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

A new high-power DC/DC converter for residential fuel cell power systems [Electronic resource]
Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** 11th Spanish Portuguese Conference on Electrical Engineering (11CHLIE) : 1-4 of July 2009, Zaragoza, Spain 2009 / [6] p. [CD-ROM]

A simple modular active power electronic transformer
Roasto, Indrek; Strzelecki, Ryszard Proceedings : 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE) : Grand Cevahir Hotel and Convention Center, Istambul, Turkey, 01-04 June, 2014 2014 / p. 1976-1980 : ill

Active power electronic transformer as a power conditioner for nonlinear loads [Electronic resource]
Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao; **Jalakas, Tanel** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 63-68 : ill [CD-ROM]

Active power electronic transformer based on modular building blocks
Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5922-5927 : ill

Ainulaadne pingemuundur taastuvenergeetikale
Roasto, Indrek Mente et Manu 2009 / 22. mai, lk. 2 : fot https://www.ester.ee/record=b1242496*est

Alalisvoolu tagasitulek - unistus või reaalsus?
Roasto, Indrek; **Vinnikov, Dmitri**; **Blinov, Andrei**; **Chub, Andrii**; **Carvalho da Silva, Edivan Laercio** Elektriala 2023 / lk. 22-25 : ill, portr https://www.ester.ee/record=b1240496*est

An improved high-power DC/DC converter for distributed power Generation [Electronic resource]
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel** EPQU'09 : 10th International Conference on Electrical Power Quality and Utilisation : 15-17 September 2009, Lodz, Poland 2009 / [6] p. [CD-ROM]

An improved interface converter for a medium-power wind-hydrogen system
Vinnikov, Dmitri; **Hõimoja, Hardi**; **Andrijanovitš, Anna**; **Roasto, Indrek**; **Lehtla, Tõnu**; Klytta, Marius 2nd International Conference on Clean Electrical Power Renewable Energy Resources Impact : Capri (Italy) June 9-11, 2009 2009 / p. 426-432 : ill

An indirect adaptive control paradigm for wind generation systems
Kamal, Tariq; Karabacak, Murat; Hassan, Syed Zulqadar; Fernández Ramírez, Luis M.; **Roasto, Indrek**; Khan, Laiq Advanced control and optimization paradigms for wind energy systems 2019 / p. 235-257 https://doi.org/10.1007/978-981-13-5995-8_10 Article collection metrics at Scopus Article at Scopus

Analysis and design of 3.3 kV IGBT based three-level DC/DC converter with high-frequency isolation and current doubler rectifier
Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2009 / p. 97-102 : ill

Analysis and evaluation of PWM and PSM shoot-through control methods for voltage-fed qZSI based DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri** EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T3-100 - T3-105

Analysis of battery charger topologies for an electric vehicle
Jalakas, Tanel; **Roasto, Indrek**; **Vinnikov, Dmitri** BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 223-226 : ill

Analysis of capacitor-related mid-voltage point shift problems in high-voltage half-bridge DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** Proceedings of 2008 IEEE 39th Annual Power Electronics Specialists Conference : PESC 2008 : Rhodes, Greece, 15-19 June 2008 2008 / p. 3619-3622

Analysis of capacitor-related mid-voltage point shift problems in high-voltage half-bridge DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** PESC 08 : 39th IEEE Annual Power Electronics Specialists Conference : Rhodes, Greece, 15-19 June 2008 : book of one page paper summaries 2008 / p. 573

Analysis of current doubler rectifier based high frequency isolation stage for intelligent transformer [Electronic resource]
Beldjajev, Viktor; **Roasto, Indrek**; **Vinnikov, Dmitri** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 336-341 [CD-ROM]

Analysis of implementation possibilities and benefits of three-level half-bridge NPC topology in static auxiliary converters for rolling stock [Electronic resource]
Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** POWERENG 2009 : 2nd International Conference on Power Engineering, Energy and Electrical Drives : 18-20 March, 2009, Lisbon, Portugal 2009 / p. 587-592 : ill. [CD-ROM]
https://ieeexplore.ieee.org/document/4915180

Analysis of new bidirectional DC-DC converter based on current doubler rectifier
Beldjajev, Viktor; **Roasto, Indrek** 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. 234-237 : ill

Analysis of switching conditions of IGBTs in modified sine wave qZSIs operated with different shoot-through control methods
Vinnikov, Dmitri; **Roasto, Indrek**; **Zakis, Janis**; **Ott, Silver**; **Jalakas, Tanel** Elektronika ir elektrotechnika = Electronics and electrical engineering 2011 / p. 45-50 : ill
https://www.researchgate.net/publication/269779178_Analysis_of_Switching_Conditions_of_IGBTs_in_Modified_Sine_Wave_qZSIs_Operated_with_Different_Shoot-Through_Control_Methods

