

Accessible battery model with aging dependency

Savard, Christophe; Iakovleva, Emilia; Ivanchenko, Daniil; **Rassölkin, Anton** Energies 2021 / art. 3493, 16 p
<https://doi.org/10.3390/en14123493> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Active front-end DC grid-forming converter design with power balancing capability

Verbytskyi, Ievgen; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144688>

Adaptive frequency-based power management for off-grid hybrid photovoltaic converters

Gonschorowsk, Ezequiel; Cardoso, Rafael; **Carvalho da Silva, Edivan Laercio; Stein, Carlos Marcelo De Oliveira**; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric Eletronica de potencia 2024 / art. e202440
<https://doi.org/10.18618/REP.e202440>

Adaptive LINE-P : an adaptive linear energy prediction model for wireless sensor network nodes

Ahmed, Faisal; **Tamberg, Gert; Le Moullec, Yannick; Annus, Paul** Sensors 2018 / art. 1105, 26 p. : ill
<https://doi.org/10.3390/s18041105> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Aggregator based coordinated Transactive Energy trading between Microgrids

Crasta, Cletus J.; Mishra, Sambeet; Agabus, Hannes; Palu, Ivo 2020 International Conference on Smart Grids and Energy Systems (SGES) 2020 <https://doi.org/10.1109/SGES51519.2020.00166>

An ultrafast EV charging station demonstrator [Electronic resource]

Höimoja, Hardi; Rufer, Alfred; Dziechciaruk, Grzegorz; Vezzini, Andrea SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 1390-1395 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264617>

Analysis and design of ultracapacitor-boosted back-up power supply for tramcars [Electronic resource]

Höimoja, Hardi; Vinnikov, Dmitri; Jalakas, Tanel EUROCON 2009 : International IEEE Conference devoted to the 150-anniversary of Alexander S.Popov : May 18-23, 2009 Saint Petersburg, Russia 2009 / p. 598-604 [CD-ROM]
<https://ieeexplore.ieee.org/document/5167691>

Analysis of a flywheel storage system for ultra-fast charging station of electric vehicles with regard to electric machine design and operational speed range

Dziechciaruk, Grzegorz; Grzesiak, Lech; Vezzini, Andrea; **Höimoja, Hardi** Przegląd Elektrotechniczny = Electrical Review 2013 / [7] p. : ill https://www.researchgate.net/publication/288576180_Analysis_of_a_flywheel_storage_system_for_ultra-fast_charging_station_of_electric_vehicles_with_regard_to_electric_machine_design_and_operational_speed_range [Journal metrics at Scopus](#) [Article at Scopus](#)

Analysis of a reconfigurable non-isolated DC-DC converter for DC microgrid applications

Yadav, Vinod Kumar; Chub, Andrii 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p
<https://ieeexplore.ieee.org/document/11144731> <https://doi.org/10.1109/ICDCM63994.2025.11144731>

Analysis of microgrid configuration effects on energy efficiency

Peterson, Kristjan; Ahmadihangar, Roya; Shabbir, Noman; Vinnal, Toomas 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill <https://doi.org/>

Analysis of operation times and electrical storage dimensioning for energy consumption shifting and balancing in residential areas

Rosin, Argo; Auväart, Aivar; Lebedev, Denis Elektronika ir elektrotehnika = Electronics and electrical engineering 2012 / p. 15-20 : ill
https://www.researchgate.net/publication/268406195_Analysis_of_Operation_Times_and_Electrical_Storage_Dimensioning_for_Energy_Consumption_Shifting_and_Balancing_in_Residential_Areas

Analytical approach for maximizing self-consumption of nearly zero energy buildings- case study : Baltic region

Ahmadihangar, Roya; Karami, Hossein; **Husev, Oleksandr; Blinov, Andrei; Rosin, Argo**; Jonaitis, Audrius; Sanjari, Mohammad Javad Energy 2022 / art. 121744, 11 p. : ill <https://doi.org/10.1016/j.energy.2021.121744> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analytical evaluation of indoor energy harvesting technologies for WSNs with FYPsim framework

Ahmed, Faisal; Le Moullec, Yannick; Annus, Paul; Mustufa, Y. S. Ashad 2016 International Conference on Industrial Informatics and Computer Systems (CIICS) : March 13-15, 2016, Dubai, UAE 2016 / [6] p. : ill <https://doi.org/10.1109/ICCSII.2016.7462423>

Assessment of mixed energy storage system considering high spatial resolution data from a real PV installation

Rogowski, Szymon; Hasan, Sayeed; Chub, Andrii; Sibinski, Maciej 2024 19th Biennial Baltic Electronics Conference (BEC) 2024 / 6 p <https://doi.org/10.1109/BEC61458.2024.10737964> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Assessment of power system asset dispatch under different local energy community business models

Korõtko, Tarmo; Plaum, Freddy; Häring, Tobias; Mutule, Anna; Lazdins, Roberts; Boršceviskis, Olegs; **Rosin, Argo;** Carroll, Paula Energies 2023 / art. 3476 <https://doi.org/10.3390/en16083476> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Autonomous wireless sensor networks : implementation of transient computing and energy prediction for improved node performance and link quality

Ahmed, Faisal; Kervadec, Corentin; **Le Moullec, Yannick;** Tamberg, Gert; **Annus, Paul** The Computer Journal 2019 / p. 820 - 837 <https://doi.org/10.1093/comjnl/bxy101> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Battery energy storage systems modelling based on remaining useful lifetime through regression algorithms and binary classifiers

Zequera, Rolando Antonio Gilbert 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. 93-94 : ill https://www.ester.ee/record=b5570906*est

Battery size optimization with customer PV installations and domestic load profile

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Jawad, Muhammad; Allik, Alo; **Husev, Oleksandr** IEEE Access 2022 / p. 13012-13025 : ill <https://doi.org/10.1109/ACCESS.2022.3147977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Battery technologies in electric vehicles : improvements in electric battery packs

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Strzelecki, Ryszard; Romero-Cadaval, Enrique; Tokarski, Igor IEEE industrial electronics magazine 2023 / p. 55-65 <https://doi.org/10.1109/MIE.2023.3252265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A benchmark of DC-DC converters for DC fast charging stations of electric vehicles

Mathew, Honey Mol; Arena, Gabriele; **Chub, Andrii;** De Carne, Giovanni; **Vinnikov, Dmitri;** Lukianov, Mykola 2024 9th IEEE Workshop on the Electronic Grid (eGRID) 2024 / 6 p <https://doi.org/10.1109/eGRID62045.2024.10842879>

Bidirectional DC-DC converter for modular residential battery energy storage systems

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

Bidirectional isolated current source DAB converter with extended ZVS/ZCS range and reduced energy circulation for storage applications

Blinov, Andrei; Kosenko, Roman; Vinnikov, Dmitri; Parsa, Leila IEEE transactions on industrial electronics 2020 / p. 10552-10563 <https://doi.org/10.1109/TIE.2019.2958291> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

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

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

Case study of ECD model accuracy in estimating the cell output voltage and power dissipation

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** Doctoral School of Energy and Geotechnology II : closing conference of the project : Pärnu, Estonia, January 12-17, 2015 2015 / p. 45-48 : ill

A case study of optimising energy storage dispatch : convex optimisation approach with degradation considerations

Vaicys, Jonas; Gudžius, Saulius; Jonaitis, Audrius; Rackiene, Roma; **Blinov, Andrei;** Peftitsis, Dimosthenis Journal of energy storage 2024 / art. 112941 <https://doi.org/10.1016/j.est.2024.112941> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Charge Diagnostics and State Estimation of Battery Energy Storage Systems Through Transformer Models

