

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

Active clamped dual current-fed bidirectional DC-DC converter for wide voltage range applications

Chauhan, Sachin; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 7 p <https://doi.org/10.1109/RTUCON62997.2024.10830838>

Active front end converters with voltage balancing capability

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

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

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

Addressing cross-coupling issues in magnetically integrated three-port DC-DC converters

Carvalho da Silva, Edivan Laercio; Blinov, Andrei; Sohail, Umer; Chub, Andrii 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 5 p <https://doi.org/10.1109/PEMC61721.2024.10726373>

Alalisvoolu tagasitulek - unistus või reaalsus?

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

Analysis of design requirements and optimization possibilities of partial power converter for photovoltaic string applications in DC microgrids

Chub, Andrii; Hassanpour, Naser; Yadav, Neelesh; Jalakas, Tanel; Blinov, Andrei; Vinnikov, Dmitri IEEE Access 2024 / p. 14605-14619 <https://doi.org/10.1109/ACCESS.2024.3354375> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Analysis of 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 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 switching properties of different high voltage IGBTs operating under hard-switching conditions

Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri; Laugis, Juhan BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 323-326 : ill

Analytical approach for maximizing self-consumption of nearly zero energy buildings- case study : Baltic region

Ahmadihangar, Roya; Karami, Hossein; Husev, Oleksandr; Blinov, Andrei; Rosin, Argo; Jonaitis, Audrius; Sanjari, Mohammad Javad Energy 2022 / art. 121744, 11 p. : ill <https://doi.org/10.1016/j.energy.2021.121744> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

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

Blinov, Andrei 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 31-32 : ill https://www.ester.ee/record=b5183874*est

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

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

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

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

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

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

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

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

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

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

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>

A case study of optimising energy storage dispatch : convex optimisation approach with degradation considerations

Vaicys, Jonas; Gudžius, Saulius; Jonaitis, Audrius; Rackiene, Roma; **Blinov, Andrei;** Pefitsis, Dimosthenis Journal of energy storage 2024 / art. 112941 <https://doi.org/10.1016/j.est.2024.112941> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

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

Blinov, Andrei; Norrga, Staffan; Tibola, Gabriel; Vellozo, 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>

Characterisation of 1200 V RB-IGBTs with different irradiation levels under hard and soft switching conditions

Blinov, Andrei; Korkh, Oleksandr; Vinnikov, Dmitri; Waind, Peter 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 1382-1391 : ill <https://ieeexplore.ieee.org/document/8515535>

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

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

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

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

Comparative evaluation of a DAB converter and SRC for DC buildings application

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Banavath, Satish Naik; **Vinnikov, Dmitri** 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 6 p <https://doi.org/10.1109/PEMC61721.2024.10726346>

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

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

Comparison of 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 l <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880862>

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

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

Comparison of (N+1) redundancy and fault tolerance approaches in single-stage series-connected isolated MVAC to LVDC converters

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Blinov, Andrei; Bayhan, Sertac; Vinnikov, Dmitri 2023 International Conference on Clean Electrical Power (ICCEP) 2023 / p. 469-474 : ill <https://doi.org/10.1109/ICCEP57914.2023.10247478>

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

Korkh, Oleksandr; Blinov, Andrei; Kosenko, Roman; Vinnikov, Dmitri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659898>

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](#)

Considerations regarding the concept of cost-effective power-assist wheelchair subsystems (case study and initial evaluation)

Galkin, Ilja; Podgornovs, Andrejs; **Blinov, Andrei; Kosenko, Roman** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 71-80 : ill <https://doi.org/10.2478/ecce-2018-0008>

Cooling methods for high voltage IGBTs

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

Cooling methods for high-power electronic systems

Blinov, Andrei; Vinnikov, Dmitri; Lehtla, Tõnu Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 79-86 : ill

Current-fed dual inductor push-pull partial power converter

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

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 droop control strategies and tuning principles

Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri; Mackay, Laurens; Jalakas, Tanel 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 <https://doi.org/10.1109/RTUCON60080.2023.10412947>

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

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

DC integration of residential photovoltaic systems : a survey

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei IEEE Access 2022 / p. 66974-66991 <https://doi.org/10.1109/ACCESS.2022.3185788> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DC-DC перетворювач з широким діапазоном забезпечення режиму природної комутації в нулях напруги
Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr; Zamaruev, Volodymyr; Styslo, Bogdan Вісник НТУ "Харківський політехнічний інститут". Серія: Електричні машини та електромеханічне перетворення енергії = Bulletin of the NTU "Kharkiv Polytechnic Institute". Series: Electrical Machines and Electromechanical Energy Conversion 2019 / с. 14-19 : іл
<https://doi.org/10.20998/2409-9295.2019.20.02>