Analytical and experimental investigation of neutral point clamped quasi-impedance-source inverter
Ott, Silver; **Roasto, Indrek**; **Vinnikov, Dmitri**; **Lehtla, Tõnu** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 113-118 : ill

Analytical comparison between capacitor assisted and diode assisted cascaded quasi-Z-source inverters
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel**; Strzelecki, Ryszard; Adamowicz, Marek Przeglad elektrotechniczny = Electrical review 2012 / p. 212-217 : ill
https://www.researchgate.net/publication/290652933_Analytical_comparison_between_capacitor_assisted_and_diode_assisted_cascaded_quasi-Z-source_inverters

Bidirectional operation of the power electronic interface for nearly-zero energy buildings
Roasto, Indrek; **Jalakas, Tanel**; **Rosin, Argo** 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2456-2464 : ill https://ieeexplore.ieee.org/document/8515405

CCM and DCM operation analysis of cascaded quasi-z-source inverter
Vinnikov, Dmitri; **Roasto, Indrek**; Strzelecki, Ryszard; Adamowicz, Marek Proceedings of IEEE International Symposium on Industrial Electronics : ISIE'2011 : 27-30 June 2011, Gdansk, Poland 2011 / p. 159-164 : ill

Code development of a DSP-FPGA based control platform for power electronics applications
Minambres-Marcos, Victor; **Roasto, Indrek**; Szczepankowski, P.; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Barrero-Gonzalez, Fermin 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2890-2895 : ill

Combined active frequency drift islanding detection method for NZEB energy router
Jalakas, Tanel; **Roasto, Indrek**; **Najafzadeh, Mahdiyyeh** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p
https://doi.org/10.1109/RTUCON48111.2019.8982258

Comparative study of capacitor-assisted extended boost qZSIs operating in continuous conduction mode
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 297-300 : ill

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

Comparison of different microcontroller development boards for power electronics applications
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** 5th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology : Kuressaare, January 14-19, 2008 2008 / p. 103-107 : ill

Comparison of pulse width modulation methods for a quasi impedance source inverter
Ott, Silver; **Roasto, Indrek**; **Vinnikov, Dmitri** 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II 2011 / p. 25-29 : ill

Configurable PCB to teach DC-DC converters in power electronics
Roasto, Indrek 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. 19-20 : ill https://www.ester.ee/record=b5291755*est

Control methodology of the rolling stock auxiliary power supply
Roasto, Indrek; **Vinnikov, Dmitri** 4th International Symposium Topical Problems of Education in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 15-20, 2007 2007 / p. 122-125 : ill

Control of bidirectional grid-forming inverter for nearly zero energy buildings
Roasto, Indrek; **Jalakas, Tanel**; **Rosin, Argo** 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.2018.8659848

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

Control of ultracapacitors energy exchange [Electronic resource]
Roasto, Indrek; **Lehtla, Tõnu**; **Möller, Taavi**; **Rosin, Argo** EPE-PEMC 2006 : 12th International Power Electronics and Motion Control Conference : Portorož, Slovenia, August 30 - September 1, 2006 : proceedings 2006 / p. 1401-1406 : ill. [CD-ROM]
https://ieeexplore.ieee.org/document/4778599

Control strategies of ultracapacitors
Roasto, Indrek; **Lehtla, Tõnu**; **Rosin, Argo** 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. 85-88

Control system simulation of a 40kW half-bridge isolated DC/DC converter [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri** EPE 2007 : 12th European Conference on Power Electronics and Applications : 2-5 September 2007, Aalborg, Denmark 2007 / [10] p. [CD-ROM]

DC droop control strategies and tuning principles
Roasto, Indrek; **Blinov, Andrei**; **Vinnikov, Dmitri**; Mackay, Laurens; **Jalakas, Tanel** 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 https://doi.org/10.1109/RTUCON60080.2023.10412947

DC nano grid control in the residential energy router with the presence of constant power loads
Najafzadeh, Mahdiyyeh; **Vinnikov, Dmitri**; **Husev, Oleksandr**; **Roasto, Indrek** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / p. 1-6 https://doi.org/10.1109/ENERGYCON53164.2022.9830523

DC-link capacitor minimization in residential energy router through battery utilization
Najafzadeh, Mahdiyyeh; **Vinnikov, Dmitri**; **Husev, Oleksandr**; **Jalakas, Tanel**; **Roasto, Indrek** 2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Florence, Italy, 14-16 July 2021 2021 / p. 1-6 : ill https://doi.org/10.1109/CPE-POWERENG50821.2021