Zequera, Rolando Antonio Gilbert; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants IEEE Access 2025 / p. 17733-17744

: ill <https://doi.org/10.1109/ACCESS.2025.3532858>

Combined active frequency drift islanding detection method for NZEB energy router

Jalakas, Tanel; Roasto, Indrek; Najafzadeh, Mahdiyyeh 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p
<https://doi.org/10.1109/RTUCON48111.2019.8982258>

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

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

Community battery sizing for distribution level RES hosting capacity improvement

Peterson, Kristijan; Shabbir, Noman; Astapov, Victor; Kütt, Lauri; Kamran, Daniel 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p
<https://doi.org/10.1109/RTUCON62997.2024.10830871>

Comparative analysis of high power density bidirectional DC-DC converters for portable energy storage applications

Tytelmaier, Kostiantyn; Zakis, Janis; **Husev, Oleksandr; Vinnikov, Dmitri** Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 33–41 : ill <https://doi.org/10.5755/j01.eie.24.6.22287> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of qZS-based bidirectional DC-DC converter for storage energy application

Matiushkin, Oleksandr; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; Kroics, Kaspars; Veligorskyi, Oleksandr; Zakis, Janis Technological Innovation for Smart Systems : 8th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2017, Costa de Caparica, Portugal, May 3–5, 2017 : proceedings 2017 / p. 409-418
http://dx.doi.org/10.1007/978-3-319-56077-9_40

Comparative evaluation of a DAB converter and SRC for DC buildings application

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Banavath, Satish Naik; **Vinnikov, Dmitri** 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 6 p <https://doi.org/10.1109/PEMC61721.2024.10726346>

Comparative evaluation of multicoil inductive power transfer approaches based on Z-source network

Pakhaliuk, Bohdan; **Husev, Oleksandr**; Strzelecki, Ryszard; Shevchenko, Viktor; Maksym, Khomenko 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON) 2019 / 5 p <https://doi.org/10.1109/UKRCON.2019.8880002>

Comparative feasibility study of partial power converter for interfacing battery energy storage into power system of future circular collider

Chub, Andrii; Niinemägi, Joosep; Colmenero, Manuel; Aguglia, Davide Proceedings of the Estonian Academy of Sciences 2024 / p. 396-415 <https://doi.org/10.3176/proc.2024.4.08>

Comparative review of long-term energy storage technologies for renewable energy systems

Andrijanovičs, Anna; Hõimoja, Hardi; Vinnikov, Dmitri Elektronika ir elektrotehnika = Electronics and electrical engineering 2012 / p. 21-26 : ill

Comparison of full power and partial power buck-boost DC-DC converters for residential battery energy storage applications

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 6 p <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880862>

A comprehensive review on DC fast charging stations for electric vehicles: standards, power conversion technologies, architectures, energy management, and cybersecurity

Arena, Gabriele; **Chub, Andrii**; Lukianov, Mykola; Strzelecki, Ryszard; **Vinnikov, Dmitri**; de Carne, Giovanni IEEE open journal of power electronics 2024 / p. 1573-1611 <https://doi.org/10.1109/OJPEL.2024.3466936> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Construction of nonlinear feedback strategies for energy storage systems : a stochastic dynamic programming approach

Chowdhury, Nilanjan Roy; Baimel, Dmitry; **Belikov, Juri**; Levron, Yoash 2021 IEEE Madrid PowerTech 2021 / 6 p
<https://doi.org/10.1109/PowerTech46648.2021.9494819>

Control of energy storage devices under uncertainty using nonlinear feedback systems

Levron, Yoash; **Belikov, Juri** 2020 IEEE Power & Energy Society General Meeting : (PESGM 2020) Montreal, Quebec, Canada, 2-6 August 2020 : proceedings 2020 / p. 95-99 <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9281879>

Control of multiport partial power converters for PV-battery systems integration in DC microgrids

Yadav, Neelesh; Mitra, Tuhin; Makkieh, Ahmad; Chub, Andrii 2025 IEEE Seventh International Conference on DC Microgrids

Control of ultracapacitors energy exchange [Electronic resource]

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

Controlling a battery energy storage system to support residential photovoltaic installations

Fernao Pires, Vitor; Martins, Joao; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr** 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1769-1774 : ill <https://doi.org/10.1109/ISIE.2017.8001516>

Cooperative control of flywheel energy storage system and diesel generator for frequency regulation of microgrids using digital FIR filters

Faraji, M.; Mahdavi, Mohammad Saeed; **Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227448>

The cost-competitiveness of concentrated solar power with thermal energy storage in power systems with high solar penetration levels

Miron, Dror; Navon, Aviad; Levron, Yoash; **Belikov, Juri**; Rotschild, Carmel Journal of Energy Storage 2023 / art. 108464 <https://doi.org/10.1016/j.est.2023.108464> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cost-effective synthesis of electrodeposited NiCo2O4 nanosheets with induced oxygen vacancies : a highly efficient electrode material for hybrid supercapacitors

Pappu, Samhita; Nanaji, Katchala; **Mandati, Sreekanth**; Rao, Tata Naransinga; **Martha, Surendra K.; Bulusu, Sarada V.** Batteries and supercaps 2020 / p. 1209-1219 <https://doi.org/10.1002/batt.202000121>

CZTS monograin membranes for photoelectrochemical fuel production modifications for fuel production

Kouhiisfahani, Elham; Samiepour, Ali; Morawietz, Tobias; Kraut, Jürgen; Hiesgen, Renate; **Meissner, Dieter** 5th International Conference on Clean Electrical Power : Renewable Energy Resources Impact : Taormina (Italy), 16th-18th June 2015 2015 / p. 222-225 : ill <http://dx.doi.org/10.1109/ICCEP.2015.7177627>

CZTS monograin membranes for photoelectrochemical fuel production preparation and characterization

Samiepour, Ali; Kouhiisfahani, Elham; Galajev, Semjon; Meissner, Dieter 5th International Conference on Clean Electrical Power : Renewable Energy Resources Impact : Taormina (Italy), 16th-18th June 2015 2015 / p. 212-215 : ill <http://dx.doi.org/10.1109/ICCEP.2015.7177625>

CZTS monograin membranes for photoelectrochemical water splitting

Kois, Julia; Galajev, Semjon; Kouhiisfahani, Elham; Neubauer, Christian; Raud, Jaanika; Samiepour, Ali; Taskesen, Teoman; Meissner, Dieter BEC 16 : the 6th Baltic Electrochemistry Conference : Electrochemistry of Functional Interfaces and Materials : 15th-17th June 2016, Helsinki, Finland 2016 / p. 61 : ill

CZTS monograin membranes for photoelectrochemical water splitting

Samiepour, Ali; Kouhiisfahani, Elham; Galajev, Semjon; Morawietz, Tobias; Hiesgen, Renate; **Meissner, Dieter** Autumn School on Microstructural Characterization and Modelling of Thin-Film Solar Cells : Akademie Schmöckwitz, Berlin, Germany, October 9-14, 2016 2016 / [1] p. : ill

Current harmonics of EV chargers and effects of diversity to charging load current distortions in distribution networks

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** 2013 International Conference on Connected Vehicles and Expo (ICCVE) : proceedings : Las Vegas, Nevada, USA, 2-6 December 2013 2013 / p. 726-731 : ill <https://ieeexplore.ieee.org/document/6799884>

Day-ahead economical planning of multi-vector energy district considering demand response program

Ghasemi-Marzbali, Ali; Shafiei, Mohammad; **Ahmadihangar, Roya** Applied energy 2023 / art. 120351 <https://doi.org/10.1016/j.apenergy.2022.120351> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Day-ahead scheduling of electric vehicles and electrical storage systems in smart homes using a novel decision vector and AHP method

