

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

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

Bidirectional operation of the single-phase neutral-point-clamped quasi-Z-source inverter

Husev, Oleksandr; Zakis, Janis; Vinnikov, Dmitri; Savenko, O. BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 221-224 : ill

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>

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

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

Capacitor coupled voltage transformer defect identification in the presence of tap changer

Asefi, Sajjad; Leinakse, Madis; Kilter, Jako; Landsberg, Mart IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 5 p <https://doi.org/10.1109/isgteurope56780.2023.10408138>

CCM operation analysis of the single-phase three-level quasi-Z-source inverter

Husev, Oleksandr; Roncero-Clemente, Carlos; Stepenko, Serhii; Vinnikov, Dmitri; Romero-Cadaval, Enrique 15th International Power Electronics and Motion Control Conference, EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia 2012 / p. DS1b.21-1-DS1b.21-6 : ill <https://ieeexplore.ieee.org/document/6397221>

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>

Cyber-physical universal safety and crash detection system for autonomous robot

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Cyber-physical universal safety and crash detection system for autonomous robot

Pikner, Heiko; Sell, Raivo; Malayjerdi, Mohsen The 16th International Conference "Mechatronic Systems and Materials" MSM 2021 July 1, 2021 – July 2, 2021 : abstract book 2021 / p. 16-17 http://msm.vgtu.lt/files/conferences/1/MSM2021Abstract_Book_04005.pdf

Design and optimization of AIN based RF MEMS switches

Ziko, Mehadi Hasan; Koel, Ants IOP conference series : materials science and engineering 2018 / 012002 ; 9 p.: ill <https://doi.org/10.1088/1757-899X/362/1/012002> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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](#)

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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>

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

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

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

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Fast synchronous detector based on video switches

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

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

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

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

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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>

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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 current-fed DC-DC converters with reduced conduction losses

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

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

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Peffitsis, Dimosthenis; Rabkowski, Jacek IEEE transactions on power electronics 2016 / p. 7194-7213 : ill <http://dx.doi.org/10.1109/TPEL.2015.2510425>

A generic synthesizable NoC switch with a scalable testbench

Govind, Vineeth; Raik, Jaan; Ubar, Raimund-Johannes 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. 91-94 : 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, Ilja 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](#)

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 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](#)

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Inimese-masina-liidese üld- ja ohutuspõhimõtted, märgistus ja tuvastamine : seadmeklemmide, juhtide otste ja juhtide tuvastamine = Basic and safety principles for man-machine interface, marking and identification : identification of equipment terminals, conductor terminations and conductors (IEC 60445:2021)

2021 https://www.ester.ee/record=b5480843*est

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Vodovozov, Valery; Egorov, Mikhail; Raud, Zoja; Lehtla, Tõnu Proceedings : INDIN 2011 : 2011 9th IEEE International Conference on Industrial Informatics : Lisbon, Portugal, 26-29 July, 2011 / p. 274-279 : ill
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Rankis, Ivars; **Zakis, Janis** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering = Rīgas Tehniskās universitātes zinātniskie raksti. Serija 4. Energētika un elektrotehnika 2012 / p. 35-40 : ill
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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](#)
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Multiphase interleaved DC-DC converter with directly and inversely coupled inductors [Online resource]

Kroics, Kaspars; **Zakis, Janis;** Sirmelis, Ugis 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [6] p. : ill
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Neuro-fuzzy control system for active filter with load adaptation [Electronic resource]

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Novel family of modified qZS buck-boost multilevel inverters with reduced switch count

Husev, Oleksandr; Strzelecki, Ryszard; **Blaabjerg, Frede;** Chopyk, Vasily; **Vinnikov, Dmitri** 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 98-105 : ill <http://dx.doi.org/10.1109/CPE.2015.7231056>

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 space vector pulse width modulation strategies for single-phase three-level NPC impedance-source inverters

Shults, Tatiana; **Husev, Oleksandr;** Blaabjerg, Frede; Roncero, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** IEEE transactions on power electronics 2019 / p. 4820-4830: ill <https://doi.org/10.1109/TPEL.2018.2859194> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimized modulation scheme for four-leg quasi Z-source inverter : reducing power loss and improving output quality

Abid, Abderahmane; **Bakeer, Abualkasim Ahmed Ali;** Albalawi, Hani; Zellouma, Laid; Bouzidi, Mansour; Lashab, Abderezak; Rabhi, Boualaga; **Chub, Andrii** IEEE Access 2023 / p. 94125-94137 <https://doi.org/10.1109/ACCESS.2023.3305263> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimum electromagnetic modelling of RF MEMS switches

Ziko, Mehadi Hasan; Koel, Ants Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 46-50 : ill
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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](#)

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

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

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

Janson, Kuno; **Bolgov, Viktor;** **Kütt, Lauri;** **Kallaste, Ants;** **Mölder, Heigo** ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta : [proceedings] 2008 / p. 77-80 : ill. [CD-ROM]
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PCB design impact on GaN-Based converter operation

Husev, Oleksandr; **Jalakas, Tanel;** **Vinnikov, Dmitri;** **Vosoughi Kurdkandi, Naser;** Persson, Eric 2023 IEEE Applied Power Electronics Conference and Exposition (APEC), 19-23 March 2023 : proceedings 2023 / p. 640-650
<https://doi.org/10.1109/APEC43580.2023.10131547> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

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

Power Stage MOSFETs Segmentation in Ripple Controlled Step-Down SMPS [Online resource]

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