Design and development of 3.3 kV IGBT based three-level DC/DC converter
Vinnikov, Dmitri; **Roasto, Indrek** Electrical engineering research report 2009 / [6] p

Design and development of three-level half-bridge NPC converter with dual 3.3 kV IGBT modules
Jalakas, Tanel; **Vinnikov, Dmitri**; **Roasto, Indrek** 6th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : [Kuressaare, January 12-17, 2009] 2009 / p. 43-48 : ill

Design and evaluation of a base module of active power electronic transformer
Roasto, Indrek; Minambres-Marcos, Victor; Romero-Cadaval, Enrique; Strzelecki, Ryszard 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. 384-389 : ill http://dx.doi.org/10.1109/CPE.2015.7231106

Design and testing of an universal autonomous surface vehicle
Roasto, Indrek; **Jalakas, Tanel**; **Mõlder, Heigo**; **Möller, Taavi**; **Tabri, Kristjan**; Enok, Mart 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 705-710 : ill https://doi.org/10.1109/PEMC48073.2021.9432567

Design concepts for a hybrid diesel electric shunting locomotive powertrain
Hõimoja, Hardi; **Roasto, Indrek**; Kesküla, A. BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 293-296 : ill

Design guidelines of new step-up DC/DC converter for fuel cell powered distributed generation systems

Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek**; Strzelecki, Ryszard 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 33-41 : ill

Design issues of redundant protection and supervision system for the special purpose power converters [Electronic resource]
Vinnikov, Dmitri; **Roasto, Indrek**; **Vodovozov, Valery** International Conference on Renewable Energies and Power Quality : ICREPQ'09 : Valencia, Spain, 15th to 17th April 2009 2009 / [6] p. [CD-ROM] https://www.icrepq.com/ICREPQ%2709/356-vinnikov.pdf

Design of a simple modular active power electronic transformer
Strzelecki, Ryszard; **Roasto, Indrek**; Romero-Cadaval, Enrique Proceedings : IECON 2014 - 40th Annual Conference of the IEEE Industrial Electronics Society : Sheraton Hotel Dallas, Dallas, TX, USA, 30. October-01. November, 2014 2014 / p. 1410-1415 : ill

Design of solid state circuit breaker
Jalakas, Tanel; **Chub, Andrii**; **Roasto, Indrek**; **Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / p. 1-5 https://doi.org/10.1109/RTUCON56726.2022.9978903

Development and verification of control and protection algorithms for the special purpose high power converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Vodovozov, Valery** Intelligent Technologies in Logistics and Mechatronics Systems : ITELMS'2008 : proceedings of the 3rd International Workshop : May 22-23, 2008, Panevežys, Lithuania 2008 / p. 23-27 : ill

Development of experimental load management system for nearly zero-energy building
Maask, Vahur; **Rosin, Argo**; **Roasto, Indrek** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 5 p. : ill https://doi.org/10.1109/RTUCON.2018.8659826

Digital current mode control algorithms for high-power half-bridge DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Jalakas, Tanel**; Strzelecki, Ryszard Przeglad elektrotechniczny 2011 / p. 180-186 : ill

Digital signal processor based sinusoidal PWM for voltage source inverters
Ott, Silver; **Roasto, Indrek** 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 225-228 : ill

Dual active bridge based isolation stage for power electronic transformer
Beldjajev, Viktor; **Roasto, Indrek** 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 / lk. 216-219 : ill

Effects of voltage transients on the dc droop control in residential nanogrids
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

Electric power management and control in DC buildings—state-of-the-art and emerging technologies
Blinov, Andrei; **Roasto, Indrek**; **Chub, Andrii**; **Emiliani, Pietro**; **Vinnikov, Dmitri** Power Quality : Infrastructures and Control 2023 / p. 67-96 https://doi.org/10.1007/978-981-19-7956-9_3

Electric vehicle fast charger high voltage input multiport converter topology analysis [Electronic resource]
Jalakas, Tanel; **Roasto, Indrek**; **Vinnikov, Dmitri** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 326-331 : ill [CD-ROM]

Electric vehicle multiport fast charger based on the concept of active power electronic transformer
Jalakas, Tanel; **Roasto, Indrek**; Gallardo-Lozano, Javier; Romero-Cadaval, Enrique 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 3 2014 / p. 2168-2176 : ill

EMC considerations on PCB design for a high-power converter control system [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri**; Klytta, Marius Proceedings of 5th International Conference 2007 : Compatibility in Power Electronics : 29 May - 1 June 2007, Gdynia, Poland 2007 / [4] p. [CD-ROM]