Alilou, Masoud; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo**; Anvari-Moghaddam, Amjad Sustainability (Switzerland) 2022 / Art. 11773 <https://doi.org/10.3390/su141811773> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DC-link capacitor minimization in residential energy router through battery utilization

Najafzadeh, Mahdiyyeh; Vinnikov, Dmitri; Husev, Oleksandr; Jalakas, Tanel; Roasto, Indrek 2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Florence, Italy, 14-16 July 2021 2021 / p. 1-6 : ill <https://doi.org/10.1109/CPE-POWERENG50821.2021>

Deep eutectic solvents as phase change materials for efficient thermal energy storage

Rafique, Nouman; Koel, Mihkel; Järvik, Oliver 7th Edition of the Iberoamerican Meeting on Ionic Liquids 2024 / p. 40

https://media.sci-meet.com/imil2024.events.chemistry.pt/5b2baf78-e9f0-4f60-9f54-9a115d3be118/BookAbstracts_IMIL2024_FINAL_2.pdf

Deep Learning methodology for charging management applications in battery cells based on Neural Networks

Zequera, Rolando Antonio Gilbert; Rjabtsikov, Viktor; Rassölkin, Anton; Vaimann, Toomas; Kallaste, Ants IEEE

Transactions on Intelligent Vehicles 2025 / p. 668-682 <https://doi.org/10.1109/TIV.2024.3417216>

Design and Control of Bidirectional Step-Up/Down Partial Power Converters for DC Microgrid Applications = Alalisvoolu mikrovõrkudele osavõimsuse töötusega kahe-suunalise tõste-langetusmuunduri projekteerimine ja juhtimine

Hassanpour, Naser 2025 https://www.ester.ee/record=b5746961*est <https://digikogu.taltech.ee/et/Item/daec7687-5e83-467e-8e6a-45b1e4a15a64> <https://doi.org/10.23658/taltech.30/2025>

Design and implementation of dual-mode LLC resonant converter for charging 400 V and 800 V onboard plug-in electric vehicles

Vinusha, Bussa; Kalpana, R.; Kishan, Dharavath; Chub, Andrii 2025 IEEE 19th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2025 / 6 p <https://doi.org/10.1109/CPE-POWERENG63314.2025.11027270>

Dimensioning of electricity storage according to small wind turbine power generation and household load patterns

Rosin, Argo; Palu, Ivo; Rosin, Kai; Auväärt, Aivar IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5173-5178 : ill

https://www.researchgate.net/publication/261124704_Dimensioning_of_electricity_storage_according_to_small_wind_turbine_power_generation_and_household_load_patterns

Distributed optimal storage strategy in the ADMM-based peer-to-peer energy trading considering degradation cost

Han, Binghui; Zahraoui, Younes; Mubin, Marizan; Mekhilef, Saad; Korõtko, Tarmo; Alshammari, O. Journal of energy storage 2024 / art. 112651 <https://doi.org/10.1016/j.est.2024.112651> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Droop control implementation in bidirectional step-up/down Partial power converter for battery energy storage applications

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 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/RTUCON60080.2023.10413064>

Dual-source Linear Energy Prediction (LINE-P) model in the context of WSNs

Ahmed, Faisal; Tamberg, Gert; Le Moullec, Yannick; Annus, Paul Sensors 2017 / art. 1666, p. 1-22 : ill

<https://doi.org/10.3390/s17071666> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Dynamic behaviour of qZS-based bi-directional DC/DC converter in supercapacitor charging mode [Electronic resource]

Zakis, Janis; Vinnikov, Dmitri; Husev, Oleksandr; Rankis, Ivars SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 764-768 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264554>

An economical optimization for the participation of a residential microgrid in flexibility markets providing ancillary services

Alvi, Anas Abdullah; Gonzalez-Romera, Eva; Romero-Cadaval, Enrique; Vinnikov, Dmitri; Milanes-Montero, Maria Isabel; Barrero-Gonzalez, Fermin 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604394>

Editorial - IEA-ECES Annex 31 special issue on thermal energy storage

Kurnitski, Jarek; Haghighat, Fariborz; Mirzaei, Parham A. Energy and buildings 2015 / p. 1-2

<https://doi.org/10.1016/j.enbuild.2015.08.024> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Eesti energeetika evangelist Karl Kull. Mees, kellele meeldib tegutseda enne kurvi

Saarmann, Tanel delfi.ee 2025 <https://arileht.delfi.ee/artikkel/120361126/persoon-eesti-energeetika-evangelist-karl-kull-mees-kellele-meeldib-tegutseda-enne-kurvi>

Eestis kaitstud doktoritöö pakub uusi lahendusi, mis ei lase elektrit ega soojust raisata

Lepiksaar, Kertu postimees.ee 2024 [Eestis kaitstud doktoritöö pakub uusi lahendusi, mis ei lase elektrit ega soojust raisata](https://postimees.ee/2024/05/24/eestis-kaitstud-doktoritoo-pakub- uusi-lahendusi-mis-ei-lase-elektrit-ega-soojust-raisata)

<https://digikogu.taltech.ee/et/Item/1bf329b0-baf7-4581-866e-fbc147c44d6c>

Eestis kaitstud doktoritöö pakub uusi lahendusi, mis ei lase elektrit ja soojust raisata

Lepiksaar, Kertu postimees.ee 2024 [Eestis kaitstud doktoritöö pakub uusi lahendusi, mis ei lase elektrit ja soojust raisata](#)

Effect of hybrid modulation on performance of wireless battery charger operating in CC/CV mode

Stepins, Deniss; Kathari, N.; Zakis, Janis; **Husev, Oleksandr**; Pakhaliuk, Bohdan; Shevchenko, Viktor IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society 2021 / 6 p <https://doi.org/10.1109/IECON48115.2021.9589544>

The effect of the district heating return temperature reduction on flue gas condenser efficiency

Lepiksaar, Kertu; Volkova, Anna; Rušeljuk, Pavel; Siirde, Andres Environmental and Climate Technologies 2020 / p. 23–38
<https://doi.org/10.2478/rtuct-2020-0083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electric and hybrid vehicles : From smart energy storage systems to mechanical transmission

Sekhri, Even; Mohamed, Mahmoud Ibrahim Hassanin; Zequera, Rolando Antonio Gilbert; Rassõlkin, Anton Smart Electric and Hybrid Vehicles : Advancements in Materials, Design, Technologies, and Modeling 2025 / p. 71-126
<https://doi.org/10.1002/9781394225040.ch3>

Electric lighting predictions in the energy calculation methods

De Luca, Francesco; Simson, Raimo; Voll, Hendrik; Kurnitski, Jarek Improving energy efficiency in commercial buildings and smart communities 2020 / p. 123-141 https://doi.org/10.1007/978-3-030-31459-0_9

Electric vehicle multiport fast charger based on the concept of active power electronic transformer

Jalakas, Tanel; Roasto, Indrek; Gallardo-Lozano, Javier; Romero-Cadaval, Enrique 2014 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe) : Lappeenranta, Finland, 26-28 August 2014. Vol. 3 2014 / p. 2168-2176 : ill

Electrospun nanofibrous materials for energy storage and harvesting

Krasnou, Illia; Plamus, Tiia; Vassiljeva, Viktoria; Malmberg, Siret; Tarasova, Elvira; Krumme, Andres Baltic Polymer Symposium 2019 : Vilnius, Lithuania, 18-20 September 2019 : programme and proceedings 2019 / p. 27 : ill [Molecularly imprinted polymers](#)

Elektrienergia salvestamine

Lehtla, Madis Elektriala 2007 / 2, lk. 12-13

Elektriturg vajab kiiret ajakohastamist. Energeetikaprofessor: „Sõltume täielikult ilmastikust.”

