

### **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>

### **Accuracy analysis of dual active bridge simulations under different integration methods**

**Arena, Gabriele; Vinnikov, Dmitri; Chub, Andrii; de Carne, Giovanni** 2022 AEIT International Annual Conference (AEIT) : October 3-5, 2022 2022 / p. 1-6 <https://doi.org/10.23919/AEIT56783.2022.9951711>

### **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](https://www.ester.ee/record=b1240496*est)

### **An indirect model predictive current control (CCS-MPC) for grid-connected single-phase three-level NPC quasi-Z-source PV inverter**

**Pires Pimentel, Sergio** 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. 29-30 : ill [https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **An SVM scheme for three-level quasi-switched boost T-type inverter with Enhanced voltage gain and capacitor voltage balance**

**Tran, Vinh-Thanh; Nguyen, Minh-Khai; Do, Duc-Tri; Vinnikov, Dmitri** IEEE transactions on power electronics 2021 / p. 11499-11508 <https://doi.org/10.1109/TPEL.2021.3071011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 broken rotor bar diagnostic techniques for inverter fed induction motor faults**

**Sardar, Muhammad Usman** 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 39-40 : ill [https://www.ester.ee/record=b5570906\\*est](https://www.ester.ee/record=b5570906*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>

### **Analysis of the use of supercapacitors and batteries as energy storage elements for off-grid hybrid photovoltaic inverters**

**Gonschorowski, E.; Cardoso, Rafael; Carvalho da Silva, Edivan Laercio; de Oliveira Stein, Carlos Marcelo; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric** 2023 IEEE 8th Southern Power Electronics Conference and 17th Brazilian Power Electronics Conference (SPEC/COBEP) 2023 / 7 p <https://doi.org/10.1109/SPEC56436.2023.10407182>

### **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** Przegląd 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](https://www.researchgate.net/publication/290652933_Analytical_comparison_between_capacitor_assisted_and_diode_assisted_cascaded_quasi-Z-source_inverters)

### **Application of hysteresis voltage control for three-level neutral point clamped voltage source inverter**

**Kolmakov, Nikolay; Bakhovtsev, Igor A.; Jalakas, Tanel** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 195-198 : ill

### **Back-to-back energy router based on common-ground inverters**

**Azizi, Mohammadreza; Rahimpour, Saeed; Husev, Oleksandr; Veligorskyi, Oleksandr** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / p. 1-6 <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227480>

### **Bidirectional operation of the single-phase neutral-point-clamped quasi-Z-source inverter**

**Husev, Oleksandr; Zakis, Janis; Vinnikov, Dmitri; Savenko, O.** 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. 221-224 : ill

### **Broken rotor bar fault detection of the grid and inverter-fed induction motor by effective attenuation of the fundamental**

## **component**

**Asad, Bilal; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; Iqbal, Muhammad Naveed** IET electric power applications 2019 / p. 2005–2014 <https://doi.org/10.1049/iet-epa.2019.0350> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Buck-boost unfold inverter as a novel solution for single-phase PV systems**

**Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Roncero, Carlos; Romero-Cadaval, Enrique; Kütt, Lauri** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6116-6121 : ill <https://doi.org/10.1109/IECON.2018.8592899>

## **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

## **Calculation of an inverter-fed asynchronous motor**

Perho, J. Тезисы докладов семинара "Новые направления научных исследований в области электромеханики" 1991 / с. 10-14: ил

## **Carrier based modulation with capacitor balancing for three-level neutral-point-clamped qZS inverter**

Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Husev, Oleksandr; Vinnikov, Dmitri** 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. 57-62 : ill <http://dx.doi.org/10.1109/CPE.2015.7231049>

## **Carrier level-shifted based control method for the PWM 3L-T-Type qZS inverter with capacitor imbalance compensation**

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Ruiz-Cortes, Mercedes; **Husev, Oleksandr** IEEE transactions on industrial electronics 2018 / p. 8297-8306 : ill <https://doi.org/10.1109/TIE.2018.2814020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Cascaded quasi-Z-source inverters for renewable energy generation systems**

Adamowicz, Marek; Strzelecki, Ryszard; **Vinnikov, Dmitri** Proceedings of 5th International Conference and Exhibition on Ecological Vehicles and Renewable Energies : March 25-28, 2010, Grimaldi Forum, Monaco 2010 / [8] p

## **CCM and DCM analysis of Quasi-Z-Source derived push-pull DC/DC converter**

**Chub, Andrii; Husev, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri** Journal of microelectronics, electronic components and materials 2014 / p. 224-234 : ill [http://www.midem-drustvo.si/Journal%20papers/MIDEM\\_44\(2014\)3p224.pdf](http://www.midem-drustvo.si/Journal%20papers/MIDEM_44(2014)3p224.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **CCM operation analysis of the single-phase three-level quasi-Z-source inverter**

**Husev, Oleksandr; Roncero-Clemente, Carlos; Stepenko, Serhii; Vinnikov, Dmitri; Romero-Cadaval, Enrique** 15th International Power Electronics and Motion Control Conference, EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia 2012 / p. DS1b.21-1-DS1b.21-6 : ill <https://ieeexplore.ieee.org/document/6397221>

## **Class-E inverter: SPICE simulation including parasitic elements**

Liberatore, A.; Manetti, S.; Piccirilli, Maria Cristina; Reatti, A. Automation, simulation & measurement : 3rd biennial conference : Tallinn, Estonia, October 7-11, 1991. Section S, Simulation = Automatiseerimine, modelleerimine ja mõõtmine : 3. rahvusvaheline konverents / Tallinna Tehnikaülikool 1992 / p. 69-75: ill [https://www.ester.ee/record=b1064031\\*est](https://www.ester.ee/record=b1064031*est)

## **Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints**

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; **Husev, Oleksandr; Lytvyn, Oksana; Matiushkin, Oleksandr** Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **A CMOS constant-gm rail-to-rail input stage using a new electronic zener diode**

Yu, Chong-Gun; Park, Jong-Tae BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 79-82: ill

## **CMOS OpAmp input impedance**

**Kängsep, Eiko** BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 447-450: ill

## **Coil-to-coil efficiency of ISS-compensated inductive wireless power transfer links operating with load-independent output voltage at fixed frequency**

Belenky, A.; **Chub, Andrii**; Kuperman, A. 2023 International Conference on Clean Electrical Power (ICCEP) 2023 / p. 617-621 : ill <https://doi.org/10.1109/ICCEP57914.2023.10247404>

### **Common mode voltage reduction and neutral-point voltage balance for quasi-Z-source three-level neutral-point-clamped inverters**

Liu, Wenjie; Yang, Yongheng; Li, Weilin; Zhang, Xiaobin; **Husev, Oleksandr; Vinnikov, Dmitri** International Power Electronics Conference (IPEC-Himeji 2022- ECCE Asia) 2022 / p. 934-939 <https://doi.org/10.23919/IPEC-Himeji2022-ECCE53331.2022.9806905>

### **Comparative analysis of buck-boost inverters based on unfolding circuit versus H5, H6, HERIC topologies**

**Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Vosoughi Kurdkandi, Naser** 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) 2022 / p. 547-552  
<https://doi.org/10.1109/SPEEDAM53979.2022.9842282>

### **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 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 grid-connected flyback-based microinverter with primary and secondary side decoupling approach**

**Afshari, Hossein; Husev, Oleksandr; Vinnikov, Dmitri; Matiushkin, Oleksandr; Vosoughi Kurdkandi, Naser** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon): conference proceedings 2022 / p. 1-6 <https://doi.org/10.1109/RTUCon56726.2022.9978855>

### **Comparison of impedance-source networks for two and multilevel buck-boost inverter applications**

**Husev, Oleksandr**; Blaabjerg, Frede; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; Siwakoti, Yam P.; Strzelecki, Ryszard IEEE transactions on power electronics 2016 / p. 7564-7579 : ill <https://doi.org/10.1109/TPEL.2016.2569437> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comparison of isolated boost full bridge converters for power factor correction application**

**Zinchenko, Denys; Blinov, Andrei; Vinnikov, Dmitri** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon), 7-9 October 2019 : conference proceedings 2019 / 7 p. : ill  
<https://doi.org/10.1109/RTUCon48111.2019.8982361>

### **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

### **Comparison of three MPPT algorithms for three-level neutral-point-clamped qZ-Source inverter [Electronic resource]**

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Minambres-Marcos, Victor; **Stepenko, Serhii**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 80-85 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6601133>

### **Comparison of three-phase three-level voltage source inverter with intermediate dc-dc boost converter and quasi-Z-source inverter**

**Panfilov, Dmitry; Husev, Oleksandr**; Blaabjerg, Frede; **Zakis, Janis**; Khandakji, Kamal IET Power Electronics 2016 / p. 1238 - 1248 <https://doi.org/10.1049/iet-pel.2015.0539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comprehensive comparative analysis of impedance-source networks for DC and AC application**

**Husev, Oleksandr**; Shults, Tatiana; **Vinnikov, Dmitri; Chub, Andrii** Electronics 2019 / 21 p. : ill  
<https://doi.org/10.3390/electronics8040405> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comprison of grid-connected microinverter with primary and secondary side decoupling approach**