Energy router based energy management system for nearly zero energy buildings
Najafzadeh, Mahdiyyeh; **Roasto, Indrek**; **Jalakas, Tanel** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill https://doi.org/10.1109/RTUCON48111.2019.8982366

Experimental analysis of extended boost quasi-Z-source inverters
Ott, Silver; **Jalakas, Tanel**; **Roasto, Indrek**; **Vinnikov, Dmitri** 12th International Symposium "Topical Problems in the Field of

Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Kuressaare, Estonia, June 11-16, 2012 2012 / p. 65-67 : ill

Experimental analysis of extended boost quasi-Z-source inverters
Ott, Silver; **Jalakas, Tanel**; **Vinnikov, Dmitri**; **Roasto, Indrek** BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 259-262 : ill

Experimental study of new integrated DC/DC converter for hydrogen-based energy storage
Vinnikov, Dmitri; **Andrijanovitš, Anna**; **Roasto, Indrek**; **Jalakas, Tanel** 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / [4 p.] : ill
https://ieeexplore.ieee.org/document/5874667

Experimental study of shoot-through control methods for qZSI-based DC/DC converters [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri**; **Jalakas, Tanel**; **Zakis, Janis**; **Ott, Silver** SPEEDAM 2010 : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Pisa, Italy, 14th-16th June, 2010 : proceedings 2010 / p. 29-34 : [CD-ROM]

Experimental study of voltage-fed quasi-z-source inverter based isolated DC/DC converter
Vinnikov, Dmitri; **Roasto, Indrek**; Strzelecki, Ryszard Electrical engineering research report 2009 / [7] p

Experimental verification of novel bi-directional qZSI based DC/DC converter for short term energy storage systems [Electronic resource]
Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek**; Ribickis, Leonids International Conference on Renewable Energies and Power Quality (ICREPQ'11) : Las Palmas de Gran Canaria (Spain), 13th to 15th April 2011 2011 / [5] p. : ill. [CD-ROM]

Extended boost quasi-Z-source inverters : possibilities and challenges
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel**; **Ott, Silver** Elektronika ir elektrotechnika = Electronics and electrical engineering 2011 / p. 51-56 : ill

Fault detection and protection system for the power converters with high-voltage IGBTs [Electronic resource]
Vinnikov, Dmitri; **Roasto, Indrek**; **Lehtla, Tõnu** ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta 2008 / p. 922-925 : ill. [CD-ROM]

Feasibility study of model predictive control for grid-connected twisted buck-boost inverter
Matiushkin, Oleksandr; **Husev, Oleksandr**; Rodriguez, Jose; Young, Hector; **Roasto, Indrek** IEEE transactions on industrial electronics 2022 / p. 2488-2499 https://doi.org/10.1109/TIE.2021.3068663 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Grid-forming operation of energy-router based on model predictive control with improved dynamic performance
Najafzadeh, Mahdiyyeh; Strzelecka, Natalia; **Husev, Oleksandr**; **Roasto, Indrek**; Nassereddine, Kawsar; **Vinnikov, Dmitri**; Strzelecki, Ryszard Energies 2022 / 14 p. : ill https://doi.org/10.3390/en15114010 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

High-voltage IGBT based converters for rolling stock : possibilities and challenges
Roasto, Indrek; **Jalakas, Tanel**; **Vinnikov, Dmitri** 2011 https://www.amazon.com/HIGH-VOLTAGE-BASED-CONVERTERS-ROLLING-STOCK/dp/3843391211

High-voltage pulse transformer for IOT modulators
Jalakas, Tanel; **Janson, Kuno**; **Mõlder, Heigo**; **Roasto, Indrek** IET electric power applications 2020 / p. 2348-2354
https://doi.org/10.1049/iet-epa.2019.0877 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Impact of component losses on the efficiency of a new quasi-Z-source based dual active bridge
Beldjajev, Viktor; **Roasto, Indrek**; **Zakis, Janis** Technological innovation for the Internet of things : 4th IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems : DoCEIS 2013 : Costa de Caparica, Portugal, April 15-17, 2013 : proceedings 2013 / p. 485-492 : ill

Impact of component losses on the efficiency of the bi-directional current doubler rectifier based isolation-stage
Beldjajev, Viktor; **Roasto, Indrek** IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5209-5215 : ill

Impact of component losses on the voltage boost properties and efficiency of the QZS-converter family
Roasto, Indrek; **Vinnikov, Dmitri** COMPEL : The international journal for computation and mathematics in electrical and electronic engineering 2012 / p. 1945-1963 : ill