Hallik, Liina ohtuleht.ee 2023 [Elektriturg vajab kiiret ajakohastamist. Energeetikaprofessor: „Sõltume täielikult ilmastikust.”](#)

Energeetikaprofessor elektrikriisist: need, kes on sellised poliitikud valinud, saavad praegu vaid ennast süüdistada [Võrguväljaanne]

Konist, Alar forte.delfi.ee 2022 ["Energeetikaprofessor elektrikriisist: need, kes on sellised poliitikud valinud, saavad praegu vaid ennast süüdistada"](#)

Energeetikas osutub kõige kallimaks teistest sõltumine

Palu, Ivo TööstusEST 2025 / lk. 45 : portr https://www.ester.ee/record=b4481084*est

Energiasalv tulistab vastu: meie pole valeandmeid esitanud, hoopis mäetöösturid eksitavad avalikkust

Puhm, Carl-Robert delfi.ee 2025 <https://arileht.delfi.ee/artikkel/120356792/energiasalv-tulistab-vastu-meie-pole-valeandmeid-esitanud-hoopis-maetosturid-eksitavad-avalikkust> <https://energiasalv.ee/wp-content/uploads/2024/12/TALTECH-GNEISSKILLUSTIKU-KASUTUSELEVOTU-MAJANDUSANALUUS-2024.pdf>

Energiasalvestid ja -salvestustehnoloogiad

Rosin, Argo; Link, Siim; Hõimoja, Hardi; Drovtar, Imre 2015 http://www.ester.ee/record=b4484414*est

Energiatarbimise juhtimisel on tarkades majades kande roll

Rosin, Argo Inseneeria 2014 / lk. 18-19 : ill https://artiklid.elnet.ee/record=b2672914*est

Energiatehnika ja maailm

Risthein, Endel 2013 http://www.ester.ee/record=b2697019*est

Energiatõhususe hindamise ja energiasalvestite arvutuse meetodika linna elektertranspordile

Hõimoja, Hardi 2009 https://www.ester.ee/record=b2559283*est

Energy and buildings. Vol. 106, SI, IEA-ECES Annex 31 special issue on thermal energy storage
2015

Energy harvesting technologies - potential application to wearable health-monitoring

Ahmed, Faisal; Le Moullec, Yannick; Annus, Paul The 10th International Conference on Bioelectromagnetism : proceedings 2015 / [4] p. : ill

Energy industry waste as a thermochemical energy storage resource

Maaten, Birgit; Konist, Alar; Siirde, Andres 5th Central and Eastern European Conference on Thermal Analysis and Calorimetry & 14th Mediterranean Conference on Calorimetry and Thermal Analysis , 27-30 August 2019, Roma, Italy: CEEC-TAC5 & Medicta2019 : book of abstracts 2019 / p. 81 <http://www.ceec-tac.org/download.php?f=../download/BoA%20CEEC-TAC5%20Medicta2019.pdf>

Energy management of an isolated microgrid : a practical case

Ghasemi-Marzbali, Ali; **Ahmadihangar, Roya**; Gouran Orimi, Sina; Shafiei, Mohammad; **Häring, Tobias; Rosin, Argo** IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society, 13-16 October 2021, Toronto, ON, Canada 2021 / 6 p. : ill <https://doi.org/10.1109/IECON48115.2021.9589801> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Energy scheduling and flexibility quantification in buildings

Ahmadihangar, Roya; Blinov, Andrei; Pefitsis, Dimosthenis Distributed energy systems : design, modeling, and control 2023 / p. 249-259 : ill <https://doi.org/10.1201/9781003229124-16>

Energy scheduling of battery storage systems in micro grids

Armstorfer, Andreas; Biechl, Helmuth; **Rosin, Argo** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2017 / p. 27-33 : ill <https://doi.org/10.1515/ecce-2017-0004>

Energy storage and forecasting error impact analysis in photovoltaic equipped residential nano-grids

Hokmabad, Hossein Nouroollahi; Husev, Oleksandr; Belikov, Juri; Vinnikov, Dmitri; Petlenkov, Eduard 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p. <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227406>

Energy storage facilities impact on flexibility of active distribution networks: stochastic approach

Alipour, Manijeh; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako** Electric power systems research 2022 / art. 108645 <https://doi.org/10.1016/j.epsr.2022.108645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Energy storage for 1500 V photovoltaic systems : A comparative reliability analysis of DC-and AC-Coupling

He, Jinkui; Yang, Yongheng; **Vinnikov, Dmitri** Emerging converter topologies and control for grid connected photovoltaic systems 2021 / p. 323-338 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

Energy storage for 1500 V photovoltaic systems : A comparative reliability analysis of DC-and AC-Coupling

He, Jinkui; Yang, Yongheng; **Vinnikov, Dmitri** Energies 2020 / art. 3355, 16 p. : ill <https://doi.org/10.3390/en13133355> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Energy storage for mitigating grid congestion caused by electric vehicles : a techno-economic analysis using a computationally efficient graph-based methodology

Navon, Aviad; Nitskansky, Ran; Lipman, Eshel; **Belikov, Juri**; Gal, Nurit; Orda, Ariel; Levron, Yoash Journal of energy storage 2023 / art. 106324 <https://doi.org/10.1016/j.est.2022.106324> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhancement of residential PV energy storage system by supercapacitor battery – high spatial resolution data analysis

Rogowski, Szymon; **Hasan, Sayeed; Chub, Andrii; Sibinski, Maciej** Proceedings of the Estonian Academy of Sciences 2025 / p. 269-280 <https://doi.org/10.3176/proc.2025.2S.01>

Evaluation of equivalent circuit diagrams and transfer functions for modeling of lithium-ion batteries

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 34-39 : ill

Exhaust air heat pump heat recovery system for apartment buildings

Kõiv, Teet-Andrus; Mikola, Alo; Kuusk, Kalle Lecture Notes in Information Technology. Vol 13, 2012 International Conference on Power and Energy Systems (ICPES 2012), April 12-13, 2012, Hong Kong 2012 / p. 250-255 : 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; **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 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 study of new integrated DC/DC converter for hydrogen-based energy storage

Vinnikov, Dmitri; Andrijanovič, Anna; Roasto, Indrek; Jalakas, Tanel 2011 10th International Conference on Environment and Electrical Engineering (EEEIC), 8-11 May 2011, Rome, Italy : conference proceedings 2011 / [4 p.] : ill
<https://ieeexplore.ieee.org/document/5874667>

Experimental verification of light electric vehicle charger multiport topology

Jalakas, Tanel; Zakis, Janis 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 415-418 : ill
<http://dx.doi.org/10.1109/CPE.2015.7231111>

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>

Exploring the Landscape of End User Energy Flexibility: A Systematic Review of Technologies, Challenges, and Opportunities

Maask, Vahur; Agabus, Hannes; Tiismus, Hans; Astapov, Victor; Ahmadihangar, Roya; Korötko, Tarmo; Rosin, Argo IEEE Access 2025 / p. 146579-146602 <https://doi.org/10.1109/ACCESS.2025.3599989> <https://ieeexplore.ieee.org/document/11129056>

Extended ZVS-On/ZCS-Off range for CF-DAB converter under DCM operation for residential energy storage systems

Carvalho da Silva, Edivan Laercio; Cardoso, Rafael; Felipe, Carla Aparecida; Stein, Carlos Marcelo De Oliveira; Bellinaso, Lucas Vizzotto; Michels, Leandro; **Vinnikov, Dmitri** IEEE Access 2023 / p. 119231-119243 <https://doi.org/10.1109/ACCESS.2023.3327219>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility investigation for residential battery sizing considering EV charging demand