**Afshari, Hossein** 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 57-58 : ill  
[https://www.eester.ee/record=b5570906\\*est](https://www.eester.ee/record=b5570906*est)

### **Considerations on combining unfolding inverters with partial power regulators in battery-grid interface converters**

Galkin, Ilya A.; Saltanovs, Rodions; Bubovich, Alexander; **Blinov, Andrei**; Pefitsis, Dimosthenis Energies 2024 / art. 893  
<https://doi.org/10.3390/en17040893> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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 DC/AC full bridge inverter**

**Najafzadeh, Mahdiyyeh** 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. 159-160 : ill [https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **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 scheme of a Three-Phase Three-Level NPC qZ-Source inverter with LCL filter for RES applications**

Roncero-Sanches, Pedro; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr; Makovenko, Elena** Proceedings of the IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society : Florence, Italy, October 24-27 2016 2016 / p. 6540-6547 <https://doi.org/10.1109/IECON.2016.7793338> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **A control strategy for a grid-connected PV system with unbalanced loads compensation**

Fernao Pires, Vitor; **Husev, Oleksandr; Vinnikov, Dmitri**; Martins, Joao 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. 154-159 : ill <https://doi.org/10.1109/CPE.2015.7231065>

### **Cost-effective piggyback forward dc-dc converter**

**Matiushkin, Oleksandr; Husev, Oleksandr; Afshari, Hossein; Vinnikov, Dmitri; Strzelecki, Ryszard** 2024 IEEE Applied Power Electronics Conference and Exposition (APEC) 2024 / p. 2106-2111 <https://doi.org/10.1109/APEC48139.2024.10509355> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **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>

### **Current control strategy of a grid connected three-level neutral-point-clamped qZS inverter**

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr; Vinnikov, Dmitri**; Stepenko, Serhii 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 97-101 : ill

### **Current sensorless control algorithm for single-phase three-level NPC inverter**

Suzdalenko, Alexander; **Zakis, Janis**; Steiks, Ingars Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2014 / p. 28-33 : ill

### **Current sensorless control for half-bridge based AC/DC PFC converter with consideration of conduction losses**

Suzdalenko, Alexander; **Chub, Andrii** International journal of circuit theory and applications 2016 / p. 2072-2084 : ill <https://doi.org/10.1002/cta.2212> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Current source inverter-fed AC-motor drive**

Tuusa, Heikki Тезисы докладов семинара "Новые направления научных исследований в области электромеханики" 1991 / с. 20-24.: ил

### **Design and comparison of three-level three-phase T-source inverters**

**Shults, Tatiana; Husev, Oleksandr; Blaabjerg, Frede** 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 564-569 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266378>

### **Design and implementation issues of integrated magnetics for quasi-Z-source inverters**

**Zakis, Janis; Vinnikov, Dmitri** ISEF 2011 - XV International Symposium on Electromagnetic Fields in Mechatronics, Electrical and Electronic Engineering : Funchal, Madeira, September 1-3, 2011 2011 / [8] p.: ill

### **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 LCL-filter for grid-connected buck-boost inverter based on unfolding circuit**

**Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; Kütt, Lauri** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818248>

### **Design of three-phase three-level CIC T-source inverter with maximum boost control**

**Shults, Tatiana; Husev, Oleksandr;** Roncero-Clemente, Carlos; **Blaabjerg, Frede;** Strzelecki, Ryszard IECON 2015 - Yokohama : 41st Annual Conference of the IEEE Industrial Electronics Society : November 9-12, 2015, Pacifico Yokohama, Yokohama, Japan 2015 / p. 004447-004452 : ill <http://dx.doi.org/10.1109/IECON.2015.7392792>

### **Development of single-loop current sensorless control for bidirectional three-phase PWM rectifier**

Suzdalenko, Alexander; **Zakis, Janis; Husev, Oleksandr** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 211-214 : ill

### **Digital control strategy for interleaved quasi-Z-source inverter with active power decoupling**

**Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Vinnikov, Dmitri;** Roncero-Clemente, Carlos; **Makovenko, Elena** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 3725-3730 : 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

### **Distributed storage placement policy for minimizing frequency deviations: A combinatorial optimization approach based on enhanced cross-entropy method**

Machlev, Ram; Chowdhury, Nilanjan Roy; **Belikov, Juri; Levron, Yoash** International Journal of Electrical Power and Energy Systems 2022 / p. 1-14 : ill <https://doi.org/10.1016/j.ijepes.2021.107332> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Editorial : special issue on impedance-source converter topologies and applications**

**Vinnikov, Dmitri;** Li, Yuan; Abu-Rub, Haitham IEEE Transactions on Power Electronics 2016 / p. 7417-7418 <https://doi.org/10.1109/TPEL.2016.2577418> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Efficiency and loss distribution analysis of the 3L-Active NPC qZS inverter**

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Fernao Pires, Vitor; **Husev, Oleksandr** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 449-454 : ill <https://doi.org/10.1109/CPE.2018.8372560>

### **Efficiency study of the single-phase solar qZS-based inverter**

**Husev, Oleksandr; Stepenko, Serhii; Vinnikov, Dmitri;** Roncero, Carlos; Santasheva, Elena; Romero-Cadaval, Enrique IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 4399-4404 <https://doi.org/10.1109/IECON.2019.8926655> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **EMI problems of current measurements in inverters with high switching frequency**

**Boiko, Vitali; Laugis, Juhan** 4th International Workshop CPE 2005 : Compatibility in Power Electronics : Fifth International Research and Educational Colloquium on Electronics : 1-3 June 2005, Gdynia, Poland 2005 / p. 135-137 : ill <https://ieeexplore.ieee.org/document/1547567>

### **EMI problems of current measurements in inverters with high switching frequency [Electronic resource]**

**Boiko, Vitali; Laugis, Juhan** Proceedings of 4th International Workshop CPE 2005 : Compatibility in Power Electronics : Fifth International Research and Educational Colloquium on Electronics : 1-3 June 2005, Gdynia, Poland 2005 / [5] p. : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/1547567>

### **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 2019 / p. 1178-1183 : ill <http://toc.proceedings.com/52923webtoc.pdf>

### **Enhanced control strategy for three-level T-type converters in hybrid power-to-X systems**

Sassonker Elkayam, Moria; **Vinnikov, Dmitri** Applied sciences 2025 / art. 2409 <https://doi.org/10.3390/app15052409>

### **Enhanced switched impedance inverter with tapped inductor**

Nozadian, Mohsen Hasan Babayi; **Hassanpour, Naser; Khan, Salman** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604411>

### **EstLink 1 ja EstLink 2 : sarnased või sootuks erinevad elektriühendused Soomega?**

Haug, Reigo; **Kilter, Jako** Inseneeria 2014 / lk. 34-35 [https://artiklid.elnet.ee/record=b2664996\\*est](https://artiklid.elnet.ee/record=b2664996*est)

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

Galkin, Ilya; **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

**Evaluation of different high-voltage switch solutions for high-power converters used in rolling stock [Electronic resource]**  
**Vinnikov, Dmitri; Laugis, Juhan; Jalakas, Tanel** ISIE08 : 2008 IEEE International Symposium on Industrial Electronics : 30 June - 2 July 2008, Cambridge, United Kingdom 2008 / p. 214-219 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4677124>

**Evaluation of losses in three-level neutral-point-clamped and T-type quasi-Z-source inverters with modified carrier based modulation method**

Ruiz-Cortes, M.; Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; Gonzalez-Romera, Eva; **Husev, Oleksandr** 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 2017 / p. 638-643 : ill <https://doi.org/10.1109/CPE.2017.7915247>

**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 comparison of two-level full-SiC and three-level Si-SiC quasi-Z-source inverters for PV applications**

**Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Pimentel, Sergio Pires; Santasheva, Elena** Emerging converter topologies and control for grid connected photovoltaic systems 2021 / P. 121-137 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

**Experimental comparison of two-level full-SiC and three-level Si-SiC quasi-Z-source inverters for PV applications**

**Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Pires Pimentel, Sergio; Santasheva, Elena** Energies 2019 / 2509 ; 17 p. : ill <https://doi.org/10.3390/en12132509> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Experimental evaluation of a new carrier-based modulation method for a three-level T-type quasi-impedance-source inverter**

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; Barrero-Gonzalez, Fermin; **Husev, Oleksandr; Gonzalez-Romera, Eva; Milanés-Montero, Maria Isabel** IET power electronics 2022 / p. 337-348 <https://doi.org/10.1049/pel2.12234> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Experimental Investigation of high frequency 3L-NPC qZS inverter for photovoltaic application**

**Husev, Oleksandr; Stepenko, Serhii; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Strzelecki, Ryszard** Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5969-5974 : ill <https://doi.org/10.1109/IECON.2013.6700114> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**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] <https://www.icrepq.com/icrepq%2711/550-zakis.pdf>

**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 [https://www.researchgate.net/publication/229042778\\_Extended\\_Boost\\_Quasi-Z-Source\\_Inverters\\_Possibilities\\_and\\_Challenges](https://www.researchgate.net/publication/229042778_Extended_Boost_Quasi-Z-Source_Inverters_Possibilities_and_Challenges)

**Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-type inverter**

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard** Industrial and Technological Applications of Power Electronics Systems 2021 / p. 315-330 <https://doi.org/10.3390/en13174535>

**Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-Type inverter**

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard** Energies 2020 / art. 4535, 16 p. : ill <https://doi.org/10.3390/en13174535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Feasibility study of 200 kW half-bridge and full-bridge DC/DC converters with 6.5 kV IGBTs**

**Vinnikov, Dmitri; Lehtla, Madis** 19th International Symposium on Power Electronics, Electrical Drives, Automation and Motion :

Speedam 2008 : Ischia (Italy), June 11th-13th, 2008 : conference proceedings 2008 / p. 1537-1541 : ill. [CD-ROM]  
<https://ieeexplore.ieee.org/document/4581238>

**Feasibility study of inductor coupling in three-level neutral-point-clamped quasi-Z-source DC/AC converter**

**Zakis, Janis; Husev, Oleksandr;** Strzelecki, Ryszard PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 273-276 : ill

**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 level inverter's DC bus voltage balancing with 3-Terminal DAB converter**

Grabarek, Maciej; Strzelecki, Ryszard; Tomasov, Valentin S.; **Vinnikov, Dmitri** 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. 396-401 : ill <https://doi.org/10.1109/CPE.2016.7544221>

**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  
<https://doi.org/10.6113/JPE.2015.15.2.299> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Full SiC three-level T-type quasi-Z source inverter as grid-forming unit in islanded nanogrid**

Gutiérrez-Escalona, Javier; Roncero-Clemente, Carlos; **Matiushkin, Oleksandr;** González-Romera, Eva; Pires, V. Fernão; Romero-Cadaval, Enrique IET renewable power generation 2025 / art. e70051 <https://doi.org/10.1049/rpg2.70051>

**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 <https://doi.org/10.1109/TIE.2015.2455522> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Grid-connected buck-boost inverter based on unfolding circuit**

**Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri;** Gordienko, Vyacheslav 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUON.2018.8659824>

**Grid-connected single-phase 3L-T-type qZS inverter for renewable energy**

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Ruiz-Cortes, Mercedes; Romero-Cadaval, Enrique; Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5003-5007 : ill <https://doi.org/10.1109/IECON.2019.8926888> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Grid-connected three-phase 3L-T-type qZS inverter for renewable energy**

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Barrero-Gonzalez, Fermin; Gonzalez-Romera, Eva; Milanés-Montero, Maria Isabel; Romero-Cadaval, Enrique 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 114-119 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161512>

**High power factor AC-DC diode interfaces for drive systems with a voltage-source inverter using optimum re-rectification of the ripple power**

**Sakkos, Tiiu; Sarv, Vello** ELECTROMOTION '99 : 3rd International Symposium on Advanced Electromechanical Motion Systems : July 8-9, 1999, Patras, Greece : proceedings. Vol. II 1999 / p. 619-624 : ill

**High-efficiency 312-kVA three-phase inverter using parallel connection of silicon carbide MOSFET power modules**

Colmenares, Juan; Peftitsis, Dimosthenis; **Rabkowski, Jacek** IEEE transactions on industry applications 2015 / p. 4664-4676 : ill  
<http://dx.doi.org/10.1109/TIA.2015.2456422>

**High-voltage half-bridge IGBT inverter [Electronic resource]**

**Vinnikov, Dmitri; Laugis, Juhan** Proceedings of 16th International Conference on Electrical Drives and Power Electronics EDPE'2007 : The High Tatras (Slovakia), 24-26 September, 2007 2007 / [6] p. [CD-ROM]

**High-voltage pulse transformer for IOT modulators**

**Jalakas, Tanel; Janson, Kuno; Mölder, 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](#)

**Hybrid inverter and control strategy for enabling the PV generation dispatch using extra-low-voltage batteries**

Meneghetti, Luiz Henrique; **Carvalho da Silva, Edivan Laercio;** Carati, Emerson Giovani; Denardin, Gustavo Weber; da Costa, Jean Patric; de Oliveira Stein, Carlos Marcelo; Cardoso, Rafael Energies 2022 / art. 7539 <https://doi.org/10.3390/en15207539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Hysteresis current control with distributed shoot-through states for impedance source inverters**

**Husev, Oleksandr; Chub, Andrii;** Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Vinnikov, Dmitri** International journal of circuit theory and applications 2016 / p. 783-797 : ill <https://doi.org/10.1002/cta.2106> [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 [https://doi.org/10.1007/978-3-642-37291-9\\_52](https://doi.org/10.1007/978-3-642-37291-9_52) [Article collection metrics at Scopus](#) [Article at Scopus](#)

### **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 <https://www.emerald.com/insight/content/doi/10.1108/03321641211267227/full/html>

### **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](#)

### **Implementation of high-voltage IGBTs in power electronic converters for the rolling stock**

**Vinnikov, Dmitri; Laugis, Juhan;** Frolov, S.; Matvejev, J. Технічна електродинаміка 2007 / 4, p. 109-114 : ill

### **Implementation possibilities of hybrid IGBT-IGCT switches in three-level NPC inverters**

**Blinov, Andrei; Vinnikov, Dmitri;** Ivakhno, Volodymyr; Zamaruev, Vladimir COMPEL : the international journal for computation and mathematics in electrical and electronic engineering 2012 / p. 1917-1930 : ill <https://www.semanticscholar.org/paper/Implementation-possibilities-of-hybrid-IGBT%E2%80%90IGCT-in-Blinov-Vinnikov/c57ac29d7993543a1dcb4370fe7bf7a1fe44597c>

### **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>

### **Improved half-bridge Z-source inverter based gamma structure with continuous input current**

**Bahador, Asghar; Babaei, Ebrahim; Chauhan, Sachin** 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830839>

### **An improved programmed PWM method using walsh functions**

Gatlan, Leonard; Gatlan, Clarissa BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 213-216 : 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

### **Improved switching patterns of inverters for electric drive applications**

**Vodovozov, Valery; Raud, Zoja** International Journal of Automation and Control Engineering (IJACE) 2013 / p. 70-78 : ill

### **Improvements on the carrier-based control method for a three-level T-type, quasi-impedance-source inverter**

Barrero-Gonzalez, Fermin; Roncero-Clemente, Carlos; Milanes-Montero, Maria Isabel; **Husev, Oleksandr** Electronics 2019 / art. 677, 12 p. : ill <https://doi.org/10.3390/electronics8060677> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Indirect model predictive control for inverter connected to distorted grid with significant computation delay**

**Husev, Oleksandr; Pimentel, Sergio Pires; Vinnikov, Dmitri; Kütt, Lauri;** Rodriguez, Jose IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 6483-6488 : ill <https://doi.org/10.1109/IECON.2019.8927279>

### **Induction generator with direct control and a limited number of measurements on the side of the converter connected to the power grid**

Kasprowicz, Andrzej Bogdan; **Husev, Oleksandr;** Strzelecki, Ryszard Energies 2023 / art. 63, 23 p. : ill <https://doi.org/10.3390/en16010063> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Inductive bifilar coil based wireless charging system for autonomous electric boat**

Pakhaliuk, Bohdan; **Husev, Oleksandr; Shevchenko, Viktor;** Kroics, Kaspars; Stepins, Deniss; Strzelecki, Ryszard IEEE 31st International Symposium on Industrial Electronics (ISIE) 2022 / p. 758-761 <https://doi.org/10.1109/ISIE51582.2022.9831731>

### **Inductor Current Ripple Analysis and Reduction for Quasi-Z-Source Inverters with An Improved ZSVM6 Strategy**

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Vinnikov, Dmitri**; Blaabjerg, Frede IEEE transactions on power electronics 2021 / p. 7693-7704 <https://doi.org/10.1109/TPEL.2020.3043102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Interleaved quasi-Z-source inverter with activ power decoupling for kW-scale PV applications**

**Stepenko, Serhii** 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. 71-72 : ill [https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Interleaved single-phase quasi-Z-source inverter with special modulation technique**

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Stepenko, Serhii; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 593-598 : ill <https://doi.org/10.1109/UKRCON.2017.8100310>

### **Inverter mode in converter with alternating of parallel and series resonance**

**Janson, Kuno**; Järvik, Jaan; Šklovski, Jevgeni; **Vinnal, Toomas** EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 1 of 7, Power electronic converters and control 2004 / p. 1-227 - 1-232 : ill

### **Inverters for power systems with renewable sources: basic topologies and purposes**

Yamnenko, Iuliia; Tereshchenko, Tetiana; Fedin, Ihor; **Carvalho da Silva, Edivan Laercio**; Kozhushko, Yuliia; Bondarenko, Oleksandr 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227384>

### **Inverters with reduced switching losses for industrial applications**

**Vodovozov, Valery**; Egorov, Mikhail; Raud, Zoja; Lehtla, Tõnu Proceedings : INDIN 2011 : 2011 9th IEEE International Conference on Industrial Informatics : Lisbon, Portugal, 26-29 July, 2011 2011 / p. 274-279 : ill <https://ieeexplore.ieee.org/document/6034887>

### **Investigation of radiated emissions of a galvanically isolated qZS DC-DC converter**

**Jalakas, Tanel**; Jarkovoi, Marek; Roasto, Indrek; **Zakis, Janis**; Garganev, 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>

### **Kalman-filter based maximum power point tracking for a single-stage grid-connected photovoltaic system**

Farrokhi, Ehsan; Ghoreishy, Hoda; **Ahmadihangar, Roya**; **Rosin, Argo** IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / Code 173927 <https://doi.org/10.1109/IECON48115.2021.9589653> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **LCCT-derived three-level three-phase inverters**

**Shults, Tatiana**; **Husev, Oleksandr**; Blaabjerg, Frede; **Zakis, Janis**; Khandakji, Kamal IET power electronics 2017 / p. 996-1002 <https://doi.org/10.1049/iet-pel.2016.0023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Loss calculation methods of half-bridge square-wave inverters**

**Blinov, Andrei**; **Vinnikov, Dmitri**; **Jalakas, Tanel** Elektronika ir elektrotechnika = Electronics and electrical engineering 2011 / p. 9-14 : ill <https://eejournal.ktu.lt/index.php/elt/article/view/604>

### **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

### **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/2011SJRP...29...73V/abstract>

### **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>

### **Maximum boost control for interleaved single-phase quasi-Z-source inverter**

Roncero-Clemente, Carlos; **Stepenko, Serhii**; **Husev, Oleksandr**; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 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. 7698-7703 : ill <https://doi.org/10.1109/IECON.2017.8217349>

### **Minimal output impedance required for stability of grid-supporting inverters**

Ofir, Ron; Zargari, Noa; **Belikov, Juri**; Levron, Yoash IEEE transactions on power delivery 2021 / p. 2241-2244

<https://doi.org/10.1109/TPWRD.2021.3071023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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](#)

### **Model order reduction of voltage source converters based on the ac side admittance assessment : from EMT to RMS**

Grdenic, Goran; Cifuentes-Garcia, Francisco; **Campos, Nathalia de Moraes Dias**; Villella, Fortunato; Beerten, Jef IEEE transactions on power delivery 2023 / p. 56–67 : ill <https://doi.org/10.1109/TPWRD.2022.3179836>

### **Model predictive control for buck-boost inverter based on unfolding circuit**

**Matiushkin, Oleksandr**; Husev, Oleksandr; **Vinnikov, Dmitri**; Roncero-Clemente, Carlos 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering : UKRCON-2019 : conference proceedings 2019 / p. 431-436 : ill <https://doi.org/10.1109/UKRCON.2019.8879870>

### **Model predictive control of a single-stage flying inductor based buck-boost grid-connected common-ground inverter**

**Rahimpour, Saeed**; **Matiushkin, Oleksandr**; **Kurdkandi, Naser Vosoughi**; **Najafzadeh, Mahdiyyeh**; **Husev, Oleksandr**; **Vinnikov, Dmitri** 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2021 / p. 1-6 <https://doi.org/10.1109/RTUCON53541.2021.9711711>

### **Model predictive control of novel buck-boost inverter with unfolding circuit**

**Matiushkin, Oleksandr** 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. 155-156 : ill [https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Model predictive control-based dual input split source inverter for PV applications**

Abu-Zaher, Mustafa; Aly, Mokhtar; Zhuo, Fang; Ahmed, Mostafa; Rodriguez, Jose; **Bakeer, Abualkasim Ahmed Ali**; Hassan, Alaaeldien IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905950> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **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>

### **Modelling of transients in IGBT inverter fed AC drives**

**Lehtla, Tõnu**; **Kulmar, Lembit** Тезисы докладов I международной (XII всероссийской) конференции по автоматизированному электроприводу, 26-28 сентября 1995 г., Санкт-Петербург 1995 / с. 19

### **Modelling of voltage transients on inverter fed AC induction motor**

**Lehtla, Tõnu** Stockholm Power Tech : International Symposium on Electrical Power Engineering : June 18-22, 1995 : [papers]. Electrical machines and drives 1995 / p. 438-439

### **Modified DQ control approach for three-phase inverter**

**Makovenko, Elena**; **Husev, Oleksandr**; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 2017 IEEE 58th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings : Latvia, Riga, 12-13 October, 2017 2017 / [3] p. : ill <http://dx.doi.org/10.1109/RTUCON.2017.8124800>

### **Modified high voltage gain soft-switched quasi-switched boost inverter**

Abbasi Aghdam Meinagh, Farhad; Babaei, Ebrahim; **Vinnikov, Dmitri**; **Chub, Andrii** 2019 IEEE International Conference on Industrial Technology, ICIT 2019 : Melbourne, Australia, 13-15 February 2019 : proceedings 2019 / p. 1087-1092 : ill <https://doi.org/10.1109/ICIT.2019.8755041>

### **Modified technique of parameter identification of a permanent magnet synchronous motor with PWM inverter in the presence of dead-time effect and measurement noise**

Mamatov, Aleksandr; Lovlin, Sergey; **Vaimann, Toomas**; **Rassõlkin, Anton**; Vakulenko, Sergei; Abramian, Andrei Electronics 2019 / art. 1200, 19 p <https://doi.org/10.3390/electronics8101200> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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](#)

### **MPPT and GMPPT Implementation for Buck-Boost Mode Control of quasi-Z-Source Inverter**

**Husev, Oleksandr; Vinnikov, Dmitri;** Roncero-Clemente, Carlos; Blaabjerg, Frede; Strzelecki, Ryszard IEEE transactions on industrial electronics 2022 / p. 11348 - 11358 <https://doi.org/10.1109/TIE.2021.3125658> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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>

**Neutral-point-clamped quasi-Z-source inverter with field-programmable gate array based control**

**Stepenko, Serhii; Husev, Oleksandr; 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. 76-77 : ill

**Three-level neutral-point-clamped quasi-Z-source inverter with maximum power point tracking for photovoltaic systems**

Roncero-Clemente, Carlos; Stepenko, Serhii; **Husev, Oleksandr;** Minambres-Marcos, Victor; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 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. 334-342 [https://doi.org/10.1007/978-3-642-37291-9\\_36](https://doi.org/10.1007/978-3-642-37291-9_36) [https://link.springer.com/chapter/10.1007/978-3-642-37291-9\\_36](https://link.springer.com/chapter/10.1007/978-3-642-37291-9_36) [Article collection metrics at Scopus](#) [Article at Scopus](#)

**A new five-level switched capacitor-based grid-connected inverter with common grounded feature**

**Vosoughi Kurdkandi, Naser;** Marangalu, Milad Ghavipanjeh; Islam, Md. Rabiul 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA) 2021 / p. 749-754 <https://doi.org/10.1109/ICCCA52192.2021.9666335>

**A new high step-up NPC-based switched-capacitor seven-level grid-tied inverter for PV applications**

Marangalu, Milad Ghavipanjeh; Mashinchi Maheri, Hamed; **Vinnikov, Dmitri; 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 / 6 p <https://doi.org/10.1109/RTUCon60080.2023.10413150>

**New hysteresis current control for grid connected single-phase three-level quasi-Z-source inverter**

**Husev, Oleksandr; Vinnikov, Dmitri;** Roncero-Clemente, Carlos; Romero-Cadaval, Enrique APEC 2014 : Twenty-Ninth Annual IEEE Applied Power Electronics Conference and Exposition : March 16-20, 2014, Fort Worth Convention Center - Fort Worth, Texas 2014 / p. 1765-1770 : ill <https://doi.org/10.1109/APEC.2014.6803544> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**New interleaved single-phase quasi-Z-source inverter with active power decoupling**

**Stepenko, Serhii;** Roncero-Clemente, Carlos; **Husev, Oleksandr; Makovenko, Elena;** Pires Pimentel, Sergio; **Vinnikov, Dmitri** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 437-442 : ill <https://doi.org/10.1109/CPE.2018.8372558>

**A new modulated finite control set-model predictive control of quasi-Z-source inverter for PMSM drives**

Ahmed, Abdelsalam A.; **Bakeer, Abualkasim Ahmed Ali;** Alhelou, Hassan Haes; Siano, Pierluigi; Mossa, Mahmoud A. Electronics (Switzerland) 2021 / art. 2814 <https://doi.org/10.3390/electronics10222814> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**New modulation technique for three-level quasi-Z-source inverter**

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr; 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. 68-71 : ill

**New operation strategy for a grid-connected three-phase three-level NPC qZS inverter based on power losses**

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr;** Martins, Joao Elektronika ir elektrotechnika = Electronics and electrical engineering 2016 / p. 60 - 65 <https://doi.org/10.5755/j01.eie.22.3.15316> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A new seven-level transformer-less grid-tied inverter with leakage current limitation and voltage boosting feature**

**Vosoughi Kurdkandi, Naser;** Marangalu, Milad Ghavipanjeh; **Husev, Oleksandr;** Aghaie, Amir; Islam, Md. Rabiul; Siwakoti, Yam P.; Muttaqi, Kashem; Hosseini, Seyed Hossein IEEE journal of emerging and selected topics in industrial electronics 2023 / p. 228-241 <https://doi.org/10.1109/JESTIE.2022.3205546>

**A new six-level transformer-less grid-connected solar photovoltaic inverter with less leakage current**

**Vosoughi Kurdkandi, Naser;** Marangalu, Milad Ghavipanjeh; Mohammadsalehian, Shamim; Tarzamni, Hadi; Siwakoti, Yam P.; Islam, Md. Rabiul; Muttaqi, Kashem M. IEEE Access 2022 / p. 63736 - 63753 : ill <https://doi.org/10.1109/ACCESS.2022.3182240> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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>

### **Novel family of flying inductor-based single-stage buck-boost inverters**

**Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri** IEEE journal of emerging and selected topics in power electronics 2022 / p. 6020-6032 <https://doi.org/10.1109/JESTPE.2022.3161113> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Novel family of modified qZS buck-boost multilevel inverters with reduced switch count**

**Husev, Oleksandr; Strzelecki, Ryszard; Blaabjerg, Frede; Chopyk, Vasily; Vinnikov, Dmitri** 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 / p. 98-105 : ill <http://dx.doi.org/10.1109/CPE.2015.7231056>

### **Novel family of single-phase modified impedance-source buck-boost multilevel inverters with reduced switch count**

**Husev, Oleksandr; Strzelecki, Ryszard; Blaabjerg, Frede; Chopyk, Vasily; Vinnikov, Dmitri** IEEE transactions on power electronics 2016 / p. 7580-7591 : ill <https://doi.org/10.1109/TPEL.2016.2569535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Novel family of single-stage buck-boost inverters based on unfolding circuit**

**Husev, Oleksandr** 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. 39-40 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Novel family of single-stage buck-boost inverters based on unfolding circuit : [conference paper]**

**Matiushkin, Oleksandr; Husev, Oleksandr** 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 / p. 128-129 : ill  
[http://ise.elnet.ee/record=b2950043~S2\\*est](http://ise.elnet.ee/record=b2950043~S2*est)

### **A novel flying inductor based grid-connected inverter with buck-boost ability**

**Vosoughi Kurdkandi, Naser; Husev, Oleksandr; Rahimpour, Saeed; Roncero-Clemente, Carlos; Matiushkin, Oleksandr; Vinnikov, Dmitri** IECON 2022 - 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / 6 p  
<https://doi.org/10.1109/IECON49645.2022.9968954> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Novel quasi-Z-source derived inverter with unfolding circuit and battery storage**

**Makovenko, Elena; Husev, Oleksandr; Vinnikov, Dmitri** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 / p. 431-436 : ill  
<https://doi.org/10.1109/CPE.2018.8372557>

### **Novel single-stage buck-boost inverter with unfolding circuit**

**Matiushkin, Oleksandr; Husev, Oleksandr; Strzelecki, Ryszard; Ivanets, Sergey; Fesenko, Artem** 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 538-543 : ill <https://doi.org/10.1109/UKRCON.2017.8100298>

### **Novel space vector pulse width modulation strategies for single-phase three-level NPC impedance-source inverters**

**Shults, Tatiana; Husev, Oleksandr; Blaabjerg, Frede; Roncero, Carlos; Romero-Cadaval, Enrique; Vinnikov, Dmitri** IEEE transactions on power electronics 2019 / p. 4820-4830 : ill <https://doi.org/10.1109/TPEL.2018.2859194> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **On the design process of a 6-kVA quasi-Z-inverter employing SiC power devices**

**Zdanowski, Mariusz; Peftitsis, Dimosthenis; Piasecki, Szymon; Rabkowski, Jacek** IEEE transactions on power electronics 2016 / p. 7499-7508 : ill <https://doi.org/10.1109/TPEL.2016.2527100>

### **Operation of PSA converter in inverter mode**

**Janson, Kuno; Järvi, Jaan; Šklovski, Jevgeni; Vinnal, Toomas** The 4th International Conference Electric Power Quality and Supply Reliability : August 29...31, 2004, Pedase, Estonia : proceedings 2004 / p. 81-86 : ill

### **Operation possibility of grid connected quasi-Z-source inverter with energy storage and renewable energy generation in wide power range**

**Kroics, Kaspars; Zakis, Janis; Suzdalenko, Alexander; Husev, Oleksandr; Tytelmaier, Kostiantyn; Khandakji, Kamal** 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 564-569 : ill <https://doi.org/10.1109/UKRCON.2017.8100303>

### **Operation strategy and shoot-through indirect control method for three-phase Z-source inverters**

**Roncero-Clemente, Carlos; Husev, Oleksandr; Romero-Cadaval, Enrique; Vinnikov, Dmitri; Milanes-Montero, Maria Isabel** 2015

IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 576-581 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266380>

#### **Optimal LCL-filter study for buck-boost inverter based on unfolding circuit**

**Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri;** Roncero-Clemente, Carlos Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 467-472 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161683>

#### **Optimization and implementation of the proportional-resonant controller for grid-connected inverter with significant computation delay**

**Husev, Oleksandr;** Roncero-Clemente, Carlos; **Makovenko, Elena; Pires Pimentel, Sergio; Vinnikov, Dmitri;** Martins, Joao IEEE transactions on industrial electronics 2020 / p. 1201 -1211 <https://doi.org/10.1109/TIE.2019.2898616> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Optimization of the inverter size for grid-connected residential wind energy systems with peak shaving**

Allik, Alo; **Märss, Mairo;** Uiga, Jaanus; Annuk, Andres Renewable energy 2016 / p. 1116-1125 : ill <https://doi.org/10.1016/j.renene.2016.08.016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Optimized modulation scheme for four-leg quasi Z-source inverter : reducing power loss and improving output quality**

Abid, Abderahmane; **Bakeer, Abualkasim Ahmed Ali;** Albalawi, Hani; Zellouma, Laid; Bouzidi, Mansour; Lashab, Abderezak; Rabhi, Boualaga; **Chub, Andrii** IEEE Access 2023 / p. 94125-94137 <https://doi.org/10.1109/ACCESS.2023.3305263> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Output filter design for grid connected single phase three-level quasi-Z-source inverter [Electronic resource]**

**Husev, Oleksandr; Stepenko, Serhii;** Roncero-Clemente, Carlos; **Vinnikov, Dmitri;** Romero-Cadaval, Enrique CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 46-51 : ill [CD-ROM]

#### **Overview of advanced functionalities for residential photovoltaic inverter connected to the grid**

**Makovenko, Elena; Husev, Oleksandr;** Romero-Cadaval, Enrique 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 2018 / p. 99-102 : ill [http://ise.elnet.ee/record=b2950024~S2\\*est](http://ise.elnet.ee/record=b2950024~S2*est)

#### **Overview of control methods of DC-AC grid connected converter**

**Makovenko, Elena; Husev, Oleksandr** 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. 69-71 : ill [http://www.ester.ee/record=b4650094\\*est](http://www.ester.ee/record=b4650094*est)

#### **Overview of impedance source networks for voltage source inverters**

**Shults, Tatiana; Husev, Oleksandr; Zakis, Janis** 2015 16th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices (EDM 2015) : Erlagol (Altai Republic), Russia, 29 June-3 July 2015 2015 / p. 514-520 : ill

#### **An overview of the functions of smart grids associated with virtual power plants including cybersecurity measures**

Alvi, Anas Abdullah; Romero-Cadaval, Enrique; González-Romera, Eva; Hassan, Jamil; **Vinnikov, Dmitri** Technological innovation for connected cyber physical spaces : 14th IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2023, Caparica, Portugal, July 5-7, 2023 : proceedings 2023 / p. 95 - 107 [https://doi.org/10.1007/978-3-031-36007-7\\_7](https://doi.org/10.1007/978-3-031-36007-7_7) [Conference Proceedings at Scopus](#) [Article at Scopus](#)

#### **Partial buck-boost resonant power converter for residential PV applications**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 5 l. <https://doi.org/10.1109/ENERGYCON53164.2022.9830394>

#### **Passive power decoupling approach for three-level single-phase impedance source inverter based on resonant and PID controllers**

**Makovenko, Elena; Husev, Oleksandr; Zakis, Janis;** Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 2017 11th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2017) : Cadiz, Spain, 4-6 April 2017 2017 / p. 516-521 : ill <https://doi.org/10.1109/CPE.2017.7915225>

#### **Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies**

**Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo** ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : 31st August to 3rd September 2008, Malta : conference guide 2008 / p. 37 <https://ieeexplore.ieee.org/document/4674795>

#### **Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies [Electronic resource]**

**Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo** ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta : [proceedings] 2008 / p. 77-80 : ill. [CD-ROM]  
<https://doi.org/10.1109/ICECS.2008.4674795> <https://ieeexplore.ieee.org/document/4674795>

**Performance comparison of voltage-fed and current-fed series resonant converters for high step-up DC-DC applications**  
**Khan, Salman; Chub, Andrii; Vinnikov, Dmitri** 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 6 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027290>

**Performance evaluation of a three-phase PV power plant under unbalanced conditions with islanding detection reliability test**

**Alvi, Anas Abdullah;** Romero-Cadaval, Enrique; Gonzalez-Romera, Eva; Vinnikov, Dmitri; Hassan, Jamil 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p  
<https://doi.org/10.1109/CPE-POWERENG58103.2023.10227391>

**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 <https://ieeexplore.ieee.org/document/5476229>

**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 and submodule level power electronics and control**

Spagnuolo, Giovanni; Kouro, Samir; **Vinnikov, Dmitri** IEEE Transactions on Industrial Electronics 2019 / p. 3856 - 3859  
<https://doi.org/10.1109/TIE.2018.2883187> [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 / p. 478-483 : ill  
<https://doi.org/10.1109/CPE.2018.8372565>

**Power loss model and efficiency analysis of the quasi-Z-Source isolated buck-boost converter with wide input voltage and load range**

**Mashinchii Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2021 / 8 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316587>

**Power supply system based on photovoltaic panels and three-level NPC inverter**

**Shults, Tatiana** Doctoral School of Energy and Geotechnology II : closing conference of the project : Pärnu, Estonia, January 12-17, 2015 2015 / p. 154-157 : ill

**Predictive control based on ranking multi-objective optimization approaches for a quasi-Z source inverter**

**Bakeer, Abualkasim Ahmed Ali;** Magdy, Gaber; **Chub, Andrii; Vinnikov, Dmitri** CSEE journal of power and energy systems 2021 / p. 1152-1160 : ill <https://doi.org/10.17775/CSEEJPES.2020.01310> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Problems in the operation of parallel-series converter when using two switch forward inverter**

**Niilo, Helar; Vaimann, Toomas** 7th International Conference-workshop Compatibility and Power Electronics : CPE 2011 : Tallinn, Estonia, June 3, 2011 : student forum 2011 / p. 28-33 : ill

**Proportional resonant controller tuning in three-phase four-leg VSI based on particle swarm optimization**

Akhtar, Zeeshan; Zhu, Jiebei; **Husev, Oleksandr; Vinnikov, Dmitri;** Yu, Lujie 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. 851-856 : ill <https://doi.org/10.1109/PEMC48073.2021.9432607>

**PWM for single phase 3L Z/qZ-Source inverter with balanced power losses**

Roncero-Clemente, Carlos; **Husev, Oleksandr; Jalakas, Tanel;** Romero-Cadaval, Enrique; **Zakis, Janis;** Minambres-Marcos, Victor Elektronika ir elektrotehnika = Electronics and electrical engineering 2014 / p. 71-76 : ill  
<https://doi.org/10.5755/j01.eee.20.6.7270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Päikesega saab kütta tuba ja vett, ilma paneele võrku ühendamata**

Raamets, Heli maakodu.delfi.ee 2023 [Päikesega saab kütta tuba ja vett, ilma paneele võrku ühendamata](#)

### **QZSI DC/DC converters in input-series output-parallel connection for distributed generation [Electronic resource]**

Martinez, C.; **Jalakas, Tanel; Vinnikov, Dmitri**; Lazaro, A.; Barrado, A. SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 952-957 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264536>

### **Quasi-Z source T-type power converter for PV based commercial and industrial nanogrids with active functions strategy**

Barrero-Gonzalez, Fermin; Roncero-Clemente, Carlos; Milanes-Montero, Maria Isabel; Gonzalez-Romera, Eva; Romero-Cadaval, Enrique; **Husev, Oleksandr** Electronics 2020 / art. 1233, 18 p. : ill <https://doi.org/10.3390/electronics9081233> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Quasi-Z-source based string inverter for residential photovoltaic application = Kvaasi-impedants tüüpi allikaga muundur kodumajapidamistes kasutatavatele päikesepaneelidele**

**Santasheva, Elena** 2019 <https://digi.lib.ttu.ee/i/?12312>

### **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](https://www.researchgate.net/publication/224245116_Quasi-Z-source_inverter_based_bi-directional_DCDC_converter_Analysis_of_experimental_results)

### **Quazi-Z-source based string inverter for residential photovoltaic application**

**Santasheva, Elena** 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. 105-106 : ill [https://www.eester.ee/record=b5183874\\*est](https://www.eester.ee/record=b5183874*est)

### **Reactive power injection capability of buck-boost inverter with unfolding circuit**

Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri**; Blaabjerg, Frede IEEE transactions on power electronics 2022 / p. 11876-11886 <https://doi.org/10.1109/TPEL.2022.3179784> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Reconfigurable three-switch leg multi-port boost inverters with novel modulation schemes for hybrid DC/AC microgrid systems**

Reddy, M. Rama Narayana; Reddy, B. Dastagiri; Prabhakaran, Prajof; **Chub, Andrii**; Kouro, Samir IEEE Access 2025 / p. 77124-77146 <https://doi.org/10.1109/ACCESS.2025.3565791> <https://ieeexplore.ieee.org/document/10980297>

### **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 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>

### **Research and development of control methods for low-loss IGBT inverter-fed induction motor drives = Energiatõhusa IGBT transistor-vaheldiga asünkroonajami juhtimismeetodite uurimine ja väljatöötamine**

**Egorov, Mikhail** 2011 <https://digi.lib.ttu.ee/i/?616>

### **Resonant and Z-source multilevel inverters**

**Husev, Oleksandr**; Roncero-Clemente, Carlos Multilevel inverters : introduction and emergent topologies 2021 / p. 217-257 <https://doi.org/10.1016/B978-0-12-821668-2.00014-3>

### **Review of extended boost qZSI topologies for single phase applications**

Barath, Jayakumar Geetha Nataraj; Soundararajan, Ayyasamy; **Stepenko, Serhii**; Padmanaban, Sanjeevikumar; Prystupa, Anatoliy; Bolotov, Maksym 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 8 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982342>

### **Review of novel topologies for PV applications**

**Makovenko, Elena; Husev, Oleksandr**; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique Technological innovation for cyber-physical systems : 7th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2016, Costa de Caparica, Portugal, April 11-13, 2016 : proceedings 2016 / p. 369-377 : ill <https://doi.org/10.1007/978-3-319->

**Review of technical solutions addressing voltage and operational challenges in a distribution grid with high penetration of intermittent RES**

**Astapov, Victor; Shabbir, Noman; Rosin, Argo; Kütt, Lauri; Maask, Vahur; Tiismus, Hans** Energy reports 2025 / p. 1738-1760  
<https://doi.org/10.1016/j.egy.2025.08.019>

**Review of the present state, development trends, and advancements of power electronic converters used in robotics**

**Vodovozov, Valery; Raud, Zoja** Energies 2025 / art. 2638 <https://doi.org/10.3390/en18102638>

**Robust operation of four-leg voltage source inverter using model-free predictive control**

**Bakeer, Abualkasim Ahmed Ali; Abid, Abderahmane; Albalawi, Hani A.; Magdy, Gaber; Chub, Andrii; Zaid, Sherif A.** Journal of Electrical Engineering & Technology 2025 / p. 685-702 <https://doi.org/10.1007/s42835-024-02018-z>

**SCALLER: standard cell assembled and local layout effect-based ring oscillators**

**Aljafar, Muayad J.; UI Abideen, Zain; Peetermans, Adriaan; Gierlichs, Benedikt; Pagliarini, Samuel** IEEE Embedded Systems Letters 2024 / p. 493 - 496 <https://doi.org/10.1109/LES.2024.3459730> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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>

**Simulation study of different modulation techniques for three-level quasi-Z-source inverter**

**Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Husev, Oleksandr; Vinnikov, Dmitri** 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 14 of Subsection of Power Electronic Converters and Applications 2012 / 7 p. : ill

**Simulation study of different modulation techniques for three-level quasi-Z-source inverter**

**Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Husev, Oleksandr; Vinnikov, Dmitri** 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. 120 : ill  
<https://intapi.sciendo.com/pdf/10.2478/v10314-012-0002-3>

**Simulation study of inverter-fed motor drives**

**Egorov, Mikhail** 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. 165-168 : ill

**Simulation study of the grid-connected single-phase impedance-sourced NPC inverter with different control methods**

**Roncero-Clemente, Carlos; Husev, Oleksandr; Romero-Cadaval, Enrique; Zakis, Janis; Vinnikov, Dmitri; Milanes-Montero, Maria Isabel** 2015 IEEE International Conference on Industrial Technology (ICIT 2015) : Seville, Spain, 17-19 March 2015 2015 / p. 2949-2954 : ill <https://doi.org/10.1109/ICIT.2015.7125533> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Simulation study of the three-level boost DC-DC converter with full ZVS for PV application**

**Vorobei, Vasilii; Zakis, Janis; Husev, Oleksandr; Veligorskyi, Oleksandr; Savenko, Oleksandr** ICPE 2015 - ECCE Asia : 9th International Conference on Power Electronics - ECCE Asia : "Green World with Power Electronics" : June 1-5, 2015, 63 Convention Center, Seoul, Korea 2015 / p. 2038-2043 : ill <http://dx.doi.org/10.1109/ICPE.2015.7168058>

**Single phase three-level neutral-point-clamped quasi-Z-source inverter**

**Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Vinnikov, Dmitri; Stepenko, Serhii** IET power electronics 2015 / p. 1-10 : ill <https://doi.org/10.1049/iet-pel.2013.0904> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Single-phase 3L PR controlled qZS inverter connected to the distorted grid**

**Makovenko, Elena; Husev, Oleksandr; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Blaabjerg, Frede** 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. 234-239 : ill <https://doi.org/10.1109/CPE.2016.7544191>

**Single-phase three-level qZ-source inverter connected to the grid with battery storage and active power decoupling function**

**Makovenko, Elena; Husev, Oleksandr; Romero-Cadaval, Enrique; Vinnikov, Dmitri; Stepenko, Serhii** 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.2018.8659843>

**Single-stage buck-boost inverters: a state-of-the-art survey**

Azizi, Mohammadreza; **Husev, Oleksandr; Vinnikov, Dmitri** Energies 2022 / art. 1622 <https://doi.org/10.3390/en15051622> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Single-stage single-phase current source inverter for standalone applications**

Sohail, Umer; **Blinov, Andrei; Østrem, Trond; Hoff, Bjarte; Carvalho, Edivan Laercio** IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2024 / 6 p <https://doi.org/10.1109/IECON55916.2024.10905718> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **6.5 kV IGBT switch realization possibilities and their feasibility study for high-power applications**

**Vinnikov, Dmitri; Laugis, Juhan;** Strzelecki, Ryszard; **Egorov, Mikhail** 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. EE051 [CD-ROM] [https://iceeng.journals.ekb.eg/article\\_34406.html](https://iceeng.journals.ekb.eg/article_34406.html)

### **Sliding mode based control of dual boost inverter for grid connection**

Lopez-Caiza, Diana; Flores-Bahamonde, Freddy; Kouro, Samir; Santana, Victor; Müller, Nicolas; **Chub, Andrii** Energies 2019 / art. 4241, 15 p.: ill <https://doi.org/10.3390/en1224241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Small signal modeling of interleaved quasi-z-source inverter with active power decoupling circuit**

**Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Makovenko, Elena; Vinnikov, Dmitri** 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.2018.8659903>

### **Small signal modeling of interleaved quasi-z-source inverter with active power decoupling circuit**

**Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Makovenko, Elena; Vinnikov, Dmitri** 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.2018.8659903>

### **Soft-switching modulation method for full-bridge DC-AC HF-link inverter**

**Korkh, Oleksandr** 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. 133-134 : ill [https://www.eester.ee/record=b5291755\\*est](https://www.eester.ee/record=b5291755*est)

### **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](#)

### **Some design considerations for high-power high-voltage DC/DC converter with improved power density and efficiency**

**Vinnikov, Dmitri** The Brazilian journal of power electronics = Revista eletrônica de potência 2009 / 4, p. 297-304 <https://sobraep.org.br/site/uploads/2018/06/rvol14no4p15.pdf>

### **Space vector modulation with reduced switching losses for motor drive inverters [Electronic resource]**

**Egorov, Mikhail; Vodovozov, Valery** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 388-393 [CD-ROM] <https://www.semanticscholar.org/paper/Space-vector-modulation-with-reduced-switching-for-Egorov-Vodovozov/89b803db973d2bd7908d7596b234f56665c14d4c>

### **Stability issues with inverter loads and their control in low inertia islanded microgrids**

**Beg, Nauman;** Biechl, Helmuth; **Rosin, Argo** 2020 2nd Global Power, Energy and Communication Conference (GPECOM) 2020 IEEE 2nd Global Power, Energy and Communication Conference (GPECOM) :Online Conference, 20-23 October, 2020 : proceedings 2020 / p. 196-201 : ill <https://doi.org/10.1109/GPECOM49333.2020.9247913>

### **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.eester.ee/record=b2150914\\*est](http://www.eester.ee/record=b2150914*est)

### **Step-up current-source partial power converter for PV systems**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Hassanpour, Naser** IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 l. <https://doi.org/10.1109/PEDG54999.2022.9923250>

### **Study of operating conditions of 3,3 kV dual IGBT modules in three-level neutral point clamped inverters**

**Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri** Технічна електродинаміка 2010 / 1, p. 135-140 : ill

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

**Zakis, Janis; Vinnikov, Dmitri** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2011 / p. 67-72 : ill  
[https://www.researchgate.net/publication/258547430\\_Study\\_of\\_Simple\\_MPPT\\_Converter\\_Topologies\\_for\\_Grid\\_Integration\\_of\\_Photovoltaic\\_Systems](https://www.researchgate.net/publication/258547430_Study_of_Simple_MPPT_Converter_Topologies_for_Grid_Integration_of_Photovoltaic_Systems)

### **Switched-capacitor current-fed quasi-Z-source inverter**

**Chub, Andrii; Husev, Oleksandr; Zakis, Janis;** Rabkowski, Jacek 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. 229-232 : ill

### **SVPWM capacitor balancing method for single-phase three-level NPC impedance-source inverters**

Shults, Tatiana; Filatova, Alena; Dybko, Maxim; **Husev, Oleksandr** 2018 19th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices (EDM 2018) : Erlagol (Altai Republic), Russia, 29 June - 3 July 2018 2018 / p. 580-584 : ill <http://dx.doi.org/10.1109/EDM.2018.8434962>

### **SVPWM strategy for single-phase three-level impedance source inverter**

Shults, Tatiana; Sidorov, Andrey; **Husev, Oleksandr** 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. 144-147 : ill  
[http://www.ester.ee/record=b4650094\\*est](http://www.ester.ee/record=b4650094*est)

### **Sõltuva inverteri väärtuse likvideerimise tingimuste uurimine**

**Kebja, R.; Treufeldt, Jüri** XXXII üliõpilaste teaduslik-tehnilise konverentsi ettekannete teesid : pühendatud V. I. Lenini 110. sünniaastapäevale : 16.-18. aprill 1980 1981 / lk. 402 [https://www.ester.ee/record=b1322611\\*est](https://www.ester.ee/record=b1322611*est)

### **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

### **Three-level single-phase quasi-Z source inverter with active power decoupling circuit**

**Makovenko, Elena; Husev, Oleksandr;** Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** 18th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices : proceedings : Erlagol, Altai - 29 June - 3 July, 2017 2017 / p. 497-502 : ill <https://doi.org/10.1109/EDM.2017.7981804>

### **Three-level three-phase quasi-Z-source neutral-point-clamped inverter with novel modulation technique for photovoltaic application**

**Husev, Oleksandr;** Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Vinnikov, Dmitri; Jalakas, Tanel** Electric power systems research 2016 / p. 10-21 : ill <https://doi.org/10.1016/j.epsr.2015.08.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Three-level T-type qZ source inverter as grid-following unit for distributed energy resources**

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr;** Barrero-Gonzalez, Fermin; Llor, Ana M.; Fernao Pires, Vitor IEEE journal of emerging and selected topics in power electronics 2022 / p. 7772-7785  
<https://doi.org/10.1109/JESTPE.2022.3193258> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **3L-T-type qZSI as grid-forming unit in AC microgrid**

Gutierrez-Escalona, Javier; Roncero-Clemente, Carlos; **Husev, Oleksandr;** Pires, Victor; Milanés-Montero, Maria Isabel; Gonzalez-Romera, Eva IECON 2022 – 48th Annual Conference of the IEEE Industrial Electronics Society 2022 / code 184962  
<https://doi.org/10.1109/IECON49645.2022.9968571> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **Three-phase four wire high-frequency link converter for residential DC grids**

**Emiliani, Pietro; Blinov, Andrei;** de Carne, Giovanni; Arena, Gabriele; **Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227416>

### **Three-phase three-level neutral-point-clamped qZ source inverter with active filtering capabilities**

Roncero-Clemente, Carlos; **Husev, Oleksandr;** Romero-Cadaval, Enrique; Martins, Joao; **Vinnikov, Dmitri;** Milanés-Montero, Maria Isabel 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. 216-220 : ill <http://dx.doi.org/10.1109/CPE.2015.7231075>

### **Tiratron-vaheldaja**

**Agur, Ustus; Sillamaa, Hanno; Teearu, Viktor; Plakk, Paul** Üliõpilaste teaduslike tööde kogumik. 1 1954 / lk. 4-9 : ill

### **Topological review of quasi-switched boost inverters**

Barath, Jayakumar Geetha Nataraj; Soundarajan, Ayyasamy; Stepenko, Serhii; **Husev, Oleksandr; Vinnikov, Dmitri**; Nguyen, Minh-Khai Electronics 2021 / art. 1485 <https://doi.org/10.3390/electronics10121485> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Tracking of MPP for three-level neutral-point clamped qZ-source off-grid inverter in solar applications**

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Minambres-Marcos, Victor; Romero-Cadaval, Enrique; Stepenko, Serhii; **Vinnikov, Dmitri** Journal of microelectronics, electronic components and materials 2013 / p. 212-221 : ill [https://www.researchgate.net/publication/259495902\\_Tracking\\_of\\_MPP\\_for\\_three-level\\_neutral-point\\_clamped\\_qZ-source\\_off-grid\\_inverter\\_in\\_solar\\_applications](https://www.researchgate.net/publication/259495902_Tracking_of_MPP_for_three-level_neutral-point_clamped_qZ-source_off-grid_inverter_in_solar_applications)

### **Transient analysis of high-voltage half-bridge inverter during freewheeling states**

**Blinov, Andrei; Jalakas, Tanel; Vinnikov, Dmitri; Janson, Kuno** 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. 8-11 : 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

### **Trans-Z-source-like inverter with built-in DC current blocking capacitors [Electronic resource]**

Adamowicz, Marek; Guzinski, Jaroslaw; Strzelecka, Natalia; **Vinnikov, Dmitri** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 137-149 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/5942221>

### **Triple-Loop Control Configuration for Grid-Connected LCL-Filtered Inverters Based on Time-Domain Design**

**Elkayam, Moria Sassonker; Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p. : ill <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227426>

### **2 switch forward inverter for parallel-series resonance alternating (PSA) converter for supplying electric welding arc**

**Niilo, Helar; Vaimann, Toomas** 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. 140-144 : ill

### **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 <https://ieeexplore.ieee.org/document/5636562>

### **Uninterruptible power supply in distribution substations auxiliary circuits**

**Hõimoja, Hardi** 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. 78-82

### **Uninterruptible power supply: an optimal passivity-based control scheme**

**Bakeer, Abualkasim Ahmed Ali**; Alhasheem, Mohammed; Elhelw, Hadi M. 2023 IEEE Power and Energy Society Innovative Smart Grid Technologies Conference, ISGT 2023 2023 / art. 187411 <https://doi.org/10.1109/ISGT51731.2023.10066406>

### **Unitary input power factor uninterruptible power supply**

Florea, Mihail; Posa, Constantin BEC'98 : the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia : proceedings 1998 / p. 235-238: ill

### **Ways to reduce switching losses in motor drive inverters**

**Vodovozov, Valery; Lehtla, Tõnu** 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. 3-9 : ill

### **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](#)

### **Verification of current sensorless control for single-phase NPC multilevel inverter**

Suzdalenko, Alexander; **Zakis, Janis**; Steiks, Ingars; Chaiko, Yelena 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. 462-466 : ill <http://dx.doi.org/10.1109/CPE.2015.7231119>

### **Voltage and reactive power control in islanded microgrids without communication link**

**Armstorfer, Andreas;** Biechl, Helmut; **Rosin, Argo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/BEC49624.2020.9277219>

### **Voltage distortion approach for output filter design for off-grid and grid-connected PWM inverters**

**Husev, Oleksandr; Chub, Andrii;** Romero-Cadaval, Enrique; Roncero-Clemente, Carlos; **Vinnikov, Dmitri** Journal of power electronics 2015 / p. 278-287 : ill <https://doi.org/10.6113/JPE.2015.15.1.278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Voltage inverter on GTO thyristors**

**Pikkov, Mihhail** BEC'96 : the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia : proceedings 1996 / p. 487-488: ill

### **Защита тиристорного преобразователя при опрокидывании инвертора**

**Lootus, Jaan; Treufeld, Jüri; Tuldava, Toomas** Исследование электромагнитных и электромашинных устройств управления и контроля специального назначения 1978 / с. 65-75 : илл [https://www.ester.ee/record=b1346523\\*est](https://www.ester.ee/record=b1346523*est) <https://digikogu.taltech.ee/et/Item/a244ed16-2990-4904-9ca3-15c6823a6050>

### **Идентификация карты намагничивания вентильно-индукторного электропривода в режиме реального времени**

**Demidova, Galina** Известия СПбГЭТУ "ЛЭТИ" 2021 / с. 69-75 [https://izv.etu.ru/assets/files/izvestiya-1\\_2021-69-75.pdf](https://izv.etu.ru/assets/files/izvestiya-1_2021-69-75.pdf)

### **Инвертор напряжения на базе запираемых тиристоров**

**Pikkov, Mihhail** Automation, simulation & measurement. Section A, Automation. Section M, Measurement : 3rd biennial conference : Tallinn, Estonia, October 7-11, 1991 = Automatiseerimine, modelleerimine ja mõõtmine : 3. rahvusvaheline konverents / Tallinna Tehnikaülikool 1992 / с. 151-155: ил [https://www.ester.ee/record=b1064034\\*est](https://www.ester.ee/record=b1064034*est)

### **Инвертор с общим коммутирующим узлом**

**Irs, Rein; Pikkov, Otto; Šilf, K.; Tomson, Jaan** Электромеханика. 3 1970 / с. 17-21 : илл [https://www.ester.ee/record=b2189951\\*est](https://www.ester.ee/record=b2189951*est) <https://digikogu.taltech.ee/et/Item/ba0097d6-af8f-4557-96a1-ac545e315074/>

### **Использование разделенной коммутации в двухзвенных преобразователях постоянного напряжения для снижения динамических потерь силовых полупроводниковых ключей**

**Sokol, Jevgeni; Blinov, Andrei; Vinnikov, Dmitri** Энергосбережение. Энергетика. Энергоаудит 2014 / 55-69 : ил

### **Исследование защиты зависимого инвертора**

**Treufeld, Jüri; Harlamov, V.** Тезисы докладов XXXI студенческой научно-технической конференции 1980 / с. 66-67 [https://www.ester.ee/record=b1319482\\*est](https://www.ester.ee/record=b1319482*est)

### **Исследование и разработка инвертора с общим звеном коммутации для управления асинхронным двигателем**

**Tomson, Jaan; Irs, Rein; Šadeiko, T.** Тиристорный управляемый асинхронный электропривод : (Сборник тезисов докладов к Конференции. 29 янв. - 4 февр. 1968 г.) 1968 / с. 202

### **Исследование и разработка приборов интегрального исполнения системы тиристор-диод**

**Krunk, O.; Seleninov, K.; Tarma, Mati** Силовые полупроводниковые приборы : сборник статей 1981 / с. 30-34 [https://www.ester.ee/record=b1264428\\*est](https://www.ester.ee/record=b1264428*est)

### **Конденсатор-тиристорная система управления трехфазным мостовым инвертором**

**Irs, Rein; Šilf, K.** Электромеханика. 3 1970 / с. 29-32 : илл [https://www.ester.ee/record=b2189951\\*est](https://www.ester.ee/record=b2189951*est) <https://digikogu.taltech.ee/et/Item/ba0097d6-af8f-4557-96a1-ac545e315074/>

### **О ликвидации однофазного опрокидывания зависимого инвертора**

**Lootus, Jaan; Treufeld, Jüri** Исследование электромагнитных и электромашинных устройств управления и контроля специального назначения 1980 / с. 37-42 : илл [https://www.ester.ee/record=b1312090\\*est](https://www.ester.ee/record=b1312090*est) <https://digikogu.taltech.ee/et/Item/e708f6e5-a186-4ef0-893e-d61558782a2b>

### **Об одном способе устранения срыва ведомого инвертора**

**Lootus, Jaan; Treufeld, Jüri** Исследование электромагнитных и электромашинных устройств специального назначения 1981 / с. 41-46 : илл [https://www.ester.ee/record=b1319107\\*est](https://www.ester.ee/record=b1319107*est) <https://digikogu.taltech.ee/et/Item/69f32682-c927-437b-9d88-f03d45fbfd06>

### **Особенности применения силовых транзисторов в автономных инверторах напряжения**

**Pikkov, Mihhail** Тезисы докладов Республиканской научно-технической конференции "Современные методы и устройства радиоэлектронного оборудования", посвященной Дню радио. Секция: полупроводниковые приборы 1981 / с. 65 [https://www.ester.ee/record=b1310801\\*est](https://www.ester.ee/record=b1310801*est)

### **Система управления инвертором на диодтранзисторных логических элементах**

**Irs, Rein; Pikkov, Otto; Šilf, K.; Tomson, Jaan; Šadeiko, T.** Электромеханика. 3 1970 / с. 23-27 : илл [https://www.ester.ee/record=b2189951\\*est](https://www.ester.ee/record=b2189951*est) <https://digikogu.taltech.ee/et/Item/ba0097d6-af8f-4557-96a1-ac545e315074/>

**Трёхуровневый квази-импедансный инвертор с новым методом модуляции**

**Husev, Oleksandr; Stepenko, Serhii;** Clemente, C.; Kadaval, E.; **Vinnikov, Dmitri** Технічна електродинаміка : тематичний випуск : силова електроніка та енергоефективність 2012 / с. 47-52 : ил

**Экспериментальное исследование трёхуровневого инвертора напряжения с квази-импедансным звеном на входе**

**Stepenko, Serhii** Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с. 74-83 : ил

**Экспериментальное исследование трёхуровневого инвертора напряжения с квази-импедансным звеном на входе [Компьют. файл]**

**Stepenko, Serhii** Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [3] с. : ил [CD-ROM]