Impact of component losses on the voltage boost properties and efficiency of the qZS-converter family [Electronic resource]
Vinnikov, Dmitri; **Roasto, Indrek** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 303-308 [CD-ROM]
https://www.researchgate.net/publication/241185271_Impact_of_component_losses_on_the_voltage_boost_properties_and_efficiency_of_the_QZS-converter_family

Improved DC-Link voltage transient response and stability issues in energy router with fuzzy logic control method
Najafzadeh, Mahdiyyeh; **Husev, Oleksandr**; **Roasto, Indrek**; **Jalakas, Tanel** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 6 p. : ill https://doi.org/10.1109/RTUCON51174.2020.9316477

Intelligent transformer : possibilities and challenges
Beldjajev, Viktor; **Roasto, Indrek**; **Lehtla, Tõnu** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 95-100 : ill

Investigation of radiated emissions of a galvanically isolated qZS DC-DC converter
Jalakas, Tanel; **Jarkovoi, Marek**; **Roasto, Indrek**; **Zakis, Janis**; Garganeev, Alexander 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 176-181 : ill http://dx.doi.org/10.1109/PowerEng.2015.7266314

Iselaev käis ise mere taga ära
Vill, Ants Director. Inseneeria 2019 / lk. 61-67 : fot http://www.ester.ee/record=b2336521*est https://director.ee/2019/10/02/iselaev-kais-mere-taga/?v=a57b8491d1d8

Isesõitvat autot täiendab nüüd robotlaev
Tamm, Kadri TööstusEST 2019 / lk. 34-38 : ill http://www.ester.ee/record=b4481084*est https://toostusest.ee/uudis/2019/05/14/isesoitvat-autot-taiendab-nuud-robotlaev/

Isolation stage for power electronic transformer : dual active bridge vs bi-directional current doubler rectifier [Electronic resource]
Beldjajev, Viktor; **Roasto, Indrek**; **Zakis, Janis** SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 849-854 : ill [CD-ROM]

Juhtmevaba elekter on veel lapsekingades
Saar, Sandra; Rosin, Jakob novaator.err.ee 2024 Juhtmevaba elekter on veel lapsekingades

Laboratory setup for studying ultracapacitors in industrial applications
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 77-78

Laboratory setup for studying ultracapacitors in industrial applications [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 2034-2037 : ill. [CD-ROM]

Lade- und Entladevorgänge von Ultrakondensatoren
Roasto, Indrek Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 19-24, 2004 2004 / p. 69-72 : ill

Lossless dynamic models of the quasi-Z-source converter family
Vinnikov, Dmitri; Husev, Oleksandr; **Roasto, Indrek** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 73-78 https://ui.adsabs.harvard.edu/abs/2011SJRUP..29...73V/abstract

Mathematical models of cascaded quasi-impedance source converter
Vinnikov, Dmitri; **Roasto, Indrek**; **Zakis, Janis** Технічна електродинаміка 2010 / 1, p. 59-64 : ill

Modeling of grid-connected quasi-Z-source series resonant topology based microinverter
Roasto, Indrek; **Jalakas, Tanel**; **Husev, Oleksandr** 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. 192-195 : ill https://doi.org/10.1109/CPE.2016.7544183

Multifunctional energy router for residential applications = Multifunktsionaalne energiaruuter eramutele
Najafzadeh, Mahdiyyeh 2022 https://doi.org/10.23658/taltech.25/2022 https://digikogu.taltech.ee/et/Item/6914b8ca-7ca5-49d1-868a-a6de9192f8b4 https://www.ester.ee/record=b5501867*est

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 https://doi.org/10.1109/APEC.2016.7468221

Multiport interface converter with an energy storage for nanogrids
Roasto, Indrek; **Rosin, Argo**; **Jalakas, Tanel** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6088–6093 : ill https://doi.org/10.1109/IECON.2018.8591104

Neutral point clamped quasi-impedance-source inverter [Electronic resource]
Ott, Silver; **Roasto, Indrek**; **Vinnikov, Dmitri** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 348-353 [CD-ROM] https://www.semanticscholar.org/paper/Neutral-point-clamped-quasi-impedance-source-Ott-Roasto/547db91f89adecec7c854cc3e4b811934890b7a6

New bi-directional DC/DC converter for supercapacitor interfacing in high-power applications
Vinnikov, Dmitri; **Roasto, Indrek**; **Zakis, Janis** EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T11-38 - T11-43 : ill

New fuel cell power conditioning system for supplying dedicated loads
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel**; **Lehtla, Tõnu**; **Laugis, Juhan** 2010 9th International Conference on Environment and Electrical Engineering : Prague, Czech Republic, 16-19 May 2010 2010 / p. 341-344 : ill