Shabbir, Noman; Kütt, Lauri; Daniel, Kamran; Astapov, Victor; Raja, Hadi Ashraf; Iqbal, Muhammad Naveed; Husev, Oleksandr Sustainability 2022 / art. 1079 <https://doi.org/10.3390/su14031079> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility of solar hybrid energy system at a conservation park: Technical, economic, environmental analysis

Sukumaran, Sreenath; Azmi, Azlin Mohd; Ismail, Zubir Ahmad Mohd Energy reports 2023 / p. 711-719
<https://doi.org/10.1016/j.egy.2022.11.065>

Finding Potential Phase Change Materials Among Ionic Liquids with The Aid of Machine Learning Model

Kaljusmaa, Liisa-Maria; Järvik, Oliver Conference Book : International Conference in Chemistry and Chemical Technology 2023 / p. 71 https://www.cct2023.chgf.vu.lt/images/2023/CCT_2023_Conference_book.pdf

Flexibility investigation of price-responsive batteries in the microgrids cluster

Ahmadihangar, Roya; Azizi, Elnaz; Subham, Sahoo; **Häring, Tobias; Rosin, Argo; Vinnikov, Dmitri;** Dragicevic, Tomislav; Blaabjerg, Frede Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 456-461 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161667>

Flywheel energy storage: principles and possibilities

Hõimoja, Hardi 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 89-92 : ill

A full bridge series-series resonant IPT system optimized for charging electric vehicle batteries across an extensive range

Kishan, Dharavath; Vinod, Marupuru; **Chub, Andrii** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604397>

Full soft-switching bidirectional isolated current-fed dual inductor push-pull DC-DC converter for battery energy storage applications [Online resource]

Kosenko, Roman; Zakis, Janis; Blinov, Andrei; Chub, Andrii; Veligorskyi, Oleksandr 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [8] p. : ill <https://doi.org/10.1109/RTUCON.2016.7763138>

Full-soft-switching high step-up bidirectional isolated current-fed push-pull DC-DC converter for battery energy storage applications [Online resource]

Kosenko, Roman; Chub, Andrii; Blinov, Andrei Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics Society : Florence (Italy), October 24-27, 2016 2016 / p. 6548-6553 : ill <https://doi.org/10.1109/IECON.2016.7794014>
[Conference Proceedings at Scopus](#) [Article at scopus](#) [Article at WOS](#)

Füüsik Jaan Kalda: tuumaenergeetika ohud seonduvad pigem inimliku faktoriga

Kalda, Jaan postimees.ee 2023 [Füüsik Jaan Kalda: tuumaenergeetika ohud seonduvad pigem inimliku faktoriga](#)

FYPsim : an estimation framework for energy harvesting and energy prediction for WSNs

Ahmed, Faisal; Le Moullec, Yannick; Annus, Paul 2016 IEEE International Conference on Consumer Electronics-Taiwan (ICCE-TW) : Nantou County, Taiwan, 27-29 May 2016 2016 / p. 291-292 : ill <https://doi.org/10.1109/ICCE-TW.2016.7521033>

FYPsim : evaluation tool for solar-based energy harvesting for WSNs

Ahmed, Faisal; Le Moullec, Yannick; Annus, Paul International journal of bioelectromagnetism 2015 / p. 75-86 : ill

A generalized control paradigm for storage systems : optimal energy management and stability certificates

Chowdhury, Nilanjan Roy; Baimel, Dmitry; Belikov, Juri; Levron, Yoash IEEE Transactions on Control Systems Technology 2023 / p. 2920-2927 <https://doi.org/10.1109/TCST.2023.3269808> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Grid-forming operation of energy-router based on model predictive control with improved dynamic performance

Najafzadeh, Mahdiyyeh; Strzelecka, Natalia; Husev, Oleksandr; Roasto, Indrek; Nassereddine, Kawsar; Vinnikov, Dmitri; Strzelecki, Ryszard Energies 2022 / 14 p. : ill <https://doi.org/10.3390/en15114010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Blinov, Andrei; Korkh, Oleksandr; Chub, Andrii; Vinnikov, Dmitri; Peftitsis, Dimosthenis; Norrga, Staffan; Galkin, Ilja IEEE transactions on industrial electronics 2022 / p. 1465-1476 : ill <https://doi.org/10.1109/TIE.2021.3060657> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-efficiency partial power converter for integration of second-life battery energy storage systems in DC microgrids

Hassanpour, Naser; Chub, Andrii; Yadav, Neelesh; Blinov, Andrei; Vinnikov, Dmitri IEEE Open Journal of the Industrial Electronics Society 2024 / p. 87850-87863 <https://doi.org/10.1109/OJIES.2024.3389466> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hooratassalvestitest

Hõimoja, Hardi Keskkonnatehnika 2008 / 3, lk. 30-33 : ill https://artiklid.elnet.ee/record=b1021845*est

Hüdroakumulatsioonielektriijaamad Eestisse. Küsimusi rohkem kui vastuseid!

Oidram, Rein Elektriala 2019 / lk. 13-15 : ill http://www.ester.ee/record=b1240496*est

Hydrocharge

Jürgenson, Jagnar; Petersell, Teisi Studioosus 2024 / lk. 43 : fot https://www.ester.ee/record=b1558644*est

Ilmus eestikeelne raamat energiasalvestistest

Ehitaja 2015 / lk. 34 : ill

Impact of load matching algorithms on the battery capacity with different household occupancies

Häring, Tobias; Ahmadiyahangar, Roya; Rosin, Argo; Biechl, Helmut IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 2541-2547 <https://doi.org/10.1109/IECON.2019.8927495> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Impact of power allocation on device-to-device discovery processes

Osman, Essam Abdelsalam; Khan, Muhidul Islam; Elgarhy, Osama Mohamed Mostafa; Reggiani, Luca; Mahtab, Muhammad BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p <https://doi.org/10.1109/BEC.2018.8600961>

Impacts of grid-scale battery systems on power system operation, case of Baltic region

Ahmadiyahangar, Roya; Plaum, Freddy; Häring, Tobias; Drovtar, Imre; Korötko, Tarmo; Rosin, Argo IET Smart Grid 2024 / p. 101-119 <https://doi.org/10.1049/stg2.12142> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impedance network-based diode-clamped multilevel inverter voltage balancing with cascaded voltage multiplier

Ebrahimi, Ali; Babaei, Ebrahim; Mousavi, S. M. J.; Mashinchi Maheri, Hamed; 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/RTUCON60080.2023.10413166>

Implementation issues of droop controlled DC nanogrids: State of charge management of battery energy storage and impact of sensor gain tolerance

Hasan, Sayeed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830832>

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](#)

Interface converters for residential battery energy storage systems : practices, difficulties and prospects

Galkin, Ilja; **Blinov, Andrei**; Vorobyov, Maxim; Bubovich, Alexander; Saltanovs, Rodions; Pefitsis, Dimosthenis Energies 2021 / art. 3365 <https://doi.org/10.3390/en14123365> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ionically conductive monograin membranes

Kouhiisfahani, Elham; **Samiepour, Ali**; Morawietz, Tobias; Handl, Michael; Simolka, Matthias; Hiesgen, Renate; **Meissner, Dieter** Physical Society of Iran Conference 2015 / p. 208-211 : ill

Jõuelektroonik: akupõlenguid õhutab rutiinist toituv turvatunne

Blinov, Andrei novaator.err.ee 2024 [Jõuelektroonik: akupõlenguid õhutab rutiinist toituv turvatunne](#)

Kahes asendis eksponeeritavate vertikaalsete PV-moodulitega heliofarmi kasu

Tomson, Teolan Keskkonnatehnika 2007 / 1, lk. 16-17 : ill https://artiklid.elnet.ee/record=b1020252*est

Kas alternatiivenergeetikal on tulevikku?

