

Application of cycle skipping modulation in buck-boost photovoltaic microconverters

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

Assessment of autonomous power supply system for light sensor of illumination measurement testbench

Tetervenok, Oleg; Galkin, Ilja; **Armas, Jelena** 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 10 of Subsection of Power Electronic Converters and Applications 2012 / 6 p. : ill

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

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

Assessment of energy efficient LED ballasts based on their weight and size

Milaševski, Irena; Tetervenok, Oleg; Galkin, Ilja Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 105-112 : ill <https://ui.adsabs.harvard.edu/abs/2011SJRU...29..105M/abstract>

Autonomous power supply system for light sensor of illumination measurement test bench

Tetervenok, Oleg; Galkin, Ilja; **Armas, Jelena** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2012 / p. 30-35 : ill

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](#)

Bus bar test bench development for common 3x3 matrix converter

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

Choice of light regulation technique for distributed lighting

Milaševski, Irena; Tetervenok, Oleg; Galkin, Ilja Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / p. 74-78 : ill

Comparative study of smart lighting grids with LEDs operated with concentrated, localized or distributed control [Electronic resource]

Suzdalenko, Alexander; **Milaševski, Irena;** Galkin, Ilja SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 1437-1441 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264633>

Comparative study of steady-state performance of voltage and current fed dimmable LED drivers [Electronic resource]

Galkin, Ilja; Tetervenok, Oleg; **Milaševski, Irena** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 292-297 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6601172>

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

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

A concept of laboratory testbench for investigation of LED dimmers

Milaševski, Irena; Tetervenok, Oleg; Galkin, Ilja Технічна електродинаміка 2011 / p. 136-141 : ill

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>

Design and development of the middle-frequency isolation transformer for the high-voltage DC/DC converter [Electronic resource]

Vinnikov, Dmitri; Lehtla, Tõnu; Strzelecki, Ryszard; **Galkin, Ilja** The 4th International Scientific Conference of The Military Technical College [Korby El-Kobbah, Cairo, Egypt] : 27-29 May 2008. Proceedings of the 6th ICEENG Conference : 27-29 May, 2008 2008 / p.

Design and implementation of flyback MPPT converter for PV-applications

Suskis, Pavels; **Zakis, Janis; Galkin, Ilja** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 291-296 : ill

Design of primary power supply for composite LED luminary

Milaševski, Irena; Galkin, Ilja 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 122-125 : ill

Digital control of PFC rectifier with combined feedforward and PI regulator

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

Distance encoding waves for identification of lighting failures

Galkin, Ilja; Suzdalenko, Alexander; **Armas, Jelena** BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 227-230 : ill

Enhancement of dimmable LED drivers utilizing discontinuous conduction mode

Milaševski, Irena; Tetervenok, Oleg; Galkin, Ilja 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. 130 : ill https://alephfiles.rtu.lv/TUA01/000035920_e.pdf

Enhancement of dimmable LED drivers utilizing discontinuous conduction mode

Milaševski, Irena; Tetervenok, Oleg; Galkin, Ilja 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 34 of Subsection of Power Electronic Converters and Applications 2012 / 4 p. : ill https://alephfiles.rtu.lv/TUA01/000035920_e.pdf

Evaluation of control solution for grid inverter of low power wind turbine for implementation with inexpensive hardware

Galkin, Ilja; **Zakis, Janis** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 297-302 : ill

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

Blinov, Andrei; Korkh, Oleksandr; Chub, Andrii; Vinnikov, Dmitri; Pefitsis, 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](#)

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](#)

Middle-frequency isolation transformer design issues for the high-voltage DC/DC converter

Vinnikov, Dmitri; Laugis, Juhan; Galkin, Ilja Proceedings of 2008 IEEE 39th Annual Power Electronics Specialists Conference : PESC 2008 : Rhodes, Greece, 15-19 June 2008 2008 / p. 1930-1936 <https://ieeexplore.ieee.org/document/4592226>

Middle-frequency isolation transformer design issues for the high-voltage DC/DC converter

Vinnikov, Dmitri; Laugis, Juhan; Galkin, Ilja PESC 08 : 39th IEEE Annual Power Electronics Specialists Conference : Rhodes, Greece, 15-19 June 2008 : book of one page paper summaries 2008 / p. 304 : ill <https://ieeexplore.ieee.org/document/4592226>

Modular approach to training hardware design for modular teaching [Electronic resource]

Galkin, Ilja; Laugis, Juhan EPE-PEMC 2006 : 12th International Power Electronics and Motion Control Conference : Portorož, Slovenia, August 30 - September 1, 2006 : proceedings 2006 / p. 1715-1720 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4778652>

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 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](#)

MSP430 as an introductory training microcontroller

Galkin, Ilja 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" :

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

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

New isolated converter for interfacing PMSG based wind turbine with distribution network

Bisenieks, Lauris; Vinnikov, Dmitri; Galkin, Ilja 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 2011 / p. 100-107 : ill

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

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

New isolated interface converter for PMSG based variable speed wind turbines

Vinnikov, Dmitri; Bisenieks, Lauris; Galkin, Ilja Przegląd elektrotechniczny = Electrical review 2012 / p. 75-80 : ill
https://alephfiles.rtu.lv/TUA01/000042552_e.pdf

New trends in the research field of matrix converters

Krievs, Oskars; **Galkin, Ilja** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 127-131

Outlook of usage of supercapacitors in uninterruptible power supplies

Galkin, Ilja; Stepanov, A.; **Laugis, Juhan** BEC 2006 : 2006 International Baltic Electronics Conference : Tallinn University of Technology, October 2-4, 2006, Tallinn, Estonia : proceedings of the 10th Biennial Baltic Electronics Conference 2006 / p. 237-240 : ill

Overview of bidirectional unfolding converters for battery energy storage systems

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

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, Ilja; Abdelrahim Abdelghafour, Omar Mohamed IEEE transactions on industry applications 2024 / p. 7111-7124 <https://doi.org/10.1109/TIA.2024.3413050>.

PMSG based residential wind turbines : possibilities and challenges

Bisenieks, Lauris; **Vinnikov, Dmitri;** Galkin, Ilja Agronomy research 2013 / p. 295-306 : ill
https://www.academia.edu/83733935/PMSG_based_residential_wind_turbines_possibilities_and_challenges Journal metrics at Scopus Article at Scopus

Research and development of electronic ballasts for smart lighting systems with light emitting diodes = Tarkades valgustussüsteemides kasutatavate LED-valgustite elektrooniliste ballastseadmete uurimine ja arendamine
Milaševski, Irena 2012

Simulation methods for 3x3 matrix converter

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

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

Sokolovs, Alvis; **Galkin, Ilja; Laugis, Juhan** 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 40-44 : ill

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/IECON2019.8927186> Conference proceedings at Scopus Article at Scopus Article at WOS

Study of high brightness RGB light-emitting diode color control systems

Tetervenok, Oleg; Galkin, Ilja; **Milaševski, Irena** 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 168-171 : ill

Weight and size estimation of energy efficient LED Ballasts

Galkin, Ilja; Tetervenok, Oleg; **Milaševski, Irena** Elektronika ir elektrotehnika = Electronics and electrical engineering 2012 / p. 55-

Применение микроконтроллера MSP430 в качестве тренировочного микропроцессорного устройства
Galkin, Ilja; Skarainis, M.; **Laugis, Juhan**; **Lehtla, Tõnu** Технічна електродинаміка 2005 / 2, с. 90-93 : ил