New high-gain step-up DC/DC converter for a fuel cell interfacing in hydrogen buffer
Vinnikov, Dmitri; **Husev, Oleksandr**; **Andrijanovitš, Anna**; **Roasto, Indrek** Технічна електродинаміка 2011 / p. 93-100 : ill

New integrated converter for hydrogen buffer interfacing in distributed energy systems [Electronic resource]
Vinnikov, Dmitri; **Andrijanovitš, Anna**; **Roasto, Indrek**; **Lehtla, Tõnu** International Conference on Renewable Energies and Power Quality (ICREPQ'11) : Las Palmas de Gran Canaria (Spain), 13th to 15th April 2011 2011 / [6] p. : ill. [CD-ROM]

New shoot-through control methods for qZSI-based DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Zakis, Janis**; **Husev, Oleksandr** IEEE transactions on industrial informatics 2013 / p. 640-647 : ill

New step-up DC/DC converter for fuel cell powered distributed generation systems: some design guidelines
Vinnikov, Dmitri; Strzelecki, Ryszard; Zakis, Janis; **Roasto, Indrek** Przeglad elektrotechniczny 2010 / 8, p. 245-252

New step-up DC/DC converter with high-frequency isolation
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel** IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society : Porto, Portugal, 3-5 November 2009 : preprint proceedings 2009 / p. 667-672 : ill https://ieeexplore.ieee.org/document/5415000

New step-up DC/DC converter with high-frequency isolation
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel** IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society. ICELIE 2009 : 3rd IEEE International Conference on E-learning in Industrial Electronics : Porto, Portugal, 3-5 November 2009 : abstracts 2009 / p. 280 https://ieeexplore.ieee.org/document/5415000

New voltage mode control method for the quasi-Z-source-based isolated DC/DC converters [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri** 2012 IEEE International Conference on Industrial Technology : proceedings CD 2012 / p. 655-660 : ill [CD-ROM] https://ieeexplore.ieee.org/document/6210011

Non-shoot-through mode behavior of DC/DC converters with a quasi Z source inverter
Jalakas, Tanel; **Roasto, Indrek**; **Vinnikov, Dmitri** 15th International Power Electronics and Motion Control Conference, EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia 2012 / 4 p. : ill https://ieeexplore.ieee.org/document/6397204

Output rectifier for the high-voltage high-frequency isolated DC/DC converter
Roasto, Indrek; **Vinnikov, Dmitri**; Klytta, Marius Scientific proceedings of Riga Technical University. Serija 4, Power and electrical engineering 2007 / p. 75-83 : ill

Performance analysis of protection methods in residential DC microgrids

Jalakas, Tanel; Banavath, Satish Naik; **Chub, Andrii**; **Roasto, Indrek**; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p https://doi.org/10.1109/CPE-POWERENG58103.2023.10227388

Performance and feasibility analysis of electricity price based control models for thermal storages in households
Rosin, Argo; **Link, Siim**; **Lehtla, Madis**; Martins, Joao; **Drovtar, Imre**; **Roasto, Indrek** Sustainable cities and society 2017 / p. 366-374 : ill https://doi.org/10.1016/j.scs.2017.04.008

Performance improvement method for the voltage-fed qZSI with continuous input current
Vinnikov, Dmitri; **Roasto, Indrek**; Strzelecki, Ryszard; Adamowicz, Marek MELECON 2010 : the 15th IEEE Mediterranean Electrotechnical Conference : 25th-28th April 2010, Malta : book of abstracts 2010 / p. 135

PIC microcontroller learning system
Jalakas, Tanel; **Möller, Taavi**; **Roasto, Indrek** 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. 99-101 : ill

Power converter interfaces for electrochemical energy storage systems - a review
Fernao Pires, Vitor; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; **Roasto, Indrek**; Martins, Joao Energy conversion and management 2014 / p. 453-475 : ill

Power electronic interface converter for resource efficient buildings
Roasto, Indrek; **Rosin, Argo**; **Jalakas, Tanel** IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society : proceedings : China National Convetion Center, Beijing, China, 29. October - 01. November, 2017 2017 https://doi.org/10.1109/IECON.2017.8216617

Practical design guidelines of qZSI based step-up DC/DC converter
Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek**; **Jalakas, Tanel** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2010 / p. 107-114 : ill

Programmeeritavad loogikaelemendid
Roasto, Indrek Elektriala 2006 / 1, lk. 24-26 : ill

Quasi-Z-source inverter based bi-directional DC/DC converter : analysis of experimental results [Electronic resource]
Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek**; Ribickis, Leonids CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 394-399 [CD-ROM] https://www.researchgate.net/publication/224245116_Quasi-Z-source_inverter_based_bi-directional_DCDC_converter_Analysis_of_experimental_results

Quasi-Z-source-based isolated DC/DC converters for distributed power generation
Vinnikov, Dmitri; **Roasto, Indrek** IEEE transactions on industrial electronics 2011 / p. 192-201 : ill

Rahvusvaheline konverents CPE2011 Tallinnas : [1.-3. juunini toimunud jõuelektroonika ja ühilduvuse alane konverents]
Roasto, Indrek Mente et Manu 2011 / lk. 2 : fot https://www.ester.ee/record=b1242496*est

Rapid prototyping - speed up your power electronic design
Roasto, Indrek 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. 47-48 : ill https://www.ester.ee/record=b5183874*est

Recent contributions, future prospects and limitations of interlinking converter control in hybrid AC/DC microgrids
Najafzadeh, Mahdiyyeh; **Ahmadiahangar, Roya**; **Husev, Oleksandr**; **Roasto, Indrek**; **Jalakas, Tanel**; **Blinov, Andrei** IEEE Access 2021 / art. 9312595, p. 7960−7984 https://doi.org/10.1109/ACCESS.2020.3049023 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Research and development of digital control systems and algorithms for high power, high voltage isolated DC/DC converters = Võimsate kõrgepingeliste alalisvoolumuundurite arvjuhtimissüsteemide ja -algoritmide uurimine ning väljatöötamine
Roasto, Indrek 2009 https://www.ester.ee/record=b2557768*est

Research and development of the new topologies for the isolation stage of the power electronic transformer = Jõuelektroonilise trafo isolatsioonilüli uudsete topoloogiate uurimine ja arendamine
Beldjajev, Viktor 2013 http://www.ester.ee/record=b2969664*est

Research and development of voltage converters based on 6,5 kV IGBTs
Jalakas, Tanel; **Roasto, Indrek**; **Müür, Margus**; **Vinnikov, Dmitri**; **Laugis, Juhan** International Youth Conference on Energetics

IYCE-2007 : 31 May - 02 June, 2007, Budapest, Hungary : program & abstracts 2007 / p. 153-154 : ill

Robotex 2005
Roasto, Indrek Elektriala 2005 / 6, lk. 28

Selection of the duty cycle variation range and its influence on the efficiency and operability of high-power converters operating at wide input voltage swing
Vinnikov, Dmitri; **Roasto, Indrek**; **Jalakas, Tanel** 7th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Narva-Jõesuu, Estonia, 16.06-19.06.2009] 2009 / p. 26-31 : ill

Simplified digital average current mode control algorithm for half- or full-bridge isolated DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri** IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society : Porto, Portugal, 3-5 November 2009 : preprint proceedings 2009 / p. 1744-1749 : ill https://ieeexplore.ieee.org/document/5414820/similar#similar

Simplified digital average current mode control algorithm for half- or full-bridge isolated DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri** IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society. ICELIE 2009 : 3rd IEEE International Conference on E-learning in Industrial Electronics : Porto, Portugal, 3-5 November 2009 : abstracts 2009 / p. 166

A simplified peak current mode control algorithm for special purpose high voltage IGBT converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu**; **Auväärt, Aivar** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 305-308 : ill

Simulation and evaluation of control methods for the rolling stock static auxiliary converter based on three-level NPC inverter topology [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri**; **Vodovozov, Valery** POWERENG 2009 : 2nd International Conference on Power Engineering, Energy and Electrical Drives : 18-20 March, 2009, Lisbon, Portugal 2009 / p. 593-598 : ill. [CD-ROM]
https://ieeexplore.ieee.org/document/4915176/similar#similar

Single-phase power electronics transformer with active functions for smart grid
Minambres-Marcos, Victor; **Roasto, Indrek**; Romero-Cadaval, Enrique; Strzelecki, Ryszard; Barrero-Gonzalez, Fermin 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. 528-533 : ill http://dx.doi.org/10.1109/CPE.2015.7231131

Soft start algorithm for a droop controlled dc nanogrid
Roasto, Indrek; **Blinov, Andrei**; **Vinnikov, Dmitri** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 6 l.
https://doi.org/10.1109/BEC56180.2022.9935608

Soft-switching capability analysis of a qZSI-based DC/DC converter
Zakis, Janis; **Vinnikov, Dmitri**; **Roasto, Indrek** BEC 2010 : 2010 12th Biennial Baltic Electronics Conference : proceedings of the 12th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 4-6, 2010, Tallinn, Estonia 2010 / p. 301-304 : ill

Stability analysis of the quasi-Z-source DC/DC converter based on small signal model [Electronic resource]
Husev, Oleksandr; **Vinnikov, Dmitri**; **Roasto, Indrek** SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 298-303 : ill [CD-ROM]

Startup sequence for a grid connected single phase voltage source inverter
Roasto, Indrek; **Jalakas, Tanel**; **Rosin, Argo** 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1787-1791 : ill
https://doi.org/10.1109/ISIE.2017.8001519

Startup strategy for grid connected PV micro inverter
Roasto, Indrek; **Jalakas, Tanel** 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. 187-190 : ill
http://www.ester.ee/record=b2150914*est

State of the art and development trends of smart control systems for high voltage DC/DC converters
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** 6th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : [Kuressaare, January 12-17, 2009] 2009 / p. 36-42 : ill

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 https://ieeexplore.ieee.org/document/6389543

State of the art trends and design challenges of power electronic transformer for future distribution grids
Beldjajev, Viktor; **Roasto, Indrek** Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / p. 55-61 : ill

Step-up DC/DC converters with cascaded quasi-Z-source network
Vinnikov, Dmitri; **Roasto, Indrek**; Strzelecki, Ryszard; Adamowicz, Marek IEEE transactions on industrial electronics 2012 / p. 3727-3736 : ill https://ieeexplore.ieee.org/document/6096410

Steueralgorithmus für Laden von Ultrakondensator
Roasto, Indrek The 4th Research Symposium of Young Scientists : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 128-130 : ill

TalTechi energeetikutel valmis kodudes taastuvenergia kasutamiseks uudseid lahendusi
Blinov, Andrei; **Roasto, Indrek** Elektriala 2018 / lk. 30 : fot http://www.ester.ee/record=b1240496*est

Target tracking by neural predictive control of autonomous surface vessel for environment monitoring and cargo transportation applications
Astrov, Igor; **Udal, Andres**; **Roasto, Indrek**; **Mõlder, Heigo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p https://doi.org/10.1109/BEC49624.2020.9277115

Teaduspreemia tehnikateaduste alal uurimuste tsükli "Uudsed alalispingemuundurid taastuvenergeetikas" eest : Dimitri Vinnikov, Tanel Jalakas, Indrek Roasto
Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** Eesti Vabariigi teaduspreemiad 2014 2014 / lk. 64-74 : fot., ill

Three-level half-bridge ZVS DC/DC converter for electrolyzer integration with renewable energy systems
Andrijanovitš, Anna; **Vinnikov, Dmitri**; **Roasto, Indrek**; **Blinov, Andrei** 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / [4 p.] : ill

Transient response analyse of different voltage-fed qZS-family inverters
Ott, Silver; **Roasto, Indrek**; **Vinnikov, Dmitri**; **Teemets, Raivo** 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. 195-199 : ill

TTÜs väljatöötatud uudne kõrgepingeline abitoiteallikas
Roasto, Indrek Mente et Manu 2009 / 20. märts, lk. 2 : fot https://www.ester.ee/record=b1242496*est

Two-stage quasi-Z-source network based step-up DC/DC converter
Vinnikov, Dmitri; **Roasto, Indrek**; Strzelecki, Ryszard; Adamowicz, Marek ISIE 2010 : IEEE International Symposium on Industrial Electronics : Bari, Italy, 4-7 July 2010 2010 / p. 1143-1148 : ill

Ultracapacitors as an innovative teaching topic in Tallinn University of Technology [Electronic resource]
Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** 19th International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Speedam 2008 : Ischia (Italy), June 11th-13th, 2008 : conference proceedings 2008 / p. 475-480 : ill. [CD-ROM]

Ultrakondensatoren - Energiespeicher für Schienenfahrzeuge
Roasto, Indrek 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 119-122 : ill

Uudsed alalispingemuundurid taastuvenergeetikas
Vinnikov, Dmitri; **Jalakas, Tanel**; **Roasto, Indrek** Teadusmõte Eestis (X). Tehnikateadused. 3 : [artiklikogumik] 2019 / lk. 216-226 : ill., fot https://www.ester.ee/record=b5208765*est

Versatile laboratory tools for advanced cource of power electronics
Jalakas, Tanel; **Vinnikov, Dmitri**; **Roasto, Indrek**; **Raud, Zoja**; **Egorov, Mikhail** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 277-280 : ill

Voltage source operation of the energy-router based on model predictive control
Roasto, Indrek; **Husev, Oleksandr**; **Najafzadeh, Mahdiyyeh**; **Jalakas, Tanel**; Rodriguez, Jose Energies 2019 / art. 1892, 15 p. . ill https://doi.org/10.3390/en12101892 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS