

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>

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

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

Asymmetrical PWM control of galvanically isolated impedance-source series resonant DC-DC converters

Vinnikov, Dmitri; Zakis, Janis; Chub, Andrii; Liivik, Elizaveta 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 341-346 : ill <https://doi.org/10.1109/CPE.2016.7544211>

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

Vinnikov, Dmitri; Chub, Andrii; Liivik, Liisa 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 369-372 : ill <http://dx.doi.org/10.1109/CPE.2015.7231103>

A benchmark of DC-DC converters for DC fast charging stations of electric vehicles

Mathew, Honey Mol; Arena, Gabriele; Chub, Andrii; De Carne, Giovanni; Vinnikov, Dmitri; Lukianov, Mykola 2024 9th IEEE Workshop on the Electronic Grid (eGRID) 2024 / 6 p <https://doi.org/10.1109/eGRID62045.2024.10842879>

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

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

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

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

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

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

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

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

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

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

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

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

Comparison of decoupling control strategies for multiple active bridge DC-DC converter

Cai, Yicong; Buticchi, Giampaolo; Gu, Chunyang; Li, Jing; Carvalho da Silva, Edivan Laercio; Zhang, He 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227395>

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

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

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>

Dimmable LED drivers operating in discontinuous conduction mode

Tetervenok, Oleg; **Milaševski, Irena** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 27-33 : іл

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 : іл
<https://doi.org/10.1109/UKRCON.2017.8100299>

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 : іл
<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 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 : іл
<http://dx.doi.org/10.1109/PowerEng.2015.7266313>

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

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

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

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

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

Galkin, Ilya; **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](#)

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. : іл
<https://doi.org/10.1109/RTUCON.2016.7763102>

A novel hysteresis power point optimizer for distributed solar power generation

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

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>

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

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

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

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

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

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

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

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

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>

Study of simple MPPT converter topologies for grid integration of photovoltaic systems

Zakis, Janis; Vinnikov, Dmitri Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 67-72 : ill
https://www.researchgate.net/publication/258547430_Study_of_Simple_MPPT_Converter_Topologies_for_Grid_Integration_of_Photovoltaic_Systems

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>

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

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

Utilization of electric vehicles connected to distribution substations for peak shaving of utility network loads

Mägi, Marek Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 47-54 : ill

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

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

Voltage 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](#)