Design and Control of Bidirectional Step-Up/Down Partial Power Converters for DC Microgrid Applications = Alalisvoolu mikrovõrkudele osavõimsuse töötusega kahesuunalise tõste-langetusmuunduri projekteerimine ja juhtimine
Hassanpour, Naser 2025 https://www.ester.ee/record=b5746961*est <https://digikogu.taltech.ee/et/Item/daec7687-5e83-467e-8e6a-45b1e4a15a64> <https://doi.org/10.23658/taltech.30/2025>

Design considerations of dual-active bridge DC grid-forming converter for DC buildings
Carvalho da Silva, Edivan Laercio; Sidorova, Aleksandra; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IEEE transactions on industrial electronics 2024 / p. 10601-10611 <https://doi.org/10.1109/TIE.2023.3331125> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Development of a battery sizing tool for nearly zero energy buildings
Ahmadihangar, Roya; Husev, Oleksandr; Blinov, Andrei; Karami, Hossein; Rosin, Argo IECON 2020 The 46th Annual Conference of the IEEE Industrial Electronics Society 2020 / p. 5149-5154 : ill <https://doi.org/10.1109/IECON43393.2020.9254557> [Conference proceeding](#) [Article at Scopus](#) [Article at WOS](#)

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](#)

Droop control implementation in bidirectional step-up/down Partial power converter for battery energy storage applications
Hassanpour, Naser; Chub, Andrii; 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/RTUCON60080.2023.10413064>

Droop control with incorporated dead zone for indirect energy management in DC nanogrids
Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 6 p <https://doi.org/10.1109/PEMC61721.2024.10726394>

Dynamic characteristic evaluation of a 600V reverse blocking IGBT device
Korkh, Oleksandr; Blinov, Andrei Advances in Information, Electronic and Electrical Engineering (AIEEE) : proceedings of the 5th IEEE Workshop, november 24-25, 2017, Riga, Latvia 2018 / p. 1-5 : ill <https://doi.org/10.1109/AIEEE.2017.8270527>

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>

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

Effects of voltage transients on the DC droop control in residential nanogrids
Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri; Jalakas, Tanel 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227464>

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

Electric power management and control in DC buildings—state-of-the-art and emerging technologies

Blinov, Andrei; Roasto, Indrek; Chub, Andrii; Emiliani, Pietro; Vinnikov, Dmitri Power Quality : Infrastructures and Control 2023 / p. 67-96 https://doi.org/10.1007/978-981-19-7956-9_3

An electrolytic capacitor-less multiple-output LED driver with a universal input voltage

Awad, Khaled; **Abdelrahim Abdelghafour, Omar Mohamed**; Gaafar, Mahmoud A.; Orabi, Mohamed; **Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 6 I. <https://doi.org/10.1109/ENERGYCON53164.2022.9830255>

Energy management implementation approach for droop-controlled residential DC nanogrids

Hasan, Sayeed; Chub, Andrii; Yadav, Neelesh; Blinov, Andrei; Kurnitski, Jarek; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144665>

Energy management in residential DC microgrids - droop control-based approach

Hasan, Sayeed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 23 ; poster 14 https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf

Energy scheduling and flexibility quantification in buildings

Ahmadihangar, Roya; Blinov, Andrei; Pefitsis, Dimosthenis Distributed energy systems : design, modeling, and control 2023 / p. 249-259 : ill <https://doi.org/10.1201/9781003229124-16>

Energy-efficient high-voltage switch based on parallel connection of IGBT and IGCT [Electronic resource]

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 360-364 [CD-ROM] https://www.researchgate.net/publication/252015928_Energy-efficient_high-voltage_switch_based_on_parallel_connection_of_IGBT_and_IGCT

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>

Evaluating the Power Mismatch Dynamics of Deeply Renovated Apartment Buildings with On-site PV Panels in Estonia

Olayiwola, Tofopefun Nifise; Thalfeldt, Martin; Kuusk, Kalle; Blinov, Andrei Clima 2025 : 15th REHVA HVAC World Congress 2025

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

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

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

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

Experimental analysis of the dynamic performance of Si, GaAs and SiC diodes

Blinov, Andrei; Vinnikov, Dmitri; Rang, Toomas BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 49-52 : ill

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

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

Experimental results of parallel active filter implementation in nonideal power grid

Husev, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri Technological Innovation for Value Creation : third IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2012, Costa de Caparica, Portugal, February 27-29, 2012 : proceedings 2012 / p. 291-298 : ill https://link.springer.com/chapter/10.1007/978-3-642-28255-3_32

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

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

Experimental verification of DC/DC converter with full-bridge active rectifier

Blinov, Andrei; Ivakhno, Volodymyr; Zamaruev, Vladimir; **Vinnikov, Dmitri**; **Husev, Oleksandr** IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5179-5184 : ill <https://ieeexplore.ieee.org/document/6389549>

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

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

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

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

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

Kosenko, Roman; **Chub, Andrii**; **Blinov, Andrei** 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 384-389 : ill <https://doi.org/10.1109/CPE.2016.7544219>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Grid integration of DC buildings : standards, requirements and power converter topologies

Carvalho da Silva, Edivan Laercio; **Blinov, Andrei**; **Chub, Andrii**; **Emiliani, Pietro**; de Carne, Giovanni; **Vinnikov, Dmitri** IEEE open journal of power electronics 2022 / p. 798-823 <https://doi.org/10.1109/OJPEL.2022.3217741> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

High gain DC-AC high-frequency link inverter with improved quasi-resonant modulation

Blinov, Andrei; Korkh, Oleksandr; Chub, Andrii; Vinnikov, Dmitri; Peftitsis, Dimosthenis; Norrga, Staffan; Galkin, Ilya IEEE transactions on industrial electronics 2022 / p. 1465-1476 : ill <https://doi.org/10.1109/TIE.2021.3060657> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-efficiency partial power converter for integration of second-life battery energy storage systems in DC microgrids

Hassanpour, Naser; Chub, Andrii; Yadav, Neelesh; Blinov, Andrei; Vinnikov, Dmitri IEEE Open Journal of the Industrial Electronics Society 2024 / p. 847-860 <https://doi.org/10.1109/OJIES.2024.3389466> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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-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](#)

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

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

Hybrid IGBT-IGCT switch

Blinov, Andrei; Vinnikov, Dmitri 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 / p. 161-164 : ill

Hybrid IGBT-IGCT switch

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr; Zamaruev, Vladimir Przegląd elektrotechniczny = Electrical review 2012 / p. 12-15 : ill https://www.researchgate.net/publication/290550726_Hybrid_IGBT-IGCT_Switch

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>

Implementation issues of droop controlled DC nanogrids: State of charge management of battery energy storage and impact of sensor gain tolerance

Hasan, Sayeed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830832>

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 hybrid IGBT-IGCT switches in three-level NPC inverters

Blinov, Andrei; Vinnikov, Dmitri; Ivakhno, Volodymyr; Zamaruev, Vladimir COMPEL : the international journal for computation and mathematics in electrical and electronic engineering 2012 / p. 1917-1930 : ill <https://www.semanticscholar.org/paper/Implementation-possibilities-of-hybrid-IGBT%E2%80%90IGCT-in-Blinov-Vinnikov/c57ac29d7993543a1dcb4370fe7bf7a1fe44597c>

Improved maximum power point tracking algorithm for step-up/down partial power converters operating around zero partiality

Yadav, Neelesh; Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri IEEE journal of emerging and selected topics in power electronics 2024 / p. 1984-1994 <https://doi.org/10.1109/JESTPE.2024.3354843> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

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](#)

Isolated high-frequency link PFC rectifier with high step-down factor and reduced energy circulation

Blinov, Andrei; Vinnikov, Dmitri; Romero-Cadaval, Enrique; Martins, João F.; Pefitsis, Dimosthenis IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 788-796 <https://doi.org/10.1109/JESTIE.2021.3126226>

Isolated matrix converters = Isoleeritud maatriksmuundurid

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

Jõuelektroonik: akupõlenguid õhutam rutiinist toituv turvatunne

Blinov, Andrei novaator.err.ee 2024 [Jõuelektroonik: akupõlenguid õhutam rutiinist toituv turvatunne](#)

Jõumuundurite vedelikjahutussüsteemidest

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

Leveraging the machine learning techniques for demand-side flexibility - a comprehensive review

Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Blinov, Andrei; Korõtko, Tarmo; Vinnikov, Dmitri Electric power systems research 2025 / art. 111185 <https://doi.org/10.1016/j.epsr.2024.111185>

Loss calculation methods of half-bridge square-wave inverters

Blinov, Andrei; Vinnikov, Dmitri; Jalakas, Tanel Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 9-14 : ill <https://eejournal.ktu.lt/index.php/elt/article/view/604>

Magnetically integrated multiport converter for energy management in DC-powered buildings

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Banavath, Satish Naik; Vinnikov, Dmitri Eletrônica de Potência 2024 / art. 202445 <https://doi.org/10.18618/REP.e202445%20%20>

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>

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

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

Modelling of consumption shares for small wind energy prosumers

Annuk, Andres; Yaici, Wahiba; **Blinov, Andrei**; Märss, Maido; Trashchenkov, Sergei; Miidla, Peep Symmetry 2021 / art. 647 <https://doi.org/10.3390/sym13040647> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modular battery charger for light electric vehicles

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

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

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

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

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

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

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

Multiport converter with integrated energy storage for hydrogen buffer interfacing with renewable energy systems [Electronic resource]

Andrijanovitš, Anna; Blinov, Andrei; Husev, Oleksandr; Vinnikov, Dmitri 2012 IEEE International Conference on Industrial Technology : proceedings CD 2012 / p. 235-240 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6209943>

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

Carvalho da Silva, Edivan Laércio; 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>

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovičs, Anna 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 23 of Subsection of Power Electronic Converters and Applications 2012 / 6 p. : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovičs, Anna 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 : 11-12 October 2012, Riga, Latvija : [abstracts] 2012 / p. 123 : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovičs, Anna Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2012 / p. 24-29 : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

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](#)

Novel droop control strategy for indirect battery management in DC nanogrids

Roasto, Indrek; Vinnikov, Dmitri; Blinov, Andrei Proceedings of the Estonian Academy of Sciences 2024 / p. 345-355
<https://doi.org/10.3176/proc.2024.4.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel high-voltage half-bridge converter with phase-shifted active rectifier [Electronic resource]

Blinov, Andrei; Ivakhno, Volodymyr; Zamaruev, Vladimir; Vinnikov, Dmitri; Husev, Oleksandr 2012 IEEE International Conference on Industrial Technology : proceedings CD 2012 / p. 967-970 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6210062>

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](#)

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

Philipps, Daniel; Blinov, Andrei; Peftitsis, 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**; Peftitsis, 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 Single-Chip MOSFET and IGBT Devices after failure due to repetitive avalanche [Electronic resource]

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

Operation 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, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227425>

Opportunity charging as a solution for high-demand areas

Anniste, Hans; Vinnikov, Dmitri; Blinov, Andrei Future Frontiers : PhD Conference on Emerging Technologies : Book of Abstracts 2025 / p. 21 ; poster 12 https://tuit.ut.ee/sites/default/files/2025-05/PhD%20Conference%202025%20Book%20of%20Abstracts_pub3.pdf

Optimised residential battery energy storage systems

Blinov, Andrei 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. 13-14 https://www.ester.ee/record=b5291755*est

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>

Optimized energy scheduling of residential DC building: Case of Nordic climate

Sidorova, Aleksandra; Blinov, Andrei; Ahmadihangar, Roya; Vinnikov, Dmitri; Vösa, Karl-Villem; Kurnitski, Jarek 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227437>

Overview of bidirectional unfolding converters for battery energy storage systems

Bubovich, Alexander; Vorobyov, Maxim; Galkin, Ilya; 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>

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 p. <https://doi.org/10.1109/ENERGYCON53164.2022.9830394>

Partial Power Processing and its Emerging Applications : Chapter 7

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

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

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

Performance evaluation of step-up /down partial power converters based on current-fed DC-DC topologies

Yadav, Neelesh; Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Galkin, Ilya; Abdelrahim Abdelghafour, Omar Mohamed IEEE transactions on industry applications 2024 / p. 7111-7124 <https://doi.org/10.1109/TIA.2024.3413050>

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

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / 5 p <https://doi.org/10.1109/RTUCON56726.2022.9978890>

Performance evaluation of step-up/down partial power converters based on current-fed DC-DC topologies

Yadav, Neelesh; Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Galkin, Ilya; Abdelrahim Abdelghafour, Omar Mohamed IEEE transactions on industry applications 2024 / p. 7111-7124 : ill <https://doi.org/10.1109/TIA.2024.3413050> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

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 Electronics and Energy Management for Battery Storage Systems

2022 <https://doi.org/10.3390/books978-3-0365-5278-1>
https://www.mdpi.com/journal/energies/special_issues/peem_for_battery_storage_systems

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>

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>

Protection and control implementation for bidirectional step-up/down partial power converter for droop-controlled DC microgrids

Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; Vinnikov, Dmitri IEEE transactions on industry applications 2025 / 11 p <https://doi.org/10.1109/TIA.2025.3561767>

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

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

Quasi single-stage three-phase filterless converter for EV charging applications

Blinov, Andrei; Zinchenko, Denys; Rabkowski, Jacek; Wrona, Grzegorz; **Vinnikov, Dmitri** IEEE Open Journal of Power Electronics 2022 / p. 51-60 : ill <https://doi.org/10.1109/OJPEL.2021.3134460> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reactive power control for bidirectional isolated high-frequency link converter

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

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](#)

Regenerative passive snubber circuit for high-frequency link converters

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

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

Resonant DC transformer for grid-interactive energy efficient buildings

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

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

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

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

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

SiC и GaAs диоды в устройствах силовой электроники

Blinov, Andrei; Vinnikov, Dmitri; Rang, Toomas Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / с. 42-46 : ил

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>

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

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

Sliding mode control based on super twisting algorithm for single-stage on-board charger

Guler, Naki; Komurcugil, Hasan; Bayhan, Sertac; **Vinnikov, Dmitri; Blinov, Andrei** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227481>

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

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

Soft start algorithm for a droop controlled dc nanogrid

Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l. <https://doi.org/10.1109/BEC56180.2022.9935608>

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-start procedure for DC microgrid fed by PWM-controlled DAB converter

Carvalho, Edivan Laercio; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 6 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027167>

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

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

Solar PV Generation and Consumption Dataset of an Estonian Residential Dwelling

Hasan, Sayeed; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri Scientific Data 2025 / art. 481 <https://doi.org/10.1038/s41597-025-04747-w>

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

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

Step-up current-source partial power converter for PV systems

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Hassanpour, Naser IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 l. <https://doi.org/10.1109/PEDG54999.2022.9923250>

Step-up/down partial power converter with enhanced MPPT efficiency around zero partiality

Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; 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/RTUCON60080.2023.10412980>

Study of battery energy storage operation in droop-controlled residential DC nanogrid

Hasan, Sayeed; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 5 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604364>

Study of operating conditions of 3,3 kV dual IGBT modules in three-level neutral point clamped inverters

Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri Технічна електродинаміка 2010 / 1, p. 135-140 : ill

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

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

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

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

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](#)

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

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

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 energeetikutel valmis kodudes taastuenergia kasutamiseks uudseid lahendusi

Blinov, Andrei; Roasto, Indrek Elektriala 2018 / lk. 30 : fot http://www.ester.ee/record=b1240496*est

Three-level half-bridge ZVS DC/DC converter for electrolyzer integration with renewable energy systems

Andriyanovits, Anna; Vinnikov, Dmitri; Roasto, Indrek; Blinov, Andrei 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / [4 p.] : ill

A three-level voltage-source gate driver for SiC MOSFETs in synchronous rectification mode

Giannakis, Andreas; Philipps, Daniel; **Blinov, Andrei;** Pefitsis, Dimosthenis 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227462>

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](#) [Article at WOS](#)

Three-phase four wire high-frequency link converter for residential DC grids

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 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227416>

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

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

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

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

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

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

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

Tuleviku linn: tark valgus tänaval

Vaaks, Eveliis Trialoog 2025 <https://trialoog.taltech.ee/tuleviku-linn-tark-valgus-tanaval/>

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](#)

Using electric vehicles to enhance power supply resilience of buildings during emergencies and critical situations

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Kyselova, Anna 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830812>

Wide output voltage range isolated buck-boost PFC converter with reconfigurable rectifier

Verbytskyi, Ievgen; Nadeem, Mohammad Mahad; Blinov, Andrei; 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-POWERENG58103.2023.10227389>

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

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

Wide-range universal isolated DC-DC converter for EV charging applications

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 5 p <https://doi.org/10.1109/IECON55916.2024.10905692> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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

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

Двухтактный квази-импедансный повышающий DC/DC преобразователь

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

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

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

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

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

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

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

Советы ученого: как снизить риск возгорания аккумулятора

Blinov, Andrei nauka.err.ee 2024 [Советы ученого: как снизить риск возгорания аккумулятора](#)

Стиійкість замкнених систем електроживлення з використанням широтно-імпульсної модуляції під час врахування фактору пульсацій

Zhuikov, V.Y.; Verbytskyi, I.V.; Abakumova, O.O.; Blinov, Andrei Перетворення параметрів електричної енергії 2023 / с. 3-7 : ил
<https://doi.org/10.15407/techned2023.06.003> [Journal metrics at Scopus](#) [Article at Scopus](#)