Lehtla, Tõnu Elektriala 2000 / 3, lk. 30-31 https://artiklid.elnet.ee/record=b1004203*est

Kinetic energy storage in electric traction applications

Hõimoja, Hardi Tarptähtsuse konverentsis Elektrosirvaldymo technologijos - 2006 : pranešimu medžiaga = Proceedings of International Conference Electrical and Control Technologies - 2006 2006 / p. 401-404 : ill

Kinetic energy storage systems

Hõimoja, Hardi; **Lehtla, Madis** 8th International Workshop on Research and Education in Mechatronics 2007 : 14-15 June 2007, Tallinn, Estonia 2007 / p. 284-288 : ill

Kodumajapidamiste akusalvestid saab panna teenima Eesti elektrisüsteemi huve

Bioneer.ee 2024 [Kodumajapidamiste akusalvestid saab panna teenima Eesti elektrisüsteemi huve](#)

Konist: energia tootmine peaks olema kui supi keetmine, Strandberg: kui taastuvenergiat õnnestub salvestada, siis energiakriise ei saagi tekkida [Võrguväljaanne]

Konist, Alar; Strandberg, Marek pealinn.ee 2022 "[Konist: energia tootmine peaks olema kui supi keetmine. Strandberg: kui taastuvenergiat õnnestub salvestada, siis energiakriise ei saagi tekkida](#)"

Laboratory setup for studying ultracapacitors in industrial applications

Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 77-78 <https://ieeexplore.ieee.org/document/4635561>

Laboratory setup for studying ultracapacitors in industrial applications [Electronic resource]

Roasto, Indrek; **Vinnikov, Dmitri**; **Lehtla, Tõnu** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 2034-2037 : ill. [CD-ROM] <https://ieeexplore.ieee.org/document/4635561>

Mathematical modeling and analysis of a battery energy storage system for microgrids = Mikrovõrkude energiasalvestussüsteemi matemaatiline modelleerimine ja analüüs

Rahmoun, Ahmad 2017 <https://digi.lib.ttu.ee/i/?9116> https://www.ester.ee/record=b4745144*est

Mathematical modeling and dynamic behavior of a lithium-ion battery system for microgrid application

Rahmoun, Ahmad; **Armstorfer, Andreas**; **Helguero Cruz, Jorge Luis**; **Biechl, Helmuth**; **Rosin, Argo** 2016 IEEE International Energy Conference (ENERGYCON) : [Leuven, Belgium, 4-8 April 2016] 2016 / [6] p. : ill <https://doi.org/10.1109/ENERGYCON.2016.7513977>

Mathematical modeling and evaluation of a microgrid demonstrator in island mode

Armstorfer, Andreas; Beg, Nauman; **Rahmoun, Ahmad**; **Rosin, Argo**; **Biechl, Helmuth** NEIS 2017 Conference on Sustainable Energy Supply and Energy Storage Systems : Hamburg, 21 – 22 September 2017 2018 / p. 39-44 : ill <https://neis-conference.com/wordpress/wp-content/uploads/2018/03/Tagungsband-NEIS-2017.pdf> <https://ieeexplore.ieee.org/document/8421809>

Mathematical modeling and stability analysis of a microgrid in island operation

Beg, Nauman; **Armstorfer, Andreas**; **Rosin, Argo**; **Biechl, Helmuth** 2018 International Conference on Smart Energy Systems and Technologies (SEST), 10-12 September, 2018, Seville, Spain : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/SEST.2018.8495694>

Mathematical modeling of a battery energy storage system in grid forming mode

Rahmoun, Ahmad; Armstorfer, Andreas; Biechl, Helmuth; **Rosin, Argo** 2017 IEEE 58th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings : Latvia, Riga, 12-13 October, 2017 2017 / [6] p. : ill <http://dx.doi.org/10.1109/RTUCON.2017.8125625>

Meetod, seade, arvutitoetav andmekandja juhiste salvestamiseks ja tarkvaratoode akude energiasalvestussüsteemi (BESS) haldamiseks, kasutades Kolmogorov-Arnoldi võrke (KAN-e)

Zequera, Rolando Antonio Gilbert 2025 <https://www.etis.ee/Portal/IndustrialProperties/Display/156fcb87-e2dc-46ea-80f0-6345f2b27baa>

Meid valitsevad juhutarkus ja juhuelekter

Rosin, Argo; Landsberg, Mart postimees.ee 2025 [Meid valitsevad juhutarkus ja juhuelekter](#)

Meie elektrisüsteemi arendamine käib hetkemeeleolude alusel

Rajangu, Väino Elektriala 2024 / lk. 24-25 : fot, portr https://www.ester.ee/record=b1240496*est

Meie elektrisüsteemi eripära

Rajangu, Väino Postimees 2024 / lk. 13 <https://dea.digar.ee/article/postimees/2024/10/03/11.5>

Merilin Metsik ja Argo Rosin: mis takistab koduse elektritarbimise juhtimist?

Metsik, Merilin; Rosin, Argo err.ee 2023 [Merilin Metsik ja Argo Rosin: mis takistab koduse elektritarbimise juhtimist?](#)

Mikrovõrk võimaldab energiakasutust tõhusamalt juhtida

Alvela, Ain TööstusEST 2024 / lk. 26-29 : ill https://www.ester.ee/record=b4481084*est

Minimal energy storage required for stability of low inertia distributed sources

Fahima, Aviad; Ofir, Ron; Levron, Yoash; **Belikov, Juri** 2018 5th IEEE International Energy Conference (ENERGYCON), Limassol, Cyprus, June 3-7, 2018 : proceedings 2018 / 5 p. : ill <https://doi.org/10.1109/ENERGYCON.2018.8398775>

Mitigation of pulsed power load effect on power system using FLC-SMES

Salama, Hossam S.; **Bakeer, Abualkasim Ahmed Ali**; Vokony, Istvan; **Chub, Andrii** Energy reports 2022 / p. 463-471 <https://doi.org/10.1016/j.egy.2021.11.054> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modeling battery energy storage systems based on remaining useful lifetime through regression algorithms and binary classifiers

Zequera, Rolando Antonio Gilbert; Rjabtšikov, Viktor; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants Applied sciences 2023 / art. 7597 <https://doi.org/10.3390/app13137597> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modelling of consumption shares for small wind energy prosumers

Annuk, Andres; Yaïci, Wahiba; **Blinov, Andrei**; Märss, Maido; Trashchenkov, Sergei; Miidla, Peep Symmetry 2021 / art. 647 <https://doi.org/10.3390/sym13040647> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modelling of electricity spot price and load forecast based new energy management system for households

Lebedev, Denis; Rosin, Argo 2014 55th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : proceedings 2014 / p. 222-226 : ill

MPC-based optimal control of battery management system in residential application

Tammaru, T.; Hokmabad, Hossein Nourollahi; Levron, Yoash; Belikov, Juri IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863121>

Multi-objective optimization of a plate heat exchanger thermal energy storage with phase change material

Taghavi, Mehrdad; **Ferrantelli, Andrea**; Joronen, Tero Journal of energy storage 2024 / art. 111645 <https://doi.org/10.1016/j.est.2024.111645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multiport DC/DC converters for renewable energy systems : general topologies and control methods

Andrijanovičs, Anna 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. 121 : ill

Multiport DC/DC converters for renewable energy systems : general topologies and control methods

Andrijanovičs, Anna 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 18 of Subsection of Power Electronic Converters and Applications 2012 / 6 p. : ill

Mõne aasta pärast tuleb kõigile uutele majadele paigaldada päikesepaneelid

Pärli, Merilin err.ee 2024 [Mõne aasta pärast tuleb kõigile uutele majadele paigaldada päikesepaneelid](#)

Mäetöösturid: Paldiski vesisalvesti on suurejooneline bluff

postimees.ee 2025 <https://majandus.postimees.ee/8191248/maetoosturid-paldiski-vegisalvesti-on-suurejooneline-bluff> Mäetöösturid: valitsus on langenud suurejoonelise pettuse ohvriks. Paldiski vesisalvesti on bluff! <https://energiasalv.ee/wp-content/uploads/2024/12/TALTECH-GNEISSKILLUSTIKU-KASUTUSELEVOTU-MAJANDUSANALUUS-2024.pdf>

New bi-directional DC/DC converter for supercapacitor interfacing in high-power applications

Vinnikov, Dmitri; Roasto, Indrek; Zakis, Janis EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T11-38 - T11-43 : ill https://www.researchgate.net/publication/224184374_New_bi-directional_DCDC_converter_for_supercapacitor_interfacing_in_high-power_applications

New converter topologies for integration of hydrogen based long-term energy storages to renewable energy systems = Uued muundurite topoloogiad vesinikul põhinevate energiasalvestite integreerimiseks taastuenergiasüsteemidesse

Andrijanovitš, Anna 2013 http://www.ester.ee/record=b2946972*est

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovitš, Anna 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. 123 : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovitš, Anna 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 23 of Subsection of Power Electronic Converters and Applications 2012 / 6 p. : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

New DC/DC converter for electrolyser interfacing with stand-alone renewable energy system

Blinov, Andrei; Andrijanovitš, Anna Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2012 / p. 24-29 : ill <https://intapi.sciendo.com/pdf/10.2478/v10314-012-0004-1>

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>

New Method for Stabilization of Wind Power Generation Using Energy Storage Technology

Andrijanovitš, Anna; Egorov, Mikhail; Lehtla, Tõnu; Vinnikov, Dmitri Agronomy research 2010 / S1, p. 12-24 : ill

New practical approach to input current shaping in AC-DC power converters

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 8 https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

New practical approach to input current shaping in AC-DC power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 154-158 : ill. [CD-ROM] https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

A new virtual synchronous generator design based on the SMES system for frequency stability of low-inertia power grids

Magdy, Gaber; Bakeer, Abualkasim Ahmed Ali; Nour, Morsy; **Petlenkov, Eduard** Energies 2020 / art. 5641, 17 p. : ill <https://doi.org/10.3390/en13215641> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nord Pool Spot price fluctuation analysis for energy management of household appliances

Auväär, Aivar; Rosin, Argo; Müür, Margus; Lebedev, Denis 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. 91-94 : ill

Novel concept of universal AC/DC-DC onboard battery charger for electric vehicles

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144698>

Novel droop control strategy for indirect battery management in DC nanogrids

Roasto, Indrek; Vinnikov, Dmitri; Blinov, Andrei Proceedings of the Estonian Academy of Sciences 2024 / p. 345-355 <https://doi.org/10.3176/proc.2024.4.03>

Nüüdisaegsete energialahenduste otsingul: reis Gotlandile, Bornholmile ja Sams0le

Paenurk, Rainer; Piirsalu, Ingrid Saaremaa Teataja 2024 / lk. 6 [Nüüdisaegsete energialahenduste otsingul: reis Gotlandile, Bornholmile ja Sams0le https://www.ester.ee/record=b4762857*est](https://www.ester.ee/record=b4762857*est)

Operating wireless sensor nodes without energy storage : experimental results with transient computing

Ahmed, Faisal; Ahmed, Tauseef; Muhammad, Yar; **Le Moullec, Yannick; Annus, Paul** Electronics 2016 / art. 89, p. 1-14 : ill <https://doi.org/10.3390/electronics5040089> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Operation of the step-up/down bidirectional partial power converter near zero series voltage

Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; 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-POWERENG58103.2023.10227425>

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>

An optimal control method for storage systems with ramp constraints, based on an on-going trimming process

Zargari, Noa; Ofir, Ron; Chowdhury, Nilanjan Roy; **Belikov, Juri;** Levron, Yoash IEEE Transactions on Control Systems Technology 2023 / p. 493-496 <https://doi.org/10.1109/TCST.2022.3169906> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimal control of energy storage devices based on Pontryagin's minimum principle and the shortest path method

Zargari, Noa; Levron, Yoash; **Belikov, Juri** Proceedings of 2019 IEEE PES : Innovative Smart Grid Technologies Europe : (ISGT-Europe), Bucharest Romania, 29 September – 2 October, 2019 2019 / 5 p <https://doi.org/10.1109/ISGTEurope.2019.8905748>

Optimal control of Lossy energy storage systems with nonlinear efficiency based on dynamic programming and Pontryagin's minimum principle

Chowdhury, Nilanjan Roy; Ofir, Ron; Zargari, Noa; Baimel, Dmitry; **Belikov, Juri;** Levron, Yoash IEEE transactions on energy conversion 2021 / p. 524-533 <https://doi.org/10.1109/TEC.2020.3004191> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimal strategy for comfort-based home energy management system considering impact of battery degradation cost model

Han, Binghui; **Zahraoui, Younes;** Mubin, Marizan; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex Mathematics 2023 / art. 1333 <https://doi.org/10.3390/math11061333> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimal supercapacitor energy storage system sizing for traction substations

Sirmelis, Ugis; **Zakis, Janis;** Grigans, Linards 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 592-595 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266383>

Optimised residential battery energy storage systems

Blinov, Andrei 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. 13-14 https://www.eester.ee/record=b5291755*est

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 renewable energy for buildings with energy storages and 15-minute power balance

Savolainen, Rebecka; Lahdelma, Risto Energy 2022 / art. 123046 <https://doi.org/10.1016/j.energy.2021.123046> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization-based power management for battery/supercapacitor hybrid energy storage system with load estimation capability in a DC microgrid

Farrokhi, Ehsan; Ghoreishy, Hoda; **Ahmadihangar, Roya** International journal of electrical power and energy systems 2024 / art. 109665, 10 p. : ill <https://doi.org/10.1016/j.ijepes.2023.109665> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimized energy scheduling of residential DC building: Case of Nordic climate

Sidorova, Aleksandra; Blinov, Andrei; Ahmadihangar, Roya; Vinnikov, Dmitri; Vösa, Karl-Villem; Kurnitski, Jarek 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227437>

Optimizing building hybrid energy systems for demand response marketplace operation

Savolainen, Rebecka; Einolander, Johannes; Lahdelma, Risto Journal of Energy Storage 2024 / art. 114108
<https://doi.org/10.1016/j.est.2024.114108> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optimizing EV driving-recharge time ratio a under limited grid connection

Tsimomeny, M.; **Hõimoja, Hardi** 7th IET International Conference on Power Electronics, Machines and Drives (PEMD 2014) : Manchester, United Kingdom, 8–10 April 2014. Vol. 2 2014 / p. 903-908 : ill

Optimizing size and economic feasibility assessment of photovoltaic and energy storage setup in residential applications

Nourollahi Hokmabad, Hossein; Husev, Oleksandr; Kurnitski, Jarek; Belikov, Juri Sustainable energy, grids and networks 2024 / art. 101385, 15 p. : ill <https://doi.org/10.1016/j.segan.2024.101385> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optimizing solar energy integration in Tallinn's district heating and cooling systems

Lepiksaar, Kertu; Kajandi, G-M.; **Sukumaran, Sreenath; Krupenski, Igor**; Kirs, Tanel; **Volkova, Anna** Smart Energy 2025 / art. 100166 <https://doi.org/10.1016/j.segy.2024.100166>

Organizational and economic mechanisms for promoting residential battery energy storage systems in Ukraine

Trypolska, Galyna; Kurbatova, Tetiana; Kubatko, Oleksandra; **Prause, Gunnar Klaus**; Domashenko, Maryna International Journal of Energy Economics and Policy 2024 / p. 501-512 <https://doi.org/10.32479/ijep.16385> Journal metrics at Scopus Article at Scopus

Overview of battery energy storage systems readiness for digital twin of electric vehicles

Zequera, Rolando Antonio Gilbert; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants IET Smart Grid 2023 / p. 5-16
<https://doi.org/10.1049/stg2.12101> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Overview of battery energy storage systems readiness for digital twin of electric vehicles

Zequera, Rolando Antonio Gilbert 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 103-104
https://www.ester.ee/record=b5504019*est

An Overview of bidirectional AC-DC grid connected converter topologies for low voltage battery integration

Kroics, Kaspars; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; **Zakis, Janis**; Veligorskyi, Oleksandr International Journal of Power Electronics and Drive System (JPEDS) 2018 / p. 1223-1239 : ill <https://doi.org/10.11591/ijpeds.v9.i3.pp1223-1239>

Overview of bidirectional unfolding converters for battery energy storage systems

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

An overview of wide-voltage range isolated DC-DC converters

Khan, Salman; Chub, Andrii; Vinnikov, Dmitri 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/RTUCON60080.2023.10413144>

Paldiski vesisalvesti arendaja loodab riigile müüa poole miljardi eest gneissi

Hindre, Madis err.ee 2024 [Paldiski vesisalvesti arendaja loodab riigile müüa poole miljardi eest gneissi](https://www.err.ee/1007111/paldiski-vesisalvesti-arendaja-loodab-riigile-muua-poole-miljardi-eest-gneissi)

A penalty scheme for mitigating uninstructed deviation of generation outputs from variable renewables in a distribution market

Yang, Jiajia; Dong, Zhao Yang; **Wen, Fushuan**; Chen, Qixin; Luo, Fengji; Liu, Weijia; Zhan, Junpeng IEEE Transactions on Smart Grid 2020 / p. 4056 - 4069 <https://doi.org/10.1109/TSG.2020.2993049> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Performance analysis of partial power converter in DC microgrid with active front-end converter

Yadav, Neelesh; Hasan, Sayeed; Galkin, Ilya; **Chub, Andrii** 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144718>

Performance and feasibility analysis of electricity price based control models for thermal storages in households

Rosin, Argo; Link, Siim; Lehtla, Madis; Martins, Joao; **Drovtar, Imre; Roasto, Indrek** Sustainable cities and society 2017 / p. 366-374 : ill <https://doi.org/10.1016/j.scs.2017.04.008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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>

Possibilities of stabilising fluctuating wind power with cogeneration power plants

Kuhi-Thalfeldt, Reeli; Valtin, Juhan 5th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology : Kuressaare, January 14-19, 2008 2008 / p. 140-144: ill

Power analyse of a tram system with energy storage devices

Joller, Jüri; Lehtla, Madis BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 395-396

Power converter interfaces for electrochemical energy storage systems - a review

Fernao Pires, Vitor; Romero-Cadaval, Enrique; **Vinnikov, Dmitri; Roasto, Indrek**; Martins, Joao Energy conversion and management 2014 / p. 453-475 : ill <https://doi.org/10.1016/j.enconman.2014.05.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Power Electronic Systems for Efficient and Sustainable Energy Supply

2019 https://www.mdpi.com/journal/energies/special_issues/power_electronic_systems_for_eses

Power interfaces and storage selection for an ultrafast EV charging station

Hõimoja, Hardi; Vasiladiotis, M.; Rufer, A. PEMD 2012 : Power Electronics, Machines and Drives : 27-29 March 2012, University Bristol, UK : [proceedings] 2012 / 6 p. : ill

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

Mashinchi 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>

Practical design guidelines of qZSI based step-up DC/DC converter

Zakis, Janis; Vinnikov, Dmitri; Roasto, Indrek; Jalakas, Tanel Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2010 / p. 107-114 : ill https://www.researchgate.net/publication/258448386_Practical_Design_Guidelines_of_qZSI_Based_Step-Up_DCDC_Converter

Practical use of the energy management system with day-ahead electricity prices

Lebedev, Denis; Rosin, Argo 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 394-398 : ill <http://dx.doi.org/10.1109/PowerEng.2015.7266349>

Profitability of energy storages for household load scheduling

Lebedev, Denis; Rosin, Argo; Auväär, Aivar 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. 70-75 : ill

A promising approach to solid-state hydrogen storage : mechanical nanostructuring synthesis of magnesium by high pressure torsion extrusion

Omranpour Shahreza, Babak; Sergejev, Fjodor; Ivanisenko, Julia; Huot, Jacques Advances in science and technology (volume 134). Materials Engineering and Modern Manufacturing, MeMM 2023 : Selected peer-reviewed extended articles based on abstracts presented at the 30th International Baltic Conference "Materials Engineering and Modern Manufacturing 2023", MeMM 2023. Materials science forum 2023 / p. 43-51 <https://doi.org/10.4028/p-4ccBoQ>

PV module level DC-DC converters with wide input voltage regulation range - implementation challenges and application benefits

Chub, Andrii 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. 25-26 : ill https://www.ester.ee/record=b5183874*est

Päikeseelektri tulva aitaks leevendada kohalik salvestusvõimsus

Alvela, Ain novaator.err.ee 2023 [Päikeseelektri tulva aitaks leevendada kohalik salvestusvõimsus https://digikogu.taltech.ee/et/item/2c178a6b-f918-4932-bd1b-48febf7fc7aa](https://digikogu.taltech.ee/et/item/2c178a6b-f918-4932-bd1b-48febf7fc7aa)

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](#)

Päikesepatareide tulevik

Krustok, Jüri Tehnikamaailm 2012 / 1, lk. 44-46 : ill https://artiklid.elnet.ee/record=b2466680*est

Pööratava heliokollektori kasu

Tomson, Teolan Keskkonnatehnika 2006 / 1, lk. 16-17 https://artiklid.elnet.ee/record=b1018859*est

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>

Real-time optimal power management for a hybrid energy storage system with battery thermal consideration and DC microgrid current estimation capability

Farrokhi, Ehsan; Ghoreishy, Hoda; Ahmadihangar, Roya Electrical Engineering 2024 / p. 4705 - 4718

<https://doi.org/10.1007/s00202-024-02243-9> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Regenerative passive snubber circuit for high-frequency link converters

Blinov, Andrei; Verbytskyi, Ievgen; Peftitsis, Dimosthenis; Vinnikov, Dmitri IEEE journal of emerging and selected topics in industrial electronics 2022 / p. 252 - 257 <https://doi.org/10.1109/JESTIE.2021.3066897>

Reinforcement learning based MIMO controller for virtual inertia control in isolated microgrids

Škiparev, Vjatseslav; Belikov, Juri; Petlenkov, Eduard; Levron, Yoash 2022 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : proceedings 2022 / art. 184786, 5 p. : ill <https://doi.org/10.1109/ISGT-Europe54678.2022.9960447>

Reliability evaluation of the universal power electronic interface converter for PV applications

Khan, Salman; Chub, Andrii; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 8 p <https://doi.org/10.1109/PEMC61721.2024.10726360>

Remote data transfer and comparative performance through PyBaMM and mathematical techniques in battery applications

Zequera, Rolando Antonio Gilbert; Rassölkin, Anton; Belolipetