour, Naser 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 51-52 https://www.ester.ee/record=b5504019*est

Analysis of state of the art and development trends in soft-switched half-bridge DC/DC converters

Egorov, Mikhail; Vinnikov, Dmitri; Vodovozov, Valery 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. 49-54 : ill

Analysis of switching conditions of IGBTs in modified sine wave qZSIs operated with different shoot-through control methods

Vinnikov, Dmitri; Roasto, Indrek; Zakis, Janis; Ott, Silver; Jalakas, Tanel Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 45-50 : ill
https://www.researchgate.net/publication/269779178_Analysis_of_Switching_Conditions_of_IGBTs_in_Modified_Sine_Wave_qZSIs_Operated_with_Different_Shoot-Through_Control_Methods

An analytical model for a nearfield of an ultrasonic transducer using evolution equations = Ultraheligenaatori lähisvälja kirjeldamine evolutsioonivõrrandite abil : magistritöö

Feldmann, Mati 1992 http://www.ester.ee/record=b2630616*est

Application and control of bidirectional T-type converter in hybrid bipolar AC/DC microgrid

Sassonker Elkayam, Moria; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p
<https://doi.org/10.1109/ICDCM63994.2025.11144720>

Application of boundary conduction mode control in galvanically isolated buck-boost converter

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii 3rd International Conference on Smart Grid and Renewable Energy (SGRE) 2022 / p. 1-6 <https://doi.org/10.1109/SGRE53517.2022.9774105>

Application of cycle skipping modulation in buck-boost photovoltaic microconverters

Maheri, Hamed Mashinchi; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim; Galkin, Ilja IEEE transactions on industry applications 2022 / p. 4804-4815 <https://doi.org/10.1109/TIA.2022.3163083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of self-adjusting features of resonant converters

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 9th European Conference on Power Electronics and Applications : 27-29 August 2001, Graz, Austria 2001 / p. L6a-1 : ill

Application of self-adjusting features of resonant converters [Electronic resource]

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas EPE 2001 : 9th European Conference on Power Electronics and Applications : 27-29 August 2001, Graz 2001 / [9] p.: ill. [CD-ROM]

Assessment of buck converter powered by current or voltage sources for LEDs luminary

Milaševski, Irena; Galkin, Ilja; Tetervenok, Oleg BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 239-242 : ill

Assessment of the development limitations for wave energy utilization in the Baltic Sea

Vidjajev, Nikon; Palu, Riina; Terentjev, Jan; Hilmola, Olli-Pekka Kristian; Alari, Victor Sustainability 2022 / art. 2832
<https://doi.org/10.3390/su14052832> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Auxiliary power converter for a tram

Vinnikov, Dmitri; Lehtla, Madis Summer Seminar on Nordic Network for Multi Disciplinary Optimised Electric Drives 2002 / ? p

Auxiliary power supplies for the light rail vehicles : research and development

Vinnikov, Dmitri 2009 <https://www.amazon.com/AUXILIARY-POWER-SUPPLIES-LIGHT-VEHICLES/dp/3838303695>

Bidirectional isolated hexamode DC-DC converter

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri IEEE transactions on power electronics 2022 / p. 12264-12278
<https://doi.org/10.1109/TPEL.2022.3170229> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bidirectional wide voltage range series-parallel resonant buck-boost DC-DC converter

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 5 p <https://doi.org/10.1109/PEMC61721.2024.10726369>

Black start and fault tolerant operation of isolated matrix converter for DC microgrids

Emiliani, Pietro; Blinov, Andrei; Chub, Andrii; de Carne, Giovanni; Vinnikov, Dmitri IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / 5 p <https://doi.org/10.1109/IECON49645.2022.9968735> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Buck-boost resonant Z-source parital power converter

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 3rd International Conference on Smart Grid and Renewable Energy (SGRE) 2022 / p. 1-6 <https://doi.org/10.1109/SGRE53517.2022.9774095>

Bus bar test bench development for common 3x3 matrix converter

Sokolovs, Alvis; **Galkin, Ilja; Laugis, Juhan** BEC 2006 : 2006 International Baltic Electronics Conference : Tallinn University of Technology, October 2-4, 2006, Tallinn, Estonia : proceedings of the 10th Biennial Baltic Electronics Conference 2006 / p. 233-236 : ill

Calculation and analysis of radial forces in the air-gap of a cycloconverter-fed synchronous machine

Lehti, Matti; Luomi, Jorma 35 научная конференция студентов вузов Эстонии, Латвии, Литвы, Белоруссии и Молдовы : [Таллинн, 1991] : доклады. Секция электромеханики. Секция электроэнергетики 1991 / с. 3-6: ил

Capacitive vs Inductive Coupling Based DC-DC Converter Operating in MHz Switching Frequency Range

Pourjafar, Saeed; Mohseni, Parham; Husev, Oleksandr; Strzelecki, Ryszard; Matiushkin, Oleksandr 2025 IEEE Applied Power Electronics Conference and Exposition (APEC) 2025 / p. 2173-2178 <https://doi.org/10.1109/APEC48143.2025.10977156>

CCM and DCM operation analysis of cascaded quasi-z-source inverter

Vinnikov, Dmitri; Roasto, Indrek; Strzelecki, Ryszard; Adamowicz, Marek Proceedings of IEEE International Symposium on Industrial Electronics : ISIE'2011 : 27-30 June 2011, Gdansk, Poland 2011 / p. 159-164 : ill

Cell-level power supply for high-voltage modular multilevel converters [Electronic resource]

Blinov, Andrei; Norrga, Staffan; Tibola, Gabriel; Velotto, Giovanni 19th European Conference on Power Electronics and Application : EPE'17 ECCE Europe : September 11-14, 2017, Warsaw, Poland 2017 / p. P1-P10 : ill. [USB]
<https://doi.org/10.23919/EPE17ECCEEurope.2017.8099361>

Charging of high power pulse capacitors from resonant converter of alternating parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Elektroenergetika 2000 : mezinárodní vědecká konference : sborník přednášek 2000 / p. 93-97 : ill

The class of test signals for dynamic testing of AD converters

Land, Raul The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 127-128 : ill

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

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

Coil-to-coil efficiency of ISS-compensated inductive wireless power transfer links operating with load-independent output voltage at fixed frequency

Belenky, A.; **Chub, Andrii;** Kuperman, A. 2023 International Conference on Clean Electrical Power (ICCEP) 2023 / p. 617-621 : ill
<https://doi.org/10.1109/ICCEP57914.2023.10247404>

Commutation processes in the diode bridge of resonant converter with alternating parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 205-208 : ill

Compact design of a power circuit for a dual-output voltage converter

Vinnikov, Dmitri; Lehtla, Tõnu BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 333-336 : ill

Comparative analysis of toolboxes to explore power converters of electrical drives

Egorov, Mikhail 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 193-199 : ill

Comparative evaluation of a new flying capacitor-based buck-boost converters for universal application

Hemmati Shahsavari, Tala 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 65-66 : ill https://www.eester.ee/record=b5504019*est

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

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

Comparative evaluation of dual-purpose converters suitable for application in dc and ac grids

Husev, Oleksandr; **Matiushkin, Oleksandr;** **Jalakas, Tanel;** **Vinnikov, Dmitri;** Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in power electronics 2024 / p. 1337-1347 <https://doi.org/10.1109/JESTPE.2023.3243857> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative evaluation of the air core magnetic design for MHz+ switching frequency

Matiushkin, Oleksandr; Pakhaliuk, Bohdan; Gutierrez-Escalona, Javier; Romero-Cadaval, Enrique; Husev, Oleksandr; Zakis, Janis
Applied sciences 2025 / art. 8820 <https://doi.org/10.3390/app15168820>

Comparative feasibility study of partial power converter for interfacing battery energy storage into power system of future circular collider

Chub, Andrii; Niinemägi, Joosep; Colmenero, Manuel; Aguglia, Davide Proceedings of the Estonian Academy of Sciences 2024 / p. 396-415 <https://doi.org/10.3176/proc.2024.4.08> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative study of possible implementations of the flexible power electronic interface for wide-range high step-up applications in DC microgrid

Khan, Salman; Chub, Andrii; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604370>

Comparative study of the phase-integrated converter as universal power converter

Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser; Kouro, Samir Annual IEEE Conference on Applied Power Electronics Conference and Exposition (APEC) 2022 / p. 58-63
<https://doi.org/10.1109/APEC43599.2022.9773553> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Comparison of 2- and 3-level Half-Bridge DC/DC converters for high-voltage high-power applications

Vinnikov, Dmitri; Strzelecki, Ryszard Przegląd elektrotechniczny = Electrical review 2009 / 10, p. 217-221
https://www.researchgate.net/publication/283654804_Comparison_of_2-and_3-level_half-bridge_DCDC_converters_for_high-voltage_high-power_applications

Comparison of control methods for high-voltage high-power three-level half-bridge DC/DC converters [Electronic resource]

Roasto, Indrek; Vinnikov, Dmitri; Galkin, Ilja 6th International Conference-Workshop Compatibility and Power Electronics : May 20-22, 2009 : CPE 2009 : conference proceedings 2009 / p. 258-264 : ill. [CD-ROM]
https://www.researchgate.net/publication/241160163_Comparison_of_control_methods_for_high-voltage_high-power_three-level_half-bridge_DCDC_converters

Comparison of full power and partial power buck-boost DC-DC converters for residential battery energy storage applications

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 6 p <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880862>

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

Zinchenko, Denys 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 125-126 : ill https://www.ester.ee/record=b5291755*est

Comparison of performance of phase-shift and asymmetrical pulse width modulation techniques for the novel galvanically isolated buck-boost dc-dc converter for photovoltaic applications

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Zakis, Janis; Liivik, Elizaveta IEEE journal of emerging and selected topics in power electronics 2017 / p. 624-637 : ill <https://doi.org/10.1109/JESTPE.2016.2631628> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of three-phase isolated DC/DC converters with Z- and quasi-Z-source inverters

Egorov, Mikhail; Vinnikov, Dmitri; Strzelecki, Ryszard; Adamowicz, Marek 7th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Narva-Jõesuu, Estonia, 16.06-19.06.2009] 2009 / p. 9-14 : ill

Comparison of three-phase three-level voltage source inverter with intermediate dc-dc boost converter and quasi-Z-source inverter

Panfilov, Dmitry; Husev, Oleksandr; Blaabjerg, Frede; **Zakis, Janis**; Khandakji, Kamal IET Power Electronics 2016 / p. 1238 - 1248 <https://doi.org/10.1049/iet-pel.2015.0539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comprehensive comparison of grid-connected flyback-based microinverter with primary and secondary side decoupling approach

Afshari, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Pourjafar, Saeed; Kurdkandi, Naser Vosoughi; **Vinnikov, Dmitri** IEEE transactions on industry applications 2024 / p. 9080-9089 <https://doi.org/10.1109/TIA.2024.3452069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comprehensive comparison of isolated high step-up dc-dc converters for low power application

Pourjafar, Saeed; Afshari, Hossein; Mohseni, Parham; Husev, Oleksandr; Matiushkin, Oleksandr; Shabbir, Noman IEEE open journal of power electronics 2024 / p. 1149-1161 <https://doi.org/10.1109/OJPEL.2024.3433554> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A comprehensive review on DC fast charging stations for electric vehicles: standards, power conversion technologies, architectures, energy management, and cybersecurity

Arena, Gabriele; **Chub, Andrii**; Lukianov, Mykola; Strzelecki, Ryszard; **Vinnikov, Dmitri**; de Carne, Giovanni IEEE open journal of power electronics 2024 / p. 1573-1611 <https://doi.org/10.1109/OJPEL.2024.3466936> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comprison of grid-connected microinverter with primary and secondary side decoupling approach

Afshari, Hossein 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 57-58 : ill https://www.ester.ee/record=b5570906*est

Computation of characteristic coefficients of Cuk converter

Niculescu, Elena; Cristea, Amelia-Maria BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 105-108: ill

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

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

Considerations on combining unfolding inverters with partial power regulators in battery-grid interface converters

Galkin, Ilya A.; Saltanovs, Rodions; Bubovich, Alexander; **Blinov, Andrei**; Pefitsis, Dimosthenis Energies 2024 / art. 893 <https://doi.org/10.3390/en17040893> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Control of multiport partial power converters for PV-battery systems integration in DC microgrids

Yadav, Neelesh; Mitra, Tuhin; Makkieh, Ahmad; **Chub, Andrii** 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144705>

Converter state-space model estimation using dynamic mode decomposition

Suskis, Pavels; Zakis, Janis; Suzdalenko, Alexander; Khang, Huynh Van; **Rassölkin, Anton**; **Vaimann, Toomas**; Pomarnacki, Raimondas 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 5 I <https://doi.org/10.1109/ENERGYCON53164.2022.9830201>

Current sensorless control algorithm for single-phase three-level NPC inverter

Suzdalenko, Alexander; **Zakis, Janis**; Steiks, Ingars Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2014 / p. 28-33 : ill

Current-fed partial power converter for photovoltaic applications in DC microgrids

Jalakas, Tanel; Kosenko, Roman; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / p. 1-5 : ill <https://doi.org/10.1109/IECON48115.2021.9589899> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

DC fast charging of electric vehicles : a review on architecture and power conversion technology

Arena, Gabriele; **Emiliani, Pietro; Chub, Andrii; Vinnikov, Dmitri**; de Carne, Giovanni 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227492>

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

Emiliani, Pietro 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 53-54 : ill https://www.ester.ee/record=b5504019*est

DC microgrid: state of art, driving force, challenges and perspectives

Husev, Oleksandr; Vinnikov, Dmitri Power Systems Research and Operation : Selected Problems III 2024 / p. 149-190 https://doi.org/10.1007/978-3-031-44772-3_8 [Article collection metrics at Scopus](#) [Article at Scopus](#)

DC voltage sensorless predictive control of a high-efficiency PFC single-phase rectifier based on the versatile buck-boost converter

González-Castaño, Catalina; Restrepo, Carlos; Sanz, Fredy; **Chub, Andrii**; Giral, Roberto Sensors 2021 / art. 5107 <https://doi.org/10.3390/s21155107> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DC-ready flyback-based micro-converter

Afshari, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; 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-POWERENG60842.2024.10604344>

DC-ready photovoltaic solar converter

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Kurnitski, Jarek PCIM Europe 2023 : Conference proceedings

Design and development challenges of power electronics converters for the rolling stock

Jalakas, Tanel; Vinnikov, Dmitri; Laugis, Juhan Intelligent Technologies in Logistics and Mechatronics Systems : ITELMS'2008 : proceedings of the 3rd International Workshop : May 22-23, 2008, Panevežys, Lithuania 2008 / p. 17-22 : ill

Design and discretization of multi-resonant current controllers

Elkayam, Moria Sassonker; Vinnikov, Dmitri 19th Conference on Ph.D Research in Microelectronics and Electronics (PRIME) 2024 / 4 p <https://doi.org/10.1109/PRIME61930.2024.10559737>

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 concepts of lock-in signal converters for measurement of dynamic electrical bioimpedance

Parve, Toomas; Holmström, Nils; Land, Raul; Min, Mart; Noren, Kjell Proceedings of the 2nd European Medical & Biological Engineering Conference : EMBE'02, December 4-8, 2002, Vienna, Austria. 2 2002 / p. 1456-1457

Design guidelines of new step-up DC/DC converter for fuel cell powered distributed generation systems

Zakis, Janis; Vinnikov, Dmitri; Roasto, Indrek; Strzelecki, Ryszard 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 33-41 : ill

Design issues of redundant protection and supervision system for the special purpose power converters [Electronic resource]

Vinnikov, Dmitri; Roasto, Indrek; Vodovozov, Valery International Conference on Renewable Energies and Power Quality : ICREPQ'09 : Valencia, Spain, 15th to 17th April 2009 2009 / [6] p. [CD-ROM] <https://www.icrepq.com/ICREPQ%2709/356-vinnikov.pdf>

Determination of reactive components parameters for converter with alternating of parallel and series resonance

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas PEDC 2001 : Power Electronics Devices Compatibility : 2nd Conference : 3-5 September 2001, Zielona Gora, Poland 2001 / p. 88-96 : ill

Development and verification of control and protection algorithms for the special purpose high power converters

Roasto, Indrek; Vinnikov, Dmitri; Vodovozov, Valery Intelligent Technologies in Logistics and Mechatronics Systems : ITELMS'2008 : proceedings of the 3rd International Workshop : May 22-23, 2008, Panevežys, Lithuania 2008 / p. 23-27 : ill

Development and verification of the resonant converter with parametrical alternation of resonant tank topology for constant-power manual arc welding

Šklovski, Jevgeni; Janson, Kuno; Niilo, Helar Proceedings of the 13th International Scientific Conference Electric Power Engineering 2012 : EPE 2012 : Brno. Vol. 2 2012 / p. 1071-1076 : ill

Development system for special purpose electrical drives and converters

Joller, Jüri; Lehtla, Madis ELECTROMOTION '99 : 3rd International Symposium on Advanced Electromechanical Motion Systems : July 8-9, 1999, Patras, Greece : proceedings. Vol. II 1999 / p. 637-640 : ill

Digital control of PFC rectifier with combined feedforward and PI regulator

Verbytskyi, Ievgen; Blinov, Andrei; Emiliani, Pietro; Galkin, Ilja IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / p. 1-6 <https://doi.org/10.1109/IECON49645.2022.9968509> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Digital current mode control algorithms for high-power half-bridge DC/DC converters

Roasto, Indrek; Vinnikov, Dmitri; Jalakas, Tanel; Strzelecki, Ryszard Przegląd elektrotechniczny 2011 / p. 180-186 : ill <http://www.red.pe.org.pl/articles/2011/8/36.pdf>

Distributed energy laboratory concept focused on power electronics units

Poliakov, Nikolai; Demidova, Galina; Zolov, Pavel International Conference on Electromechanical and Power Systems (SIELMEN) 2021 / p. 387-392 <https://doi.org/10.1109/SIELMEN53755.2021.9600330>

DSP-based RMS measurement converter

Märtens, Olev Telekommunikatsioon '98 : rahvusvahelise telekommunikatsioonipäeva konverentsi ettekannete materjalid, 15. mai 1998 1998 / lk. 66-72: ill

A dual-buck-boost DC–DC/AC universal converter

Ong, Yao Rong; Cao, Shuyu; Lee, Sze Sing; Lim, Chee Shen; Chen, Max M.; Vosoughi Kurdkandi, Naser; Barzegarkhoo, Reza;

Siwakoti, Yam P. Electronics (Switzerland) 2022 / art. 1973 <https://doi.org/10.3390/electronics11131973> [Journal metrics at scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Dual-purpose dc-dc/ac PWM modular power converter as dual-output hybrid converter

Roncero-Clemente, Carlos; Gutierrez-Escalona, Javier; **Matiushkin, Oleksandr;** Husev, Oleksandr; Romero-Cadaval, Enrique; Fernao Pires, V. Renewable energy and power quality journal 2025 / p. 183-187 <https://doi.org/10.52152/4563>

Dynamic behaviour of qZS-based bi-directional DC/DC converter in supercapacitor charging mode [Electronic resource]

Zakis, Janis; Vinnikov, Dmitri; Husev, Oleksandr; Rankis, Ivars SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 764-768 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264554>

Dynamic qualities of electrical drive with a synchronous machine

Jansikene, Raik 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. 160-163 : ill

Dynamic reconfiguration for wide output voltage range isolated buck-boost PFC converter

Verbytskyi, Ievgen; Nadeem, Mohammad Mahad; Blinov, Andrei; Carvalho da Silva, Edivan Laercio; Chub, Andrii; Vinnikov, Dmitri 2023 IEEE 8th Southern Power Electronics Conference and 17th Brazilian Power Electronics Conference (SPEC/COBEP) 2023 / 5 p. : ill <https://doi.org/10.1109/SPEC56436.2023.10407792>

Eesti teadlased aitavad kaardistada Läänemere veealust mürataset : [sellealase uurimistööst TTÜs]

Jaagant, Urmas; **Klauson, Aleksander** Laupäev 2014 / lk. 4 [https://epl.delfi.ee/artikkel/67550200/eesti-teadlased-aitavad-kaardistada-
laanemere-veealust-murataset](https://epl.delfi.ee/artikkel/67550200/eesti-teadlased-aitavad-kaardistada-laanemere-veealust-murataset)

Eesti teadlaste nutikad minuundurid hoogustavad energiapööoret

Vinnikov, Dmitri; Chub, Andrii novaator.err.ee 2024 [Eesti teadlaste nutikad minuundurid hoogustavad energiapööoret](#)

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

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

An efficient non-inverting buck-boost converter with improved step up/down ability

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Pefitsis, Dimosthenis Energies 2022 / art. 4550 <https://doi.org/10.3390/en15134550> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electromechanical voltage converters in electric transport of Estonia

Boiko, Vitali Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 74-75

Elektromagnetmüra võib arvesti näidud sassi ajada ja teha muud kurja

Piir, Rait novaator.err.ee 2024 [Elektromagnetmüra võib arvesti näidud sassi ajada ja teha muud kurja](#)

An embedded half-bridge Γ -Z-source inverter with reduced voltage stress on capacitors

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Nozadian, Mohsen Hasan Babayi; Shokati Asl, Elias; Babaei, Ebrahim; **Chub, Andrii** Energies 2021 / art. 6433, 21 p. : ill <https://doi.org/10.3390/en14196433> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Emerging converter topologies and control for grid connected photovoltaic systems

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

Esmasmuundurid

Rannat, Erich 1992 https://www.ester.ee/record=b1062189*est

Estimation of harmonic emission of electric vehicles and their impact on low voltage residential network

Iqbal, Muhammad Naveed; Kütt, Lauri; Daniel, Kamran; Asad, Bilal; Shams Ghahfarokhi, Payam Sustainability 2021 / art. 8551 <https://doi.org/10.3390/su13158551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

EV battery charging converters with wide output DC voltage range

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

Evaluation of dual-active bridge converter for DC energy buildings

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Sidorova, Aleksandra; Chub, Andrii; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p
<https://doi.org/10.1109/CPE-POWERENG58103.2023.10227460>

Evaluation of level-crossing ADCs for event-driven ECG classification

Saeed, Maryam; Wang, Qingyuan; **Märtens, Olev** IEEE Transactions on Biomedical Circuits and Systems 2021 / p. 1129-1139
<https://doi.org/10.1109/TBCAS.2021.3136206> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Event-driven ECG classification using an open-source, LC-ADC based non-uniformly sampled dataset

Saeed, Maryam; Wang, Qingyuan; **Märtens, Olev**; Larras, Benoit; Frappe, Antoine; Cardiff, Barry; John, Deepu 2021 IEEE International Symposium on Circuits and Systems (ISCAS), Daegu, Korea May 22-28, 2021 : proceedings 2021 / 5 p
<https://doi.org/10.1109/ISCAS51556.2021.9401333> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [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 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 study of new integrated DC/DC converter for hydrogen-based energy storage

Vinnikov, Dmitri; Andrijanovič, Anna; Roasto, Indrek; Jalakas, Tanel 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / [4 p.] : ill
<https://ieeexplore.ieee.org/document/5874667>

Experimental study of shoot-through control methods for qZSI-based DC/DC converters [Electronic resource]

Roasto, Indrek; Vinnikov, Dmitri; Jalakas, Tanel; Zakis, Janis; Ott, Silver SPEEDAM 2010 : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Pisa, Italy, 14th-16th June, 2010 : proceedings 2010 / p. 29-34 : [CD-ROM]
<https://ieeexplore.ieee.org/document/5542046>

Experimental study of the high speed ultrasonic time-of-flight to digit converter

Pamakšis, V.; Daubaris, G.; Kanapienis, A.; Viržonis, D.; Ragauskas, A. BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 273-276: ill

Experimental study of voltage-fed quasi-z-source inverter based isolated DC/DC converter

