

AC linear induction motor based positioning drive

Jansikene, Raik; Liivik, Liisa; Tomson, Jaan Scientific proceedings of Riga Technical University. 4. [series], Power and electrical engineering 2003 / p. 41-45

Address from main organizers

Vinnikov, Dmitri; Liivik, Elizaveta 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. [3]
https://www.ester.ee/record=b5183874*est

Address from main organizers

Vinnikov, Dmitri; Liivik, Elizaveta 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. [3]
https://www.ester.ee/record=b5291755*est

Analysis of buck mode realization possibilities in quasi-Z-source DC-DC converters with voltage doubler rectifier

Zakis, Janis; Rankis, Ivars; Liivik, Liisa; Chub, Andrii 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 570-575 : ill
<http://dx.doi.org/10.1109/PowerEng.2015.7266379>

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>

Automotive applications of ultracapacitors

Boiko, Vitali; Vinnikov, Dmitri; Liivik, Liisa Summer Seminar on Nordic Network for Multi Disciplinary Optimised Electric Drives 2002 / ? p

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](#)

Boost half-bridge DC-DC converter with reconfigurable rectifier for ultra-wide input voltage range applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Siwakoti, Yam P. 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1528-1532 : ill
<https://doi.org/10.1109/APEC.2018.8341219> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Common-mode voltage analysis and reduction for the quasi-Z-source inverter with a split inductor

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; Liivik, Elizaveta; Vinnikov, Dmitri; Blaabjerg, Frede Applied sciences 2020 / art. 8713, 13 p. : ill <https://doi.org/10.3390/app10238713> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of reliability for string and central inverter PV systems in accordance with the FMECA

Dumnic, Boris; Liivik, Elizaveta; Popadic, Bane; Blaabjerg, Frede; Milicevic, Dragan; Katic, Vladimir 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 591-596 <https://doi.org/10.1109/PEDG48541.2020.9244404>

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 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>

Contemporary teaching of electrical drives

Liivik, Liisa Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 19-24, 2004 2004 / p. 48-50 : ill

Control features of multicell-type current regulator for resistance welding

Verbytskyi, Ievgen; Bondarenko, Oleksandr; **Liivik, Elizaveta** 2017 IEEE 58th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings : Latvia, Riga, 12-13 October, 2017 2017 / [5] p. : ill <https://doi.org/10.1109/RTUCON.2017.8124846>

Control of quasi-Z-source dc-dc converter by the overlap of active states : new possibilities and limitations

Roasto, Indrek; Liivik, Liisa; Vinnikov, Dmitri 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. 217-220 : ill

Critical parameter analysis and design of the Quasi-Z-Source inverter

Liu, Wenjie; Yang, Yongheng; **Liivik, Elizaveta; Vinnikov, Dmitri**; Blaabjerg, Frede 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 474-480 : ill <https://doi.org/10.1109/UKRCON.2019.8879831>

Design for accelerated testing of DC-link capacitors in photovoltaic inverters based on mission profiles

Sangwongwanich, Ariya; Shen, Yanfeng; **Chub, Andrii; Liivik, Elizaveta; Vinnikov, Dmitri**; Wang, Huai; Blaabjerg, Frede IEEE transactions on industry applications 2021 / p. 741-753 <https://doi.org/10.1109/TIA.2020.3030568> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

Doctoral School of Energy- and Geotechnology

Liivik, Liisa 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 55-57

Efficiency improvement from topology modification of the single-switch isolated quasi-Z-source DC-DC converter [Online resource]

Liivik, Elizaveta; Chub, Andrii; Vinnikov, Dmitri 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [7] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763118>

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 https://www.ester.ee/record=b5183874*est

Elektriamite ja jõuelektroonika instituut : aastaraamat 2001 = Department of Electrical Drives and Power Electronics : annual report : 2001

2002 http://www.ester.ee/record=b1684735*est

Elektriamite ja jõuelektroonika instituut : aastaraamat 2002 = Annual report 2002 : Department of Electrical Drives and Power Electronics

2003 http://www.ester.ee/record=b1684735*est

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

Liivik, Liisa; Chub, Andrii; Vinnikov, Dmitri; Zakis, Janis 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. 409-414 : ill <http://dx.doi.org/10.1109/CPE.2015.7231110>

Fault analysis and field experiences of central inverter based 2 MW PV plant

Dumnic, Boris; **Liivik, Elizaveta**; Milicevic, Dragan 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2281-2290 : ill <https://ieeexplore.ieee.org/document/8515423>

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

Galvanically isolated quasi-Z-source DC-DC converter with a novel ZVS and ZCS technique

Husev, Oleksandr; Liivik, Liisa; Blaabjerg, Frede; Chub, Andrii; Vinnikov, Dmitri; Roasto, Indrek IEEE transactions on industrial electronics 2015 / p. 7547-7556 : ill

High-performance quasi-Z-source series resonant DC-DC converter for photovoltaic module-level power electronics applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Roasto, Indrek IEEE transactions on power electronics 2017 / p. 3634-3650 : ill <http://dx.doi.org/10.1109/TPEL.2016.2591726>

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](#)

Impact of transformer turns ratio on the power losses and efficiency of the wide range isolated buck–boost converter for photovoltaic applications

Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim; Liivik, Elizaveta Energies 2020 / art. 5645, 21 p <https://doi.org/10.3390/en13215645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impedance network impact on the controller design of the QZSI for PV applications

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; Liivik, Elizaveta; Blaabjerg, Frede 2020 IEEE 21st Workshop on Control and Modeling for Power Electronics (COMPEL), Aalborg, Denmark, November 9-12, 2020 2020 / 6 p <https://doi.org/10.1109/COMPEL49091.2020.9265708>

Impedance-source galvanically isolated DC/DC converters : state of the art and future challenges

Liivik, Liisa; Chub, Andrii; Vinnikov, Dmitri 2014 55th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings 2014 / p. 67-74 : ill

Improved switched-inductor quasi-switched-boost inverter with low input current ripple

Chub, Andrii; Liivik, Liisa; Zakis, Janis; Vinnikov, Dmitri 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 221-226 : ill

Input-parallel output-series cascading possibilities of single-switch galvanically isolated quasi-Z-source DC-DC converters

Liivik, Elizaveta; Chub, Andrii; Vinnikov, Dmitri 2016 2nd International Conference on Intelligent Energy and Power Systems (IEPS) : Kyiv, Ukraine, June 7-11, 2016 : conference proceedings 2016 / [6] p. : ill <https://doi.org/10.1109/IEPS.2016.7521873>

A library of samples for testing variable load electric drives

Liivik, Liisa; Vodovozov, Valery; Rassõlkin, Anton Digest book and electronic proceedings : 54th International Scientific Conference of Riga Technical University : Section of Power and Electrical Engineering 2013 / p. 12.1-12.6 : ill

Loss reduction method for the isolated qZS-based DC/DC converter

Zakis, Janis; Rankis, Ivars; Liivik, Liisa Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 13-18 : ill

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 2017 / p. 46-52 : ill <https://doi.org/10.1109/ICCEP.2017.8004790>

Magnetically integrated high step-up resonant DC-DC converter for distributed photovoltaic systems

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society : proceedings : China National Convention Center, Beijing, China, 29. October - 01. November, 2017 2017 / p. 7691-7697 : ill <https://doi.org/10.1109/IECON.2017.8217348>

Maximizing energy harvest of the impedance source PV Microconverter under partial shading conditions

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Kouro, Samir CPE-POWERENG 2018 : Conference program : 12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering, 10-12 April, 2018, Doha, Qatar 2018 / 7 p. : ill <https://indd.adobe.com/view/bdbda104-4e24-4d7b-88b1-f84ccfd20748> <https://doi.org/10.1109/CPE.2018.8372556>

Mission profile resolution impacts on the thermal stress and reliability of power devices in PV inverters

Sangwongwanich, Ariya; Zhou, D.; Liivik, Elizaveta; Blaabjerg, Frede Microelectronics reliability 2018 / p. 1003-1007 <https://doi.org/10.1016/j.microrel.2018.06.094>

Mission profile-based accelerated testing of DC-link capacitors in photovoltaic inverters

Sangwongwanich, Ariya; Shen, Yanfeng; Chub, Andrii; Liivik, Elizaveta; Vinnikov, Dmitri; Wang, Huai; Blaabjerg, Frede Thirty-Fourth Annual IEEE Applied Power Electronics Conference and Exposition, March 17 – 21, 2019, Anaheim, California 2019 / p. 2833-2840 : ill <https://doi.org/10.1109/APEC.2019.8721794> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

MPPT performance enhancement of low-cost PV microconverters

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Liivik, Elizaveta; Blaabjerg, Frede; Kouro, Samir Solar energy 2019 / p. 156-166 : ill <https://doi.org/10.1016/j.solener.2019.05.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multi-mode quasi-Z-source series resonant DC/DC converter for wide input voltage range applications

Vinnikov, Dmitri; Chub, Andrii; Roasto, Indrek; Liivik, Liisa Applied Power Electronics Conference and Exposition : APEC 2016 : Long Beach Convention & Entertainment Center, March 20-24, 2016 2016 / p. 2533-2539 : ill

Multiphase galvanically isolated impedance-source DC-DC converter for residential renewable energy applications

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1775-1780 : ill <https://doi.org/10.1109/ISIE.2017.8001517>

Multiphase quasi-z-source DC-DC converters for residential distributed generation systems

Chub, Andrii; Vinnikov, Dmitri; Liivik, Elizaveta; Jalakas, Tanel IEEE transactions on industrial electronics 2018 / p. 8361-8371 : ill <https://doi.org/10.1109/TIE.2018.2801860> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 https://www.ester.ee/record=b5291755*est

Numerical calculations of electrotechnics

Liivik, Liisa; Jansikene, Raik The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 229-230 : ill

Numerical calculations of engineering

Liivik, Liisa; Jansikene, Raik Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 78-80 : ill

Photovoltaic energy yield improvement in two-stage solar microinverters

Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Emerging converter topologies and control for grid connected photovoltaic systems 2021 / p. 197-213 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

Photovoltaic energy yield improvement in two-stage solar microinverters

Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Energies 2019 / art. 3774, 17 p. : ill <https://doi.org/10.3390/en12193774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photovoltaic module characteristic influence on reliability of micro-inverters

Sangwongwanich, Ariya; **Liivik, Elizaveta; Blaabjerg, Frede** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 478-483 : ill <https://doi.org/10.1109/CPE.2018.8372565>

Preface to "Wind Turbines"

Blaabjerg, Frede; Liivik, Elizaveta Wind turbines 2019 / p. ix-xi <https://doi.org/10.3390/books978-3-03897-361-4>

Preheating system model of molten metal tubing for double motor MHD-drive

Jansikene, Raik; Liivik, Liisa The 4th Research Symposium of Young Scientist : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 131-134 : ill

qZS-based soft-switching DC/DC converter with a series resonant LC circuit

Vinnikov, Dmitri; Zakis, Janis; Liivik, Liisa; Rankis, Ivars Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / p. 42-50 : ill

QZS-based soft-switching DC/DC converter with a series resonant LC circuit [Electronic resource]

Vinnikov, Dmitri; Zakis, Janis; Liivik, Liisa; Rankis, Ivars Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [3] p. : ill [CD-ROM]

Raalarvutused elektrotehnikas

Liivik, Liisa 2001 https://www.ester.ee/record=b1526277*est

Reliability analysis and energy yield of string-inverter considering monofacial and bifacial photovoltaic panels

Bouguerra, Sara; Yaiche, Mohamed Redha; Sangwongwanich, Ariya; Blaabjerg, Frede; **Liivik, Elizaveta** 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 199-204 <https://doi.org/10.1109/PEDG48541.2020.9244425>

Reliability analysis of micro-inverters considering PV module variations and degradation rates

Liivik, Elizaveta; Sangwongwanich, Ariya; Blaabjerg, Frede 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 1475-1482 : ill <https://ieeexplore.ieee.org/document/8515325>

Reliability evaluation of an impedance-source PV microconverter

Shen, Yanfeng; **Liivik, Elizaveta;** Blaabjerg, Frede; **Vinnikov, Dmitri;** Wang, Huai; **Chub, Andrii** 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare,

Reliability evaluation of an impedance-source PV microconverter

Shen, Yanfeng; **Liivik, Elizaveta**; Blaabjerg, Frede; **Vinnikov, Dmitri**; Wang, Huai; **Chub, Andrii** 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1104–1108 : ill <https://doi.org/10.1109/APEC.2018.8341154> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Reliability of DC-link capacitors in two-stage micro-inverters under different PV module sizes

Sangwongwanich, Ariya; Shen, Yanfeng; **Chub, Andrii**; **Liivik, Elizaveta**; **Vinnikov, Dmitri**; Wang, Huai; Blaabjerg, Frede ICPE 2019 - ECCE Asia : 10th International Conference on Power Electronics - ECCE Asia : "Green World with Power Electronics" : May 27-30, 2019 BEXCO, Busan, Korea 2019 / p. 1867-1872 : ill <https://ieeexplore.ieee.org/xpl/conhome/8786807/proceeding>

Reliability study of input side capacitors in impedance-source PV microconverters

Liivik, Elizaveta; **Vinnikov, Dmitri**; **Chub, Andrii**; Shen, Yanfeng IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5026–5032 : ill <https://doi.org/10.1109/IECON.2019.8927173> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Reverse power flow control possibilities of galvanically isolated impedance-source DC-DC converters

Chub, Andrii; **Vinnikov, Dmitri**; **Liivik, Elizaveta** 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 2017 / p. 522-527 : ill <https://doi.org/10.1109/CPE.2017.7915226>

Semiconductor power loss reduction and efficiency improvement techniques for the galvanically isolated quasi-Z-source DC-DC converters = Galvaaniliselt isoleeritud kvaasiimpedantsallikaga alalispingemuunduri pooljuhtide võimsuskao vähendamine ja kasuteguri suurendamine

Liivik, Liisa 2015 https://www.ester.ee/record=b4484169*est

17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018

Vinnikov, Dmitri; **Liivik, Elizaveta** 2018 http://www.ester.ee/record=b4763182*est

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>

Simulation of the control system of AC linear positioning drive

Liivik, Liisa; **Jansikene, Raik** BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 77-78 : ill

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 (RTU CON) : proceedings 2014 / p. 34-37 : ill

Single-switch galvanically isolated step-up DC-DC converter for residential photovoltaic applications [Online resource]

Vinnikov, Dmitri; **Chub, Andrii**; **Liivik, Elizaveta** Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics Society : Florence (Italy), October 24-27, 2016 2016 / p. 6578-6582 : ill <https://doi.org/10.1109/IECON.2016.7793776>

Single-switch impedance-source galvanically isolated DC-DC converter with combined energy transfer

Chub, Andrii; **Vinnikov, Dmitri**; Babaei, Ebrahim; **Liivik, Elizaveta**; **Korkh, Oleksandr**; Kouro, Samir 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTU CON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTU CON.2018.8659851>

Starting processes of experimental frequency controlled electrical drive

Jansikene, Raik; **Liivik, Liisa** BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 325-326 : ill

Synchronous rectification in quasi-Z-source converters : possibilities and challenges

Liivik, Liisa; **Vinnikov, Dmitri**; **Jalakas, Tanel** 2014 IEEE International Conference on Intelligent Energy and Power Systems (IEPS) : conference proceedings : June 2-6, 2014, Kyiv, Ukraine 2014 / p. 32-35 : ill

The quasi-Z-source DC/DC converter with a series resonant circuit

Liivik, Liisa 14th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. II" : Pärnu, Estonia, January 13-18, 2014 2014 / p. 135-140 : ill

Topical problems of teaching of electrical drives

Liivik, Liisa; Jansikene, Raik; Lehtla, Tõnu EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 4 of 7, Motion control, adjustable speed drives and education of electrical engineering 2004 / p. 4-502 - 4-506 : ill

Use of interactive modelling in the field of energy saving

Liivik, Liisa; Jansikene, Raik; Lehtla, Tõnu 3rd International Scientific Workshop "Compatibility in Power Electronics" (CPE 2003) : Gdansk-Zielona Gora, Poland, 28-30 May, 2003 2003 / p. 64-66

Use of interactive software for energy saving motor selection

Liivik, Liisa; Jansikene, Raik Scientific proceedings of Riga Technical University. 4. [series], Power and electrical engineering 2003 / p. 65-70 : ill

Variable speed linear induction motor

Jansikene, Raik; Liivik, Liisa Power and Electrical Engineering International Scientific Conference 2002 / ? p

Wear-out failure analysis of an impedance-source PV microinverter based on system-level electrothermal modeling

Shen, Yanfeng; **Chub, Andrii**; Wang, Huai; **Vinnikov, Dmitri; Liivik, Elizaveta**; Blaabjerg, Frede IEEE transactions on industrial electronics 2019 / p. 3914-3927 <https://doi.org/10.1109/TIE.2018.2831643> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wear-out failure analysis of solar optiverter operating with 60- and 72-cell Si crystalline PV modules

Liivik, Liisa; Chub, Andrii; Sangwongwanich, Ariya; Shen, Yanfeng; **Vinnikov, Dmitri**; Blaabjerg, Frede IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6134-6140 : ill
<https://doi.org/10.1109/IECON.2018.8592925>

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>

Wind turbines

2018 <https://doi.org/10.3390/books978-3-03897-361-4>

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](#)