

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>

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](#)

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 for modular residential battery energy storage systems

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

Bidirectional 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/i/?11237>

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

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

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

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

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

Kosenko, Roman 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 133-137 : ill http://www.ester.ee/record=b4650094*est

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](#)

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>

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

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

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

Galkin, Ilya; 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>

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](#)

Energy yield assessment methodology for photovoltaic microinverters

Chub, Andrii; Kosenko, Roman; Korkh, Oleksandr; Vinnikov, Dmitri; Kouro, Samir 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC 2019) Santos, Brazil, 1-4 December 2019 / p. 1178-1183 : ill <http://toc.proceedings.com/52923webtoc.pdf>

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 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 / 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 / p. 384-389 : ill <https://doi.org/10.1109/CPE.2016.7544219>

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 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 / p. 6548-6553 : ill <https://doi.org/10.1109/IECON.2016.7794014> [Conference Proceedings at Scopus](#) [Article at scopus](#) [Article at WOS](#)

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

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

Influence of skin effect on current flow through electrodes of electro-surgical instruments and biological tissue

Sydorets, Volodymyr; Dubko, Andrii; Bondarenko, Oleksandr; Kosenko, Roman BEC 2016 : 2016 15th Biennial Baltic Electronics Conference : proceedings of the 15th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 3-5, 2016, Tallinn, Estonia 2016 / p. 211-214 : ill http://www.ester.ee/record=b2150914*est

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

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

Novel approach immune to partial shading for photovoltaic energy harvesting from building integrated PV (BIPV) solar roofs

Chub, Andrii; Korkh, Oleksandr; Kosenko, Roman; Vinnikov, Dmitri 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 / p. 2243-2252 : ill <https://ieeexplore.ieee.org/document/8515623>

A novel hysteresis power point optimizer for distributed solar power generation

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

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

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

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

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

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

Kosenko, Roman; Vinnikov, Dmitri Technological Innovation for Smart Systems : 8th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2017, Costa de Caparica, Portugal, May 3-5, 2017 : proceedings 2017 / p. 429-436 https://doi.org/10.1007/978-3-319-56077-9_42 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

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

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

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

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>

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>

Versatile power electronic building block for residential DC microgrids

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Liivik, Elizaveta 2018 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2018) : Amalfi, Italy, 20-22 June 2018 2018 / p. 735-741 : ill <https://doi.org/10.1109/SPEEDAM.2018.8445317>

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

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

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

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