Vinnikov, Dmitri; Roasto, Indrek; Strzelecki, Ryszard Electrical engineering research report 2009 / [7] p

Extended ZVS-On/ZCS-Off range for CF-DAB converter under DCM operation for residential energy storage systems

Carvalho da Silva, Edivan Laercio; Cardoso, Rafael; Felipe, Carla Aparecida; Stein, Carlos Marcelo De Oliveira; Bellinaso, Lucas Vizzotto; Michels, Leandro; **Vinnikov, Dmitri** IEEE Access 2023 / p. 119231-119243 <https://doi.org/10.1109/ACCESS.2023.3327219> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fault management techniques to enhance the reliability of power electronic converters : an overview

Rahimpour, Saeed; Husev, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser; Tarzamni, Hadi IEEE Access 2023 / p. 13432-13446 <https://doi.org/10.1109/ACCESS.2023.3242918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fault-tolerant galvanically isolated DCIDC converters with zero redundancy = Null-liisusega veatolerantsed galvaanilise isolatsiooniga alalispingemuundurid

Bakeer, Abualkasim Ahmed Ali 2023 <https://doi.org/10.23658/taltech.18/2023> <https://digikogu.taltech.ee/et/Item/a9433801-e32e-4f98-af87-454e414646f4> https://www.eester.ee/record=b5558648*est

FCS-model predictive control of a quadratic buck converter for more efficient data centers

Azadi, Shirin; Flores-Bahamonde, Freddy; Alireza Davari, S.; Torres-Pinzon, C. A.; **Chub, Andrii**; Rodriguez, Jose 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p
<https://doi.org/10.1109/CPE-POWERENG58103.2023.10227387>

Feasibility study : a DM3730-based data acquisition and processing solution

Mölder, Ago; Reidla, Marko; Märtens, Olev; Land, Raul EDERC 2012 : proceedings of the 5th European DSP in Education &

Feasibility study of high-power density of modified isolated CLLC DC-DC interface with wide range of voltage/current regulation

Husev, Oleksandr; Matiushkin, Oleksandr; Mohseni, Parham; Canales, Francisco PCIM Europe 2024 2024 / 10 p
<https://doi.org/10.30420/566262111> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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

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

Feasibility study of universal power electronics interface operation in 350 V and 700 V residential DC microgrids

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227441>

Fiber-optic transducer having nanometric resolution

Verkelis, J. BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 45-48: ill

Flickerreduktion und Blindleistungskompensation bei Lichtbogenöfen - TCR, vorgeschaltete gesteuerte Drosselspule, regelbarer Thyristorgleichrichter und PKB-Stromrichter

Janson, Kuno; Järvik, Jaan 4. Internationaler Workshop Oberschwingungen und Flicker, 22.-24. März 1995 / Veranstalter: Institut für Elektrische Anlagen, Technische Universität Graz, Austria 1995 / Bl. [163-166]: Ill

Forward-based DC-DC converter with eliminated leakage inductance problem

Matiushkin, Oleksandr; Husev, Oleksandr; Afshari, Hossein; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos IEEE transactions on industrial electronics 2025 / p. 1638-1648 <https://doi.org/10.1109/TIE.2024.3429626>

FPGA control of the neutral point clamped quasi-Z-source inverter

Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Ivanets, Sergey BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 263-266 : ill

Full-bridge fault-tolerant isolated DC-DC converters : overview of technologies and application challenges

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri IEEE Power Electronics Magazine 2022 / p. 45-55
<https://doi.org/10.1109/MPEL.2022.3196565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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 (RTUON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 7 p. : ill <https://doi.org/10.1109/RTUON51174.2020.9316589>

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/EPE20ECCEEurope43536.2020.9215772>

Guided waves attenuation due to deposits on the pipe wall

El Moussaoui, Mustapha; Chati, M.; Leon, Fernand; **Klauson, Aleksander**; Maze, Gerard 2005 IEEE International Ultrasonics Symposium : Rotterdam, The Netherlands, 2005 2005 / p. 586-587 <https://ieeexplore.ieee.org/document/1603021>

Half-bridge trans-Z-source inverter with high boost factor

Mashinchi Maheri, Hamed; Shokati Asl, Elias; Babaei, Ebrahim; Sabahi, Mehran; Vinnikov, Dmitri IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9589525> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Hardware and software of the IGBT power converter

Lehtla, Madis Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists : Tallinn,

High-efficiency single-stage onboard charger for electrical vehicles

Zinchenko, Denys; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Verbytskyi, Ievgen; Bayhan, Sertac IEEE Transactions on Vehicular Technology 2021 / p. 12581-12592 : ill <https://doi.org/10.1109/TVT.2021.3118392> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-frequency split-bobbin transformer design with adjustable leakage inductance

Rahman, Showrov; Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-5 : ill <https://doi.org/10.1109/RTUCon53541.2021.9711708>

High-Frequency Step-Up DC-DC Converter with Integrated Ferrite-less Inductances

Matiushkin, Oleksandr; Husev, Oleksandr; Gutiérrez-Escalona, Javier; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique PCIM Europe 2025 2025 / 7 p

High-Gain Seven-Level Switched-Capacitor Two-Stage Multi-Level Inverter

Ahmed, Hassan Yousif; **Abdelrahim Abdelghafour, Omar Mohamed;** Ali, Ziad M. Frontiers in Energy Research 2022 / art. 869662 <https://doi.org/10.3389/fenrg.2022.869662>

High-performance buck-boost partial power quasi-Z-source series resonance converter

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Mashinchi Maheri, Hamed; Blinov, Andrei; Vinnikov, Dmitri IEEE Access 2022 / p. 13017-130189 <https://doi.org/10.1109/ACCESS.2022.3225751> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-Q bandpass filters based on immittance converters

Ööpik, Priit; Koort, Marko; Kipper, Rein; **Kukk, Vello** ECCTD '97 : proceedings of the 1997 European Conference on Circuit Theory and Design, Technical University of Budapest, Hungary, 30th August-3rd September 1997 1997 / p. 599-604: ill

High-voltage IGBT based converters for rolling stock : possibilities and challenges

Roasto, Indrek; Jalakas, Tanel; Vinnikov, Dmitri 2011 <https://www.amazon.com/HIGH-VOLTAGE-BASED-CONVERTERS-ROLLING-STOCK/dp/3843391211>

Horisontaal- ja vertikaaljuhtimisega türistormuundurite võrdlus

Michalski, R.; Lahtmets, Rain; Reiner, Ardi XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 59-60 https://www.ester.ee/record=b2449987*est

A hybrid modulation approach for step-up/ down partial power converter with improved MPPT efficiency around zero partiality

Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; Vinnikov, Dmitri; Galkin, Ilya IEEE transactions on industry applications 2025 <https://doi.org/10.1109/TIA.2025.3525607>

Identification of mechanisms behind converter-related issues in power systems based on an overview of real-life events

De Rua, Philippe; Roose, Thomas; Sakinci, Özgür Can; **de Moraes Dias Campos, Nathalia;** Beerten, Jef Renewable and sustainable energy reviews 2023 / art. 113431 <https://doi.org/10.1016/j.rser.2023.113431> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of component losses on the efficiency of a new quasi-Z-source based dual active bridge

Beldjajev, Viktor; Roasto, Indrek; Zakis, Janis Technological innovation for the Internet of things : 4th IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems : DoCEIS 2013 : Costa de Caparica, Portugal, April 15-17, 2013 : proceedings 2013 / p. 485-492 : ill https://doi.org/10.1007/978-3-642-37291-9_52 [Article collection metrics at Scopus](#) [Article at Scopus](#)

Impact of component losses on the voltage boost properties and efficiency of the qZS-converter family [Electronic resource]

Vinnikov, Dmitri; Roasto, Indrek CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 303-308 [CD-ROM] https://www.researchgate.net/publication/241185271_Impact_of_component_losses_on_the_voltage_boost_properties_and_efficiency_of_the_QZS-converter_family

Impact of transformer turns ratio on the power losses and efficiency of the wide range isolated buck-boost converter for photovoltaic applications

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim; Liivik, Elizaveta Energies 2020 / art. 5645, 21 p <https://doi.org/10.3390/en13215645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Liivik, Elizaveta;** Blaabjerg, Frede 2020 IEEE 21st Workshop on Control and

Implementation of global maximum power point tracking in photovoltaic microconverters: A survey of challenges and opportunities

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; **Sidorov, Vadim;** Lindvest, Andre IEEE journal of emerging and selected topics in power electronics 2023 / p. 2259-2280: ill <https://doi.org/10.1109/JESTPE.2021.3137521> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Implementation of impedance converters in BiCMOS-technology

Tenhunen, Hannu; **Koort, Marko; Kukk, Vello** BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 405-408: ill

Implementation of snubber circuits in power converters with high-voltage IGBTs

Jalakas, Tanel; Blinov, Andrei; Mölder, Heigo; Lehtla, Tõnu 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 42-45 : ill

Implementation possibilities of SMD capacitors for high power applications

Zakis, Janis; Vinnikov, Dmitri Riga Technical University 53rd International Scientific Conference dedicated to the 150th anniversary and The 1st Congress of World Engineers and Riga Polytechnical Institute : RTU Alumni, Paper 31 of Subsection of Power Electronic Converters and Applications 2012 / 6 p. : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0003-2>

Improvement of energy transfer in bidirectional phase conversion circuits by switched-mode positive-sequence filters

Sarv, Vello; Ojaveer, Maire Proceedings of the Estonian Academy of Sciences. Engineering 1997 / 2, p. 115-126: ill

Induction generator with direct control and a limited number of measurements on the side of the converter connected to the power grid

Kasprowicz, Andrzej Bogdan; **Husev, Oleksandr;** Strzelecki, Ryszard Energies 2023 / art. 63, 23 p. : ill
<https://doi.org/10.3390/en16010063> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Installed capacities of reactive components and transformer in line frequency resonant converters

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas EPQU'01 : Electrical Power Quality and Utilisation : 6th International Conference : September 19-21, 2001, Cracow, Poland : proceedings 2001 / p. 445-449 : ill

Interface converters for residential battery energy storage systems : practices, difficulties and prospects

Galkin, Ilja; **Blinov, Andrei;** Vorobyov, Maxim; Bubovich, Alexander; Saltanovs, Rodions; Pefitsis, Dimosthenis Energies 2021 / art. 3365 <https://doi.org/10.3390/en14123365> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Inverter mode in converter with alternating of parallel and series resonance

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni; Vinnal, Toomas EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 1 of 7, Power electronic converters and control 2004 / p. 1-227 - 1-232 : ill

Investigation of supercapacitor bidirectional power flow system

Rankis, Ivars; **Zakis, Janis** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering = Rīgas Tehniskās universitātes zinātniskie raksti. Serija 4. Enerģētika un elektrotehnika 2012 / p. 35-40 : ill
<https://ortus.rtu.lv/science/en/publications/13864>

Isolated DC/DC converter topology with a three-phase intermediate AC-link

Vinnikov, Dmitri BEC 2006 : 2006 International Baltic Electronics Conference : Tallinn University of Technology, October 2-4, 2006, Tallinn, Estonia : proceedings of the 10th Biennial Baltic Electronics Conference 2006 / p. 241-244 : ill

Jõuelektroonika

Joller, Jüri 1996 https://www.ester.ee/record=b1054897*est

Jõuelektroonika : magistritöö

Joller, Jüri 1996 https://www.ester.ee/record=b2688069*est

Jõuelektroonika erikursus : laboratoorse tööde juhendid

Jalakas, Tanel 2008 http://www.ester.ee/record=b2375053*est

Jõuelektroonika on võtmetehnoloogia energia- ja rohepöörde ülesannetes

Arvamus, kultuur : [ajalehe Postimees lisa] 2022 / lk. 10 <https://dea.digar.ee/article/ak/2022/04/02/7.1> "Jõuelektroonika on võtmetehnoloogia energia- ja rohepöörde ülesannetes"

3-faasilise järgivsüsteemi häirekindluse uurimine

Vellamäe, U.; Pikkov, Otto XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 45 https://www.ester.ee/record=b2449987*est

Kütuseelement ergutab jätkuvalt fantaasiat : [kütuseelemendist Dmitri Vinnikov ja Madis Lehtla]

Juurak, Raivo; **Vinnikov, Dmitri; Lehtla, Madis** Õpetajate Leht 2010 / 5. märts, lk. 7 : fot https://artiklid.elnet.ee/record=b1962215*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

LCL-filter design and application

Husev, Oleksandr; Matiushkin, Oleksandr Distributed energy systems : design, modeling, and control 2023 / p. 283-294 <https://doi.org/10.1201/9781003229124-18>

Level system PSPICE simulation for AC to DC PWM converters under hysteresis control

Gatlan, Clarissa; Gatlan, Leonard BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 217-220: ill

Light-load efficiency improvement of galvanically isolated quasi-Z-source DC-DC converter for photovoltaic applications

Mashinchi Maheri, Hamed; Chub, Andrii; Vinnikov, Dmitri 2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL), Aalborg, Denmark, November 9-12, 2020 2020 / 6 p <https://doi.org/10.1109/COMPEL49091.2020.9265800>

Limitations and Opportunities for Wave Energy Utilization in the Baltic Sea : the case-study of Estonia

Vidjajev, Nikon; Palu, Riina; Terentjev, Jan; Hunt, Tõnis 21st Annual General Assembly – AGA 2021, Alexandria, Egypt, 26th-28th October 2021 : proceedings of The International Association of Maritime Universities 2021 / p. 638–647 : map <https://aga21.aast.edu/templates/frontend/aga21/ltr/templates/AGA21-Conference-Proceedings.pdf>

Load adapting resonant converter as a transformer with smoothly variable ratio

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas 43. Internationales Wissenschaftliches Kolloquium, 21.-24.09.1998. Band 4, Elektroenergiesysteme und elektrische Geräte, Diagnostik, Hochspannungstechnik und elektrische Isoliertechnik, Energiewandlung : Vortragsreihen 1998 / S. 657-662: ill

Load adapting resonant converter for supplying deeply varying load

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 227-230: ill

Load current harmonic sensitivity of AC/DC power converters of energy efficient devices = Energiatõhusate seadmete vahelduv-alalisvoolumuundurite koormusvoolu harmoonikute tundlikkus

Daniel, Kamran 2024 <https://doi.org/10.23658/taltech.35/2024> <https://digikogu.taltech.ee/et/Item/6401470b-5c33-473d-b82c-5793dfb1c543>

Load-resonant converter with changing resonant tank topology for welding applications

Šklovski, Jevgeni; Janson, Kuno; Kallaste, Ants USB proceedings : IECON 2012 - 38th Annual Conference on IEEE Industrial Electronics Society, Montreal, Canada, 25-28 October, 2012 2012 / p. 517-523 : ill <https://ieeexplore.ieee.org/document/6388771>

Lossless dynamic models of the quasi-Z-source converter family

Vinnikov, Dmitri; Husev, Oleksandr; Roasto, Indrek Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 73-78 <https://ui.adsabs.harvard.edu/abs/2011SJRP...29...73V/abstract>

Low-cost photovoltaic microinverter with ultra-wide MPPT voltage range

Liivik, Elizaveta; Chub, Andrii; Kosenko, Roman; Vinnikov, Dmitri 2017 6th International Conference on Clean Electrical Power : Renewable Energy Resources Impact : Santa Margherita Ligure, 27-29 June 2017 2017 / p. 46-52 : ill <https://doi.org/10.1109/ICCEP.2017.8004790>

Magnetically integrated high step-up resonant DC-DC converter for distributed photovoltaic systems

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede 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. 7691-7697 : ill <https://doi.org/10.1109/IECON.2017.8217348>

Maximizing energy harvest of the impedance source PV Microconverter under partial shading conditions

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Kouro, Samir CPE-POWERENG 2018 : Conference program : 12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering, 10-12 April, 2018, Doha, Qatar 2018 / 7 p.: ill <https://indd.adobe.com/view/bdbda104-4e24-4d7b-88b1-f84ccfd20748> <https://doi.org/10.1109/CPE.2018.8372556>

Maximum power point tracking algorithm for step-up/down partial power converters with improved performance around zero partiality

Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227506>

Medium-voltage frequency converters microprocessor control system

Mälter, Meelis; Joller, Jüri Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists : Tallinn, Estonia, May 31 - June 5, 1999 1999 / p. 63-66: ill

MHD-kiirusmuunduri magnetahela arvutus

Bogomolova, I.; Mežburd, Volf XXXII üliõpilaste teaduslik-tehnilise konverentsi ettekannete teesid : pühendatud V. I. Lenini 110. sünniaastapäevale : 16.-18. aprill 1980 1981 / lk. 108 https://www.ester.ee/record=b1322611*est

Micro capacitive displacement transducer

Ajaots, Maido; Tamre, Mart Proceedings of the 10th DAAAM International Symposium, Cluj-Napoca, Romania, Vienna, 1998 1998 / p. 005-006

Mitmenivoolised sigma-delta muundurid

Edesi, L. Raadiotehnika 2001 : VIII rahvusvahelise telekommunikatsioonipäeva materjalid 2001 / lk. 123-126 : ill

Model-free predictive control for improved performance and robustness of three-phase quasi Z-source inverters

Abid, Abderahmane; **Bakeer, Abualkasim Ahmed Ali**; Albalawi, Hani; Bouzidi, Mansour; Lashab, Abderezak; **Chub, Andrii**; Zaid, Sherif A. IEEE Access 2024 / p. 87850-87863 <https://doi.org/10.1109/ACCESS.2024.3417397> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modelling of wind energy-based microgrid system implementing MMC

Mishra, Sambeet; Palu, Ivo; Madichetty, Sreedhar; Suresh Kumar, L.V. International Journal of Energy Research 2016 / p. 952-962 <https://doi.org/10.1002/er.3490> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Multiphase galvanically isolated impedance-source DC-DC converter for residential renewable energy applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1775-1780 : ill <https://doi.org/10.1109/ISIE.2017.8001517>

Multiphase quasi-z-source DC-DC converters for residential distributed generation systems

Chub, Andrii; Vinnikov, Dmitri; Liivik, Elizaveta; Jalakas, Tanel IEEE transactions on industrial electronics 2018 / p. 8361-8371 : ill <https://doi.org/10.1109/TIE.2018.2801860> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multiport current fed push/pull partial power converter for battery integration in DC microgrid

Yadav, Neelesh; 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-POWERENG60842.2024.10604406>

Multiport DC/DC converters for interfacing of hydrogen buffer with wind turbine

Andrijanovitš, Anna; Vinnikov, Dmitri 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 95-99 : ill

Multi-port i-AFE converter for grid-interactive buildings: design requirements and efficiency evaluation

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Galkin, Ilya; Vinnikov, Dmitri 2023 IEEE 8th Southern Power Electronics Conference and 17th Brazilian Power Electronics Conference (SPEC/COBEP) 2023 / 5 p <https://doi.org/10.1109/SPEC56436.2023.10408230>

Network friendly converters for steeply and deeply varying load (power supply ESTA)

Janson, Kuno; Järvik, Jaan EPQU'97 : 4th International Conference Electrical Power Quality and Utilisation, September 23-25, 1997, Cracow, Poland : proceedings 1997 / p. 443-448: ill

Network friendly converters with self-adjustment to load

Janson, Kuno; Järvik, Jaan Elektronika'97 : konferencijos pranešimu medžiaga = Electronics'97 : materials of conference report. 1 knyga 1997 / p. 100-107: ill

Neutral point clamped quasi-impedance-source inverter [Electronic resource]

Ott, Silver; Roasto, Indrek; Vinnikov, Dmitri CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 348-353 [CD-ROM]

<https://www.semanticscholar.org/paper/Neutral-point-clamped-quasi-impedance-source-Ott-Roasto/547db91f89adecec7c854cc3e4b811934890b7a6>

New bi-directional DC/DC converter for supercapacitor interfacing in high-power applications

Vinnikov, Dmitri; Roasto, Indrek; Zakis, Janis EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T11-38 - T11-43 : ill
https://www.researchgate.net/publication/224184374_New_bi-directional_DCDC_converter_for_supercapacitor_interfacing_in_high-power_applications

New converter for interfacing PMSG based small-scale wind turbine with residential power network [Electronic resource]

Bisenieks, Lauris; Vinnikov, Dmitri; Galkin, Ilja CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 354-359 [CD-ROM]
<https://ieeexplore.ieee.org/abstract/document/5942260>

A new flying capacitor-based buck-boost converter for dual-purpose applications

Hemmati Shahsavari, Tala; Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Babaei, Ebrahim; Sabahi, Mehran; Khoshkbar-Sadigh, Arash; Vinnikov, Dmitri IEEE journal of emerging and selected topics in industrial electronics 2023 / p. 447-459
<https://doi.org/10.1109/JESTIE.2023.3238322>

New fuel cell power conditioning system for supplying dedicated loads

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel; Lehtla, Tõnu; Laugis, Juhan 2010 9th International Conference on Environment and Electrical Engineering : Prague, Czech Republic, 16-19 May 2010 2010 / p. 341-344 : ill
<https://ieeexplore.ieee.org/document/5489939>

New high-gain non-inverting buck-boost converter

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9590003> [Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

New high-gain step-up DC/DC converter for a fuel cell interfacing in hydrogen buffer

Vinnikov, Dmitri; Husev, Oleksandr; Andrijanovič, Anna; Roasto, Indrek Технічна електродинаміка 2011 / p. 93-100 : ill

New integrated converter for hydrogen buffer interfacing in distributed energy systems [Electronic resource]

Vinnikov, Dmitri; Andrijanovič, Anna; Roasto, Indrek; Lehtla, Tõnu International Conference on Renewable Energies and Power Quality (ICREPQ'11) : Las Palmas de Gran Canaria (Spain), 13th to 15th April 2011 2011 / [6] p. : ill. [CD-ROM]
https://www.researchgate.net/publication/316913371_New_integrated_converter_for_hydrogen_buffer_interfacing_in_distributed_energy_systems

New isolated interface converter for grid-connected PMSG based wind turbines

Bisenieks, Lauris; Vinnikov, Dmitri; Galkin, Ilja 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / p. 869-872 : ill <https://www.semanticscholar.org/paper/New-isolated-interface-converter-for-grid-connected-Bisenieks-Vinnikov/cac34f4cd26e3b2bb3306ab7c542bf6fc75dd48b>

A New Single Source Five-Level Common Ground Switched Capacitor based Inverter

Hemmati Shahsavari, Tala; Husev, Oleksandr; Babaei, Ebrahim; Sabahi, Mehran; Vinnikov, Dmitri; Khoshkbar-Sadigh, Arash 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 <https://doi.org/10.1109/ENERGYCON53164.2022.9830422>

A new single-phase flying inductor-based common grounded converter for dual-purpose application

Husev, Oleksandr; Vosoughi Kurdkandi, Naser; Marangalu, Milad Ghavipankeh; Vinnikov, Dmitri; Hosseini, Seyed Hossein IEEE transactions on industrial electronics 2023 / p. 7913-7923 <https://doi.org/10.1109/TIE.2022.3215832> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New single-switch input current ripple free boost DC-DC converter

Mashinchi Maheri, Hamed; Mohammadzadeh Shahir, Farzad; Babaei, Ebrahim; Chub, Andrii 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2021 / p. 1-5 : ill <https://doi.org/10.1109/RTUCON53541.2021.9711685>

New step-up DC/DC converter for fuel cell powered distributed generation systems: some design guidelines

Vinnikov, Dmitri; Strzelecki, Ryszard; Zakis, Janis; Roasto, Indrek Przegląd elektrotechniczny 2010 / 8, p. 245-252
<https://www.semanticscholar.org/paper/New-Step-Up-DC-DC-Converter-for-Fuel-Cell-Powered-Vinnikov-Roasto/00d1f7e78e0fe0d6e2a114c0515e6eb5eb196f4e>

New step-up DC/DC converter with high-frequency isolation

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society. ICELE 2009 : 3rd IEEE International Conference on E-learning in Industrial Electronics : Porto, Portugal, 3-5 November 2009 : abstracts 2009 / p. 280 <https://ieeexplore.ieee.org/document/5415000>

New step-up DC/DC converter with high-frequency isolation

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society : Porto, Portugal, 3-5 November 2009 : preprint proceedings 2009 / p. 667-672 : ill <https://ieeexplore.ieee.org/document/5415000>

A novel extendable high gain step up DC-DC converter

Mashinchi Maheri, Hamed; Salehi Vala, Sama; Basit Mirza, Abdul; Babaei, Ebrahim; **Vinnikov, Dmitri** 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2021 / p. 1-6 <https://doi.org/10.1109/RTUCON53541.2021.9711745>

Novel family of flying inductor-based single-stage buck-boost inverters

Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri IEEE journal of emerging and selected topics in power electronics 2022 / p. 6020-6032 <https://doi.org/10.1109/JESTPE.2022.3161113> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Husev, Oleksandr 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. 39-40 : ill https://www.ester.ee/record=b5183874*est

Novel family of single-stage buck-boost inverters based on unfolding circuit : [conference paper]

Matiushkin, Oleksandr; Husev, Oleksandr 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 128-129 : ill http://ise.elnet.ee/record=b2950043~S2*est

Novel Interlinking Converter Approach for Islanded Hybrid Microgrids based on the Modular Dual-Purpose Power Converter

Gutiérrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr;** Milanés-Montero, María Isabel; Romero-Cadaval, Enrique 2025 International Aegean Conference on Electrical Machines and Power Electronics & International Conference on Optimization of Electrical and Electronic Equipment 2025

A novel isolated Buck-Boost DC-DC converter with wide range of voltage regulations

Afshari, Hossein; Husev, Oleksandr; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227443>

Novel isolated power conditioning unit for micro wind turbine applications

Chub, Andrii; Husev, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri IEEE transactions on industrial electronics 2017 / p. 5984-5993 : ill <https://doi.org/10.1109/TIE.2016.2645890> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel power factor correction method and topology for AC/DC converters

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni 51. IWK : Internationales Wissenschaftliches Kolloquium, 11.-15.09.2006 : proceedings 2006 / p. 349-350 https://www.db-thueringen.de/servlets/MCRFileNodeServlet/dbt_derivate_00018153/IWK_2006_6_2_1.pdf

A novel single-phase common-grounded converter based on switched-capacitor

Kurdkandi, Naser Vosoughi; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Gao, Wei; Chunting, Chris Mi IEEE transactions on power electronics 2024 / p. 16201-16216 <https://doi.org/10.1109/TPEL.2024.3444769> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Novel universal power electronic interface for integration of pv modules and battery energy storages in residential DC microgrids

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri; Lindvest, Andre IEEE Access 2023 / p. 30845-30858 <https://doi.org/10.1109/ACCESS.2023.3260640> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On dead-time optimization and active gate driving in flyback converters with synchronous rectifiers

Philipps, Daniel; Blinov, Andrei; Pefitsis, Dimosthenis IEEE Access 2024 / p. 173146-173155 <https://doi.org/10.1109/ACCESS.2024.3462956> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Operation and design of series-resonant current-source full-bridge dc-dc converter

Verbytskyi, Ievgen; Blinov, Andrei; Vinnikov, Dmitri; Pefitsis, Dimosthenis IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / 6 p <https://doi.org/10.1109/IECON48115.2021.9589548> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Operation of PSA converter in inverter mode

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni; Vinnal, Toomas The 4th International Conference Electric Power Quality and Supply Reliability : August 29...31, 2004, Pedase, Estonia : proceedings 2004 / p. 81-86 : ill

Operation of the step-up/down bidirectional partial power converter near zero series voltage

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility,

Optimal coupling coefficient calculation for inductances in interleaved bidirectional DC-DC converters

Tytelmaier, Kostiantyn; Husev, Oleksandr; Veligorskyi, Oleksandr; Khomenko, Maksym; Maladyka, D. Technical Electrodynamics 2018 / p. 41-46 <https://doi.org/10.15407/techned2018.04.041> [Journal metrics at Scopus](#) [Article at Scopus](#)

Optimal tuning of resonant and repetitive based controller for single-phase buck-boost inverter with unfolding circuit

Husev, Oleksandr; Belikov, Juri; Matiushkin, Oleksandr; Vinnikov, Dmitri; Ahmadihangar, Roya; Vosoughi Kurdkandi, Naser IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 954-965
<https://doi.org/10.1109/JESTIE.2021.3121190>

Optimization and Design of Planar Transformer for the High Frequency Link Converter

Korkh, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri; Shevchenko, Viktor 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 615-620
<https://doi.org/10.1109/PEDG48541.2020.9244465>

Output voltage control system for a three-level neutral-point clamped quasi-Z-source inverter

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Stepenko, Serhii; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** Przegląd elektrotechniczny = Electrical review 2013 / p. 76-80 : ill <http://pe.org.pl/articles/2013/5/16.pdf> [Journal metrics at Scopus](#) [Article at Scopus](#)

Output voltage regulation of isolated PV-vonnected boost converters with variable loads using converted hysteresis sliding mode controller

Zolfaghari, Mahdi; Zolfaghari, A.; **Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227386>

Overview of advanced functionalities for residential photovoltaic inverter connected to the grid

Makovenko, Elena; Husev, Oleksandr; Romero-Cadaval, Enrique 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. 99-102 : ill http://ise.elnet.ee/record=b2950024~S2*est

Overview of bidirectional unfolding converters for battery energy storage systems

Bubovich, Alexander; Vorobyov, Maxim; Galkin, Ilja; **Blinov, Andrei;** Giannakis, Andreas 2022 IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 7 p <https://doi.org/10.1109/PEDG54999.2022.9923093>

An overview of lifetime management of power electronic converters

Rahimpour, Saeed; Tarzamni, Hadi; Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Vinnikov, Dmitri; Tahami, Farzad IEEE Access 2022 / p. 109688-109711 <https://doi.org/10.1109/ACCESS.2022.3214320> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

P3R – Partial power post regulator for DC buildings application

Carvalho, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Rathore, Akshay Kumar; **Vinnikov, Dmitri** IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905720> [Conference proceedings at Scopus](#) [Article at Scopus](#)

P3R : partial power postregulated gridforming converter for prosumer DC buildings

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; Rathore, Akshay Kumar; **Vinnikov, Dmitri** IEEE transactions on industrial electronics 2025 / p. 1628-1637 <https://doi.org/10.1109/TIE.2024.3423358>

Partial buck-boost resonant power converter for residential PV applications

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 5 l. <https://doi.org/10.1109/ENERGYCON53164.2022.9830394>

Performance benchmarking of Si and GaN MOSFETs in isolated buck-boost DC-DC converter

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Rahman, Showrov 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-6 : ill <https://doi.org/10.1109/RTUCON53541.2021.9711696>

Performance evaluation of dual rotor yokeless stator axial flux switched reluctance machine

Hussain, Shahid 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 41-42 : ill

Performance evaluation of the universal photovoltaic string converter during the operation in DC microgrid environment
Matiushkin, Oleksandr; Vinnikov, Dmitri; Husev, Oleksandr IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society, 2021 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9589473> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [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 microconverter with integrated sub-modular power optimizer

Maheri, Hamed Mashinchi; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2021 / p. 1-6 <https://doi.org/10.1109/CPE-POWERENG50821.2021.9501179>

Photovoltaic module and submodule level power electronics and control

Spagnuolo, Giovanni; Kouro, Samir; **Vinnikov, Dmitri** IEEE Transactions on Industrial Electronics 2019 / p. 3856 - 3859 <https://doi.org/10.1109/TIE.2018.2883187> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Possibilities and limitations of liquid cooling systems for high power converters

Blinov, Andrei; Vinnikov, Dmitri 7th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Narva-Jõesuu, Estonia, 16.06-19.06.2009] 2009 / p. 20-25 : ill

Power converter solutions for industrial PV applications — a review

Verbytskyi, Ievgen; Lukianov, Mykola; Nassereddine, Kawsar; Pakhaliuk, Bohdan; **Husev, Oleksandr;** Strzelecki, Ryszard Energies 2022 / art. 3295 <https://doi.org/10.3390/en15093295> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Power loss model and efficiency analysis of the quasi-Z-Source isolated buck-boost converter with wide input voltage and load range

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2021 / 8 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316587>

Predictive control based on ranking multi-objective optimization approaches for a quasi-Z source inverter

Bakeer, Abualkasim Ahmed Ali; Magdy, Gaber; **Chub, Andrii; Vinnikov, Dmitri** CSEE journal of power and energy systems 2021 / p. 1152-1160 : ill <https://doi.org/10.17775/CSEEJPES.2020.01310> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Predictive control for isolated matrix rectifier without current distortion at sector boundary

Emiliani, Pietro; Blinov, Andrei; de Carne, Giovanni; Arena, Gabriele; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227405>

Problems in the operation of parallel-series converter when using two switch forward inverter

Niilo, Helar; Vaimann, Toomas 7th International Conference-workshop Compatibility and Power Electronics : CPE 2011 : Tallinn, Estonia, June 3, 2011 : student forum 2011 / p. 28-33 : ill

Protection and common mode voltage of The Push-Pull Partial Power Converter

Abdelrahim Abdelghafour, Omar Mohamed; Vinnikov, Dmitri; Chub, Andrii; Blinov, Andrei IEEE Conference on Power Electronics and Renewable Energy : Luxor, Egypt, February, 19-21, 2023 2023 <https://doi.org/10.1109/CPERE56564.2023.10119636>

PV-battery assisted three-level T-Type inverter for AC residential nanogrid realized with small-scale HIL units

Gutierrez-Escalona, Javier; **Roncero-Clemente, Carlos;** Gonzalez-Romera, Eva; Milanes-Montero, Maria Isabel; Husev, Oleksandr; Romero-Cadaval, Enrique IEEE Access 2023 / p. 48007 - 48021 <https://doi.org/10.1109/ACCESS.2023.3276235> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

PWM two-phase induction motor controlled system "SIMULINK" models

Gogu, Mircea; Teodoru, Emil Costel; Pastravanu, Adriana BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 351-354: ill

Pöördväljatrafoga plasmotroni toitesead

Zaitsev, O.; Järvik, Jaan; Reiner, Ardi XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 65 https://www.ester.ee/record=b2449987*est

QZSI DC/DC converters in input-series output-parallel connection for distributed generation [Electronic resource]

Martinez, C.; Jalakas, Tanel; Vinnikov, Dmitri; Lazaro, A.; Barrado, A. SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 952-957 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264536>

Quasi-Z-source inverter based bi-directional DC/DC converter : analysis of experimental results [Electronic resource]

Zakis, Janis; Vinnikov, Dmitri; Roasto, Indrek; Ribickis, Leonids CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 394-399 [CD-ROM] https://www.researchgate.net/publication/224245116_Quasi-Z-source_inverter_based_bi-directional_DCDC_converter_Analysis_of_experimental_results

Recent contributions, future prospects and limitations of interlinking converter control in hybrid AC/DC microgrids

Najafzadeh, Mahdiyyeh; Ahmadihangar, Roya; Husev, Oleksandr; Roasto, Indrek; Jalakas, Tanel; Blinov, Andrei IEEE Access 2021 / art. 9312595, p. 7960-7984 <https://doi.org/10.1109/ACCESS.2020.3049023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reinforcement Learning-based Energy Management Strategy for Flexible Hybrid ac/dc Microgrid

Gutiérrez-Escalona, Javier; Roncero-Clemente, Carlos; Husev, Oleksandr; Matiushkin, Oleksandr; Barrero-González, Fermín; González-Romera, Eva IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905501> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Reliability assessment of photovoltaic Buck-Boost microconverter for Estonian climate conditions

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227505>

Reliability evaluation of isolated buck-boost DC-DC series resonant converter

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Shen, Yanfeng IEEE open journal of power electronics 2022 / p. 131-141 <https://doi.org/10.1109/OJPEL.2022.3157200> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reliability evaluation of isolated buck-boost DC-DC series resonant converter : [conference paper]

Bakeer, Abualkasim Ahmed Ali 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 55-56 : ill https://www.ester.ee/record=b5504019*est

Reliable smart electrical power supply for cubesat platforms

Pooler, V.; Priidel, Eiko; Sinivee, Veljo 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. 215-218 : ill http://www.ester.ee/record=b2150914*est

Research of switching properties and performance improvement methods of high-voltage IGBT based DC/DC converters = Kõrgepingelistel IGBT transistoridel põhinevate alalispingemuundurite lülitusomaduste ja jõudluse suuredamise meetodite uurimine

Blinov, Andrei 2012 http://www.ester.ee/record=b2856034*est

Resiliency oriented control of a smart microgrid with photovoltaic modules

Mishra, Sambeet; Peterson, Kristjan; Hilimon, Tauno; Švalova, Jelena; Wen, Fushuan; Palu, Ivo Global Energy Interconnection 2021 / p. 441-452 <https://doi.org/10.1016/j.gloe.2021.11.008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Resonant converter as a transformer for varying the ratio between input and output currents

Janson, Kuno; Järvik, Jaan Proceedings of the Estonian Academy of Sciences. Engineering 1998 / 4, p. 264-285

A review of hybrid converter topologies

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

Review of possible DC-DC converter-topologies for tram's auxiliary power supply

Vinnikov, Dmitri; Lehtla, Tõnu EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 6 of 7, Mechatronics, industrial drive systems, power electronics and drives in transport, EMC and design of PE systems 2004 / p. 6-176 - 6-179 : ill

Review of Trends in the Development of Power Rectifiers used in Robotics

Vodovozov, Valery; Raud, Zoja 2025 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI) 2025 / 6 p. <https://doi.org/10.1109/IATMSI64286.2025.10984733>

Selection of the duty cycle variation range and its influence on the efficiency and operability of high-power converters operating at wide input voltage swing

Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel 7th International Symposium "Topical Problems in the Field of Electrical and

Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Narva-Jõesuu, Estonia, 16.06-19.06.2009] 2009 / p. 26-31 : ill

Self-calibration of multiscale hysteresis with memristors in nonlinear time reversal based processes

Dos Santos, Serge; **Masood, Ali**; Furui, Sadataka; Nardoni, Giuseppe BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / p. 9-12 : ill
<https://doi.org/10.1109/BEC.2018.8600977>

Series buck-boost partial power converter based on the push-pull converter

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri IECON 2022 : 48th Annual Conference of the IEEE Industrial Electronics Society : 17-20 Oct. 2022 2022 / code. 184962
<https://doi.org/10.1109/IECON49645.2022.9968574> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

A series partial power converter based on dual active bridge converter for residential battery energy storage system

Hassanpour, Naser; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Abdelrahim Abdelghafour, Omar Mohamed 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-6 : ill <https://doi.org/10.1109/RTUCON53541.2021.9711725>

Series resonant DC-DC converter with single-switch full-bridge boost rectifier operating at fixed switching frequency

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 270-275
<https://doi.org/10.1109/PEDG48541.2020.9244438>

Shade-tolerant photovoltaic microinverter with time adaptive seamless P-V curve sweep MPPT [Electronic resource]

Vinnikov, Dmitri; Kosenko, Roman; Chub, Andrii; Liivik, Elizaveta 19th European Conference on Power Electronics and Application : EPE'17 ECCE Europe : September 11-14, 2017, Warsaw, Poland 2017 / p. P1-P7 : ill. [USB]
<https://doi.org/10.23919/EPE17ECCEEurope.2017.8099366>

Shade-tolerant PV microconverters

Sidorov, Vadim; Bakeer, Abualkasim Ahmed Ali; Maheri, Hamed Mashinchi; Hassanpour, Naser; Rahman, Showrov; Chub, Andrii Distributed Energy Systems 2023 / p. 1-22 <https://doi.org/10.1201/9781003229124-17>

SiC Schottky diode for power converters

Pikkov, Mihhail; Rang, Toomas PEDC 2001 : Power Electronics Devices Compatibility : 2nd conference : 3-5 September 2001, Zielona Gora, Poland 2001 / p. 156-161 : ill

Sigma-delta converter

Di Giandomenico, Antonio; Kampus, Vahur 2018 <https://patents.google.com/patent/EP3340474A1/en>

Simple and compatible resonant converter for supplying electric arc

Janson, Kuno; Järvik, Jaan; Vinnal, Toomas Power Electronics Conference : PCIM 2002, March 12-15, 2002, Shanghai, China : official proceedings of the international conference 2002 / p. 232-237 : ill

Simple model of acoustoelectronic devices for PSPICE

Skardžius, Julius BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 461-464: ill

A simple space vector modulation method with DC-link voltage balancing and reduced common-mode voltage strategy for a three-level T-type quasi-Z source inverter

Mayorga, Nicolas; Roncero-Clemente, Carlos; Llor, Ana M.; **Husev, Oleksandr** IEEE Access 2021 / art. 9447724, p. 82747-82760
<https://doi.org/10.1109/ACCESS.2021.3087035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A simplified peak current mode control algorithm for special purpose high voltage IGBT converters

Roasto, Indrek; Vinnikov, Dmitri; Lehtla, Tõnu; Auväärt, Aivar BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 305-308 : ill

Simulation methods for 3x3 matrix converter

Sokolovs, Alvis; **Galkin, Ilja**; Krievs, Oskars; **Laugis, Juhan** EPE-PEMC 2006 : 12th International Power Electronics and Motion Control Conference : Portorož, Slovenia, August 30 - September 1, 2006 : proceedings 2006 / p. 822-827 : ill. [CD-ROM]

Simulation of a simple control strategy for a common 3X3 matrix converter

Sokolovs, Alvis; **Galkin, Ilja; Laugis, Juhan** 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. 40-44 : ill

A single-phase high-frequency isolated quasi-Z-source AC-AC converter without commutation problem and step-change frequency operation

Zargariafshar, D.; Mousavi, S. M. J.; Babaei, Ebrahim; Mashinchi Maheri, Hamed; **Hassanpour, Naser** 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/RTUCON60080.2023.10413096>

A single-phase reduced component count asymmetrical multilevel inverter topology

Chub, Andrii; Blaabjerg, Frede IEEE journal of emerging and selected topics in power electronics 2021 / p. 6780-6790 : ill <https://doi.org/10.1109/JESTPE.2021.3066396> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-stage series-connected isolated converters for MVAC to DC applications

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Bayhan, Sertac Workshop on Smart Grid and Renewable Energy (SGRE) 2022 / 4 p <https://doi.org/10.1109/SGRE53517.2022.9774185>

Small-scale wind utilization system for electricity and heat production with vertical-axis wind converter

Selg, Vello; Jegorov, Anatoli Proceedings of the 1st World Wind Energy Conference and Exhibition proceedings, Berlin, 2.-6. June 2002 2002 / [7] p

Soft start and protection of bidirectional buck-boost partial power converter

Hassanpour, Naser; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 3rd International Conference on Smart Grid and Renewable Energy (SGRE) 2022 / p. 1-6 <https://doi.org/10.1109/SGRE53517.2022.9774133>

Soft switching bidirectional step-up/down partial power converter with reduced components stress

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri IEEE transactions on power electronics 2023 / p. 14166-14177 <https://doi.org/10.1109/TPEL.2023.3289061> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Korkh, Oleksandr 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. 133-134 : ill https://www.ester.ee/record=b5291755*est

Solar optiverter - a novel hybrid approach to the photovoltaic module level power electronics

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Korkh, Oleksandr IEEE transactions on industrial electronics 2019 / p. 3869-3880 <https://doi.org/10.1109/TIE.2018.2850036> [Tehnikaülikooli seade muudab päikesepaneelid märgatavalt tootlikumaks](#) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Some design considerations for coupled inductors for integrated buck-boost converters

Zakis, Janis; Vinnikov, Dmitri; Bisenieks, Lauris POWERENG2011 : proceedings of the 2011 International Conference on Power Engineering, Energy and Electrical Drives : Torremolinos (Málaga), Spain, May 11-13, 2011 2011 / [6] p. : ill <https://ieeexplore.ieee.org/abstract/document/6036465>

Space vector modulation with reduced switching losses for motor drive inverters [Electronic resource]

Egorov, Mikhail; Vodovozov, Valery CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 388-393 [CD-ROM] <https://www.semanticscholar.org/paper/Space-vector-modulation-with-reduced-switching-for-Egorov-Vodovozov/89b803db973d2bd7908d7596b234f56665c14d4c>

Stability of anonlinear system «frequency converter-asynchronous motor»

Tergemes, K. T.; Karassayeva, A. R.; Sagyndikova, A. Z.; Orzhanova, Z. K.; **Šuvalova, Jelena** News of the National Academy of Sciences of the Republic of Kazakhstan 2021 / p. 124-128 <https://doi.org/10.32014/2021.2518-170X.73> [Journal metrics at Scopus](#) [Article at Scopus](#)

State of the art of active power electronic transformers for smart grids

Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao; Smolenski, Robert IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5241-5246 : ill <https://ieeexplore.ieee.org/document/6389543>

State of the art trends and design challenges of power electronic transformer for future distribution grids

Beldjajev, Viktor; Roasto, Indrek Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / p. 55-61 : ill

Step-Up series resonant DC-DC converter with bidirectional-switch-based boost rectifier for wide input voltage range photovoltaic applications

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri Energies 2020 / Art. 3747 <https://doi.org/10.3390/en13143747> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Step-Up series-resonant DC-DC converter with switched mode rectifier operating at fixed switching frequency

Chub, Andrii; Bakeer, Abualkasim Ahmed Ali; Vinnikov, Dmitri 2020 IEEE 11th International Symposium on Power Electronics

for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 597-601
<https://doi.org/10.1109/PEDG48541.2020.9244312>

Step-wise approximated multi-cycle sine wave for dynamic tests of AD converters

Land, Raul XVI IMEKO World Congress : IMEKO2000 : proceedings of the 5th Workshop on ADC Modelling and Testing (EWADC'2000) : Vienna, Austria, Sept. 25-28, 2000 2000 / p. 217-220

Super twisting sliding mode control strategy for input series output parallel converters

Guler, Naki; Bayhan, Sertac; Fesli, Ugur; **Blinov, Andrei; Vinnikov, Dmitri** IEEE Access 2023 / p. 107394-107403
<https://doi.org/10.1109/ACCESS.2023.3320178> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Survey of topology morphing control techniques for performance enhancement of galvanically isolated DC-DC converters

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri; Peng, Fang Zheng IEEE Open Journal of the Industrial Electronics Society 2022 / p. 751-777 : ill <https://doi.org/10.1109/OJIES.2022.3225265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Switched capacitor general imittance converter

Kängsep, Eiko; Kukk, Vello BEC : Baltic Electronics Conference : proceedings of the 4th Biennial Conference, October 9-14, 1994, Tallinn (Estonia). 2 1994 / p. 483-486: ill https://www.ester.ee/record=b2150914*est

Switched inductor quasi-Z-source based back-to-back converter for variable speed wind turbines with PMSG

Bisenieks, Lauris; Vinnikov, Dmitri; Ott, Silver Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 61-66 : ill https://www.researchgate.net/publication/267991247_Switched_Inductor_Quasi-Z-Source_Based_Back-to-Back_Converter_for_Variable_Speed_Wind_Turbines_with_PMSG

Synthesis of higher harmonics surface acoustic wave transducers

Janeliauskas, Arturas; Neverauskas, Anatolijus; Rupkus, Stasys BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 293-296: ill

Zero-current switching impedance-source DC-DC converter

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

Zero-voltage switching galvanically isolated current-fed full-bridge DC-DC converter

Chub, Andrii; Kosenko, Roman; Blinov, Andrei 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 455-459 : ill <https://doi.org/10.1109/CPE.2016.7544231>

TalTechi vanemteadur valmistas seadme, mis avar dab oluliselt roheenergia kasutusvõimalusi [Online resource]

rohe.geenius.ee 2022 ["TalTechi vanemteadur valmistas seadme, mis avar dab oluliselt roheenergia kasutusvõimalusi"](#)

Teaching power electronics using object-oriented approach

Raud, Zoja 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. 51-52
https://www.ester.ee/record=b5183874*est

Teaduspreemia tehnikateaduste alal uurimuste tsükli "Uudsed alalispingemuundurid taastuvenergeetikas" eest : Dimitri Vinnikov, Tanel Jalakas, Indrek Roasto

Vinnikov, Dmitri; Jalakas, Tanel; Roasto, Indrek Eesti Vabariigi teaduspreemiad 2014 2014 / lk. 64-74 : fot., ill

Tehnikaülikoolis loodud uudne muundur liidab erinevad päikeseelektri tehnoloogiad ühte võrku [Võrguväljaanne]

postimees.ee 2022 ["Tehnikaülikoolis loodud uudne muundur liidab erinevad päikeseelektri tehnoloogiad ühte võrku"](#)

The passive acoustic effect of automotive catalytic converters

Lavrentjev, Jüri; Rämmal, Hans; Tiikoja, Heiki SAE technical papers 2011 / [8] p.: ill
https://www.researchgate.net/publication/289649603_The_Passive_Acoustic_Effect_of_Automotive_Catalytic_Converters

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

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

Three-phase bidirectional isolated AC-DC matrix-converter with full soft-switching range

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Emiliani, Pietro; Chub, Andrii; Vinnikov, Dmitri IEEE Access 2023 / p. 119270-119283 <https://doi.org/10.1109/ACCESS.2023.3327224> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

Title: Models of the qZ-Converters

Vinnikov, Dmitri; Strzelecki, Ryszard Przegląd elektrotechniczny 2010 / 6, p. 80-84

Topological review of quasi-switched boost inverters

Barath, Jayakumar Geetha Nataraj; Soundararajan, Ayyasamy; Stepenko, Serhii; **Husev, Oleksandr; Vinnikov, Dmitri**; Nguyen, Minh-Khai Electronics 2021 / art. 1485 <https://doi.org/10.3390/electronics10121485> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Topology morphing control of low-cost PV microconverters

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim 2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), 25-29 April 2021, Gliwice, Poland : proceedings 2021 <https://doi.org/10.1109/PEMC48073.2021.9432496>

Traction powered multiport DC-DC converter for bidirectional EV charging application – HIL simulation results

Lukianov, Mykola; Romero Cadaval, Enrique; **Matiushkin, Oleksandr**; Strzelecki, Ryszard 19th International Conference on Compatibility, Power Electronics and Power Engineering 2025

Transformerless boost AC/DC converter with the front-end active filter

Husev, Oleksandr 7th International Conference-workshop Compatibility and Power Electronics : CPE 2011 : Tallinn, Estonia, June 3, 2011 : student forum 2011 / p. 77-81 : ill

Transient analysis of high-voltage half-bridge inverter during freewheeling states

Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri; Janson, Kuno 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 8-11 : ill

2 switch forward inverter for parallel-series resonance alternating (PSA) converter for supplying electric welding arc

Nillo, Helar; Vaimann, Toomas 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. 140-144 : ill

Türistormuunduri digitaalne juhtimisskeem

Pikkov, Otto Side. Raadio. Televisioon : infoseeria 10 1974 / lk. 17-22 https://www.ester.ee/record=b1232303*est

Türistormuunduri kaitsesüsteemi uurimine

Veski, O.; Treufeldt, Jüri; Tuldava, Toomas XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 59 https://www.ester.ee/record=b2449987*est

Ultra-High gain modified SCLN based DC-DC converter with reduced device current stress

Sahoo, Gyana Manjari; Banavath, Satish Naik; **Chub, Andrii; Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 <https://doi.org/10.1109/RTUCON56726.2022.9978808>

Ultra-high step-up DC-DC converters based on center-tapped inductors

Tarzamni, Hadi; **Vosoughi Kurdkandi, Naser**; Gohari, Homayon Soltani; Lehtonen, Matti; **Husev, Oleksandr**; Blaabjerg, Frede IEEE Access 2021 / p. 136373-136383 : ill <https://doi.org/10.1109/ACCESS.2021.3117856> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ultrawide voltage gain range microconverter for integration of silicon and thin-film photovoltaic modules in DC microgrids

Chub, Andrii; Vinnikov, Dmitri; Korkh, Oleksandr; Malinowski, Mariusz; Kouro, Samir IEEE transactions on power electronics 2021 / p. 13763-13778 <https://doi.org/10.1109/TPEL.2021.3084918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uninterruptible power supply based on the converter with alternating of parallel and series resonance

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni 4th International Workshop CPE 2005 : Compatibility in Power Electronics : Fifth International Research and Educational Colloquium on Electronics : 1-3 June 2005, Gdynia, Poland 2005 / p. 44-46 : ill

Uninterruptible power supply based on the converter with alternating of parallel and series resonance [Electronic resource]

Janson, Kuno; Järvik, Jaan; Šklovski, Jevgeni Proceedings of 4th International Workshop CPE 2005 : Compatibility in Power Electronics : Fifth International Research and Educational Colloquium on Electronics : 1-3 June 2005, Gdynia, Poland 2005 / [5] p. : ill. [CD-ROM]

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

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

Uudne muundur aitab muuta terve maja päikesepaneeliks [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 ["Uudne muundur aitab muuta terve maja päikesepaneeliks"](#)

Uudne tehnoloogia päikeseenergiahoonetele

Chub, Andrii Ehitaja 2022 / lk. 22-23 : fot https://www.ester.ee/record=b1072123*est <https://taltech.ee/uudised/jouelektroonika-teadustoo-viljad-edendavad-paikeseenergia-tehnoloogiat>

Uudsed alalispingemuundurid taastuenergeetikas

Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** Teadusmõte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 216-226 : ill., fot https://www.ester.ee/record=b5208765*est

Uus võrgusõbralike muundurite klass alalisvoolu tarbijatele parameetrilise reaktiivvõimsuse kompensatsiooni, lühisvoolu piiramise ja koormusega isekohastuvusega

Janson, Kuno; **Järvik, Jaan** Eesti teadlaste kongress, 11.-15. augustini 1996. a. Tallinnas : ettekannete kokkuvõtted 1996 / lk. 248 : ill https://www.ester.ee/record=b1052731*est

Wide input voltage range photovoltaic microconverter with reconfigurable buck-boost switching stage

Chub, Andrii; **Vinnikov, Dmitri**; **Kosenko, Roman**; **Liivik, Elizaveta** IEEE transactions on industrial electronics 2017 / p. 5974-5983 : ill <https://doi.org/10.1109/TIE.2016.2645891> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wide range power electronic converters for EVs

Nadeem, Mohammad Mahad 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 59-60 : ill https://www.ester.ee/record=b5570906*est

Wide voltage gain range galvanically isolated DC-DC converters - an overview

Khan, Salman 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 61-62 : ill https://www.ester.ee/record=b5570906*est

Virtual lab to study power electronics in LabVIEW framework

Raud, Zoja; **Vodovozov, Valery** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 6 p <https://doi.org/10.1109/PQ.2019.8818275>

Väikese kiiruse muundur

Haavandi, K.; **Kala, Ülo** XXIX vabariiklik üliõpilaste teaduslik- tehniline konverents 30. märtsist - 1. aprillini 1977 : ettekannete teesid 1977 / lk. 58 https://www.ester.ee/record=b2449987*est

Välisvooga MHD-kiirusmuundur

Klimova, T.; **Štšerbakov, A.**; **Mežburd, Volf** XXXII üliõpilaste teaduslik-tehnilise konverentsi ettekannete teesid : pühendatud V. I. Lenini 110. sünniaastapäevale : 16.-18. aprill 1980 1981 / lk. 108 https://www.ester.ee/record=b1322611*est

Анализ колебательных преобразователей вязкости по переменному компоненту выходного сигнала

Remmel, Ülo Метрология : ежемесячное приложение к научно-техническому журналу "Измерительная техника" 1986 / с. 34-38 : ил https://www.ester.ee/record=b1940228*est

Асинхронный электропривод, питаемый от преобразователя напряжения на симметричных тиристорах

Tomson, Jaan; Vinni, P. Электромеханика. 3 1970 / с. 61-68 : илл https://www.ester.ee/record=b2189951*est
<https://digikogu.taltech.ee/et/Item/ba0097d6-af8f-4557-96a1-ac545e315074/>

Влияние индуктивных делителей тока на характеристики выпрямителя

Kõnnusaar, Kalju Электромеханика. 5 1974 / с. 37-44 : илл https://www.ester.ee/record=b2190666*est
<https://digikogu.taltech.ee/et/Item/6827b5ca-030f-4eae-87e4-93c1fa0f4395>

Влияние неидеальностей кос на качество преобразования импеданса

Schiff, Gunnar; **Kukk, Vello** Труды по электротехнике и автоматике : сборник статей. 14 1976 / с. 3-10 : илл https://www.ester.ee/record=b2190768*est <https://digikogu.taltech.ee/et/Item/aa35e320-87b1-405b-9cac-3b90c51867d1>

Влияние принципа действия узла синхронного преобразования на метрологические свойства векторных вольтметров

Parve, Toomas Вопросы теории и проектирования электронных вольтметров и средств их проверки : тезисы докладов республиканской научно-технической конференции, [17-18 сентября 1985 года, Таллин] 1985 / с. 89-90 https://www.ester.ee/record=b1255402*est

Возможности применения управляемого реактора в качестве преобразовательного устройства регулируемого электропривода

Meiessaar, J.; Järvik, Jaan XX студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР : тезисы докладов. Часть 1 1974 / с. 166 https://www.ester.ee/record=b1306141*est

Двенадцатипульсный преобразователь переменного напряжения в режиме устройства частоты : препринт

Sakkos, Heinar; Sakkos, Tiit 1991 https://www.ester.ee/record=b1235621*est

Двухфазно управляемые трехфазные многопульсивные преобразователи переменного напряжения

Sakkos, Heinar; Sakkos, Tiit Техническая электродинамика 1990 / 1, с. 57-62

Динамические свойства некоторых беконтактных релейных преобразователей на транзисторах

Pikkov, Otto Сборник материалов к научно-техническому совещанию по полупроводниковым средствам автоматизации дизельных агрегатов : (созыв в г. Тарту 24 мая 1966 г.) 1966 / с. [?] https://www.ester.ee/record=b1669765*est

Зависимость метрологических характеристик векторных вольтметров от свойств применяемых в них синхронных преобразователей дискретного действия

Parve, Toomas Анализ и синтез сложных систем и цепей с помощью ЭВМ 1986 / с. 93-101

Исследование миниатюрных направляющих скольжения для преобразователей перемещений

Ajaots, Mairo; Möldre, Heino XXV студенческая научно-техническая конференция вузов Прибалтийских республик, Белорусской ССР и Молдавской ССР, 21-23 апреля 1981 года : тезисы докладов. Том 2, Автоматика. Энергетика. Механика. Химия 1981 / с. 139-140 https://www.ester.ee/record=b1322629*est

Исследование условий получения фоточувствительных пленок сульфида кадмия и его аналогов методом химического распыления : автореферат ... кандидата технических наук (05.17.16)

Kerm, Karin 1972 http://www.ester.ee/record=b1335103*est

Исследование шумов электромагнитного преобразователя скорости жидкостей

Maltšev, Jüri; Meister, Ants; Toomet, Madis Тезисы докладов республиканской научно-технической конференции, посвященной 80-летию со дня изобретения радио А. С. Поповым 1975 / с. 90 https://www.ester.ee/record=b1322122*est

Квадратурный перемножитель для двухканального фильтра

Min, Mart; Parve, Toomas Избирательные системы с обратной связью : межвузовский тематический научный сборник 1983 / с. 127-129 https://www.ester.ee/record=b2347952*est

Компенсация неидеальных конверторных двухпортов

Schiff, Gunnar Труды по электротехнике и автоматике : сборник статей. 10 1972 / с. 63-76 : илл

https://www.ester.ee/record=b2190520*est <https://digikogu.taltech.ee/et/Item/49449c41-8f8a-4846-93fd-8f149889ec73>

Микрофотопреобразователи на базе многозернистого сульфида кадмия

Iijina, Natalja; Varema, Tiit Физическая химия соединений АИВУ 1984 / с. 41-48 : ил https://www.ester.ee/record=b1314940*est
<https://digikogu.taltech.ee/et/Item/b5a40c2b-483d-4f6f-a3dd-9b72e498c226>

Многопульсные трехфазные преобразователи переменного напряжения с двухфазной системой управления : препринт

Sakkos, Heinar; Sakkos, Tiit 1990 https://www.ester.ee/record=b1275285*est

Некоторые проблемы применения синхронных преобразователей с фазовой модуляцией в некоторых вольтметрах

Võrno, Toivo Вопросы теории и проектирования электронных вольтметров и средств их проверки : тезисы докладов республиканской научно-технической конференции, [17-18 сентября 1985 года, Таллин] 1985 / с. 86-87
https://www.ester.ee/record=b1255402*est

Новые направления и результаты разработки преобразовательных устройств приводов транспортных средств

Чаусов О.Г. Тезисы докладов семинара "Новые направления научных исследований в области электромеханики" 1991 / с. 68-70

О вопросах магнитной гидравлики униполярного преобразователя

Parts, Innari; Puusepp, Eugen Сборник научных трудов студентов. 4 1965 / с. 79-87 : илл

https://www.ester.ee/record=b2181987*est <https://digikogu.taltech.ee/et/Item/15040af2-b264-4339-b7b1-c0140de7d1c1>

О компенсируемости неидеальных конверторных двухпортов

Schiff, Gunnar Труды по электротехнике и автоматике : сборник статей. 10 1972 / с. 47-62 : илл

https://www.ester.ee/record=b2190520*est <https://digikogu.taltech.ee/et/Item/49449c41-8f8a-4846-93fd-8f149889ec73>

О недостатках классических ротационных реометров

Uutma, Toomas Анализ и синтез сложных систем и цепей с помощью ЭВМ 1988 / с. 3-9

О некоторых возможностях физической реализации идеального конвертора сопротивления

Schiff, Gunnar Республиканская научно-техническая конференция, посвященная Дню радио : тезисы докладов 1973 / с. 18-19 https://www.ester.ee/record=b1383925*est

О предварительном определении главных размеров униполярного преобразователя

Parts, Innari Исследование и проектирование электромагнитных средств перемещения жидких металлов : сборник трудов. 4 1966 / с. 107-116 : илл https://www.ester.ee/record=b2100520*est <https://digikogu.taltech.ee/et/Item/68300884-f47a-42d1-a1ff-2e4a489053ce>

О степени нелинейности сложного преобразователя средневыпрямленных значений

Gurjanov, Boris Расчет и проектирование приборов, устройств и систем технической кибернетики 1980 / с. 133-137 : илл https://www.ester.ee/record=b1264145*est <https://digikogu.taltech.ee/et/Item/81bf2178-a9f8-417d-86c7-2000cca6a01e>

Обеспечение требуемых характеристик у механо-пневматических преобразователей с кольцевой струей

Reedik, Vello Пневматические и гидравлические устройства и системы управления : X Международная конференция "Яблонна-86" : Сборник докладов 1986 / с. 23-26

Обобщенный МГД-преобразователь параметров движения жидкости

Mežburd, Volf Исследование электромагнитных и электромашинных устройств специального назначения 1981 / с. 13-21 : илл https://www.ester.ee/record=b1319107*est <https://digikogu.taltech.ee/et/Item/69f32682-c927-437b-9d88-f03d45fbfd06>

Определение диапазона и параметров колебательных преобразователей вязкости

Remmel, Ülo Моделирование и управление в системах технической кибернетики 1987 / с. 43-49

Основные требования к подсистеме моделирования для системы автоматизации проектирования вентильных преобразовательных устройств

Mihailevič, G.; Piroženko, Aleksander Проблемы нелинейной электротехники. Ч. 2 : тезисы докладов III всесоюзной научно-технической конференции [Черкассы, сентябрь 1988 г.] 1981 / с. 153-155 https://www.ester.ee/record=b2358631*est

Передаточные функции конверторов импеданса со следящей обратной связью во входных цепях

Maltsev, Jüri Методы обработки и регистрации сигналов 1981 / с. 45-51 : илл https://www.ester.ee/record=b1507633*est <https://digikogu.taltech.ee/et/Item/b58bba27-822f-44c3-8387-50d8a26bb3d3>

Перспективы применения датчиков и преобразователей излучения в народном хозяйстве

Mellikov, Enn 1988 https://www.ester.ee/record=b1524288*est

Преобразователь перемещений на основе датчика Холла

Väljamäe, Gunnar; Tilk, Johan; Tihhonov, V. Труды по электротехнике и автоматике : сборник статей. 13 1975 / с. 129-136 : илл https://www.ester.ee/record=b2190710*est <https://digikogu.taltech.ee/et/Item/ffbd63ed-06d6-4bbb-9468-118f743cc87f>

Применение методов теории информации при анализе измерительных устройств и преобразователей

Võrk, Jaan Труды по электротехнике и автоматике : сборник статей. 7 1970 / с. 91-101 : илл https://www.ester.ee/record=b2189958*est <https://digikogu.taltech.ee/et/Item/33610e22-06c3-48a2-83bd-e55be9589930>

Применение преобразователя с параметрическим чередованием параллельного и последовательного резонанса для питания дуговых сталеплавильных печей

Janson, Kuno; Järvik, Jaan; Bolgov, Viktor Электрика 2002 / с. 13-18 : ил

Применение резонансного преобразователя с параметрическим чередованием параллельного и последовательного резонанса (ЧППР) для питания дуговых сталеплавильных печей

Janson, Kuno; Järvik, Jaan; Bolgov, Viktor Энергосбережение. Электроснабжению Автоматизация : материалы международной научно-технической конференции : 22-23 ноября 2001 года, Гомель 2001 / с. 49-51 : ил

Принципиальные ограничения в оптоэлектронном преобразователе фотоприемника

Taklaja, Andres Исследования по прикладной квантовой электронике 1989 / с. 60-62

Пьезоэлектрические преобразователи энергии и некоторые перспективы их использования

Грейвулис Я.П.; Шинкарев В.Н. Тезисы докладов семинара "Новые разновидности электропривода и возможности их применения" 1990 / с. 29-33

Разработка и исследование статического преобразователя напряжения для трамвая

Vinnikov, Dmitri Силовая электроника и энергоэффективность : международная научно-техническая конференция (МНТК

Распределение электромагнитного поля в жидкометаллических униполярных преобразователях при односторонней

Parts, Innari Исследование и проектирование электромагнитных средств перемещения жидких металлов : сборник трудов. 4 1966 / с. 93-106 : илл https://www.ester.ee/record=b2100520*est <https://digikogu.taltech.ee/et/Item/68300884-f47a-42d1-a1ff-2e4a489053ce>

Регулятор трехфазного напряжения с управляемым межфазным энергообменом

Sakkos, Tiit; Sakkos, Heinar Проблемы электромагнитной совместимости силовых полупроводниковых преобразователей. Часть 3 : тезисы докладов III Всесоюзного научно-технического совещания [Таллинн, ноябрь 1986 года] 1986 / с. 38-39 https://www.ester.ee/record=b1216686*est

Релеиные преобразователи частотно-импульсного сигнала автоматического контроля со счетчиками импульсов

Pikkov, Otto Труды по электротехнике и автоматике : сборник статей. 6 1968 / с. 3-19 : илл https://www.ester.ee/record=b2182221*est <https://digikogu.taltech.ee/et/Item/28a82977-89e1-4d6c-ae22-51bd6ba069c0>

Синтез формы полюсных наконечников в преобразователе перемещения на базе датчика Холла

Tilk, Johan Расчет и проектирование приборов, устройств и систем технической кибернетики 1980 / с. 115-123 : илл https://www.ester.ee/record=b1281890*est <https://digikogu.taltech.ee/et/Item/8e0abfe2-9020-4ebd-85d1-fd67de0d1b30>

Синхронный преобразователь (его варианты) : [А. с. 1589371]

Min, Mart; Parve, Toomas; Sillamaa, Hanno Открытия. Изобретения 1990 / 32, с. 247

Создание и исследование эпидаксиальных многослойных п-р-п+ -структур большой площади

Allikas, E.; Vergi, U.; Vinnal, J.; Saks, P.; Seleninov, K.; **Tarma, Mati** Электротехническая промышленность. Серия: Преобразовательная техника 1976 / с.?

Тиристорные преобразователи питания МГД устройств

Tiismus, Hugo; Irs, Rein; Randoja, Toe; Tomson, Jaan Сборник материалов к VI Таллинскому совещанию по электромагнитным расходомерам и электротехнике жидких проводников. Электромагнитные насосы 1973 / с. 162-168 : ил https://www.ester.ee/record=b1337031*est

Улучшение конструкции и способа градуировки кондукционных преобразователей скорости течения жидких металлов

Irs, Rein; Lehtla, Tõnu; Tiismus, Hugo Исследование и проектирование электромагнитных средств перемещения жидких металлов : сборник трудов. 11 1974 / с. 73-85 : илл https://www.ester.ee/record=b2100319*est <https://digikogu.taltech.ee/et/Item/e4a28dda-447a-4efc-a3bf-2d868e162d8d>

Усовершенствованный преобразователь перемещений на основе датчика Холла

Väljamäe, Gunnar; Tilk, Johan; Uutma, Toomas Расчет и проектирование измерительных преобразователей 1983 / с. 3-9 : ил https://www.ester.ee/record=b1288985*est <https://digikogu.taltech.ee/et/Item/4e3815a3-f217-4ae2-9776-1b5ea3c25959>

Устойчивость нагруженного конвертора отрицательного сопротивления

Kukk, Vello; Schiff, Gunnar Труды по электротехнике и автоматике : сборник статей. 13 1975 / с. 23-31 : илл https://www.ester.ee/record=b2190710*est <https://digikogu.taltech.ee/et/Item/ffbd63ed-06d6-4bbb-9468-118f743cc87f>

Устройство для синхронного преобразования (его варианты) : [А.с. 1589372]

Min, Mart; Parve, Toomas; Kukk, Vello; Land, T. Открытия. Изобретения 1990 / 32, с. 247-248

Фотопроводящие монозернистые слои для электролюминесцентных преобразователей и дозиметрии рентгеновских и гамма-лучей

Varema, Tiit; Mellikov, Enn; Hiie, Jaan Тезисы докладов II Всесоюзного симпозиума по люминесцентным приемникам и преобразователям рентгеновского излучения, Рига, 5-7 октября 1976 г. 1976 / с. 131-132 https://www.ester.ee/record=b4436883*est

Эквивалентная схема преобразователя электромагнитного расходомера

Maltsev, Jüri; Meister, Ants; Toomet, Madis Труды по радиотехнике. 3 1976 / с. 45-50 https://www.ester.ee/record=b2190765*est <https://digikogu.taltech.ee/et/Item/051089c8-3240-47a7-84ae-2e65ba92e5fb>

Эквивалентное преобразование для уменьшения суммарной емкости RC-цепи

Männamaa, Vello Тезисы докладов республиканской научно-технической конференции, посвященной 80-летию со дня изобретения радио А. С. Поповым 1975 / с. 62-63 https://www.ester.ee/record=b1322122*est

Электромагнитные процессы в схеме с делителями без магнитной и электрической связей

Kõnnusaar, Kalju Электромеханика. 5 1974 / с. 27-35 : илл https://www.ester.ee/record=b2190666*est <https://digikogu.taltech.ee/et/Item/6827b5ca-030f-4eae-87e4-93c1fa0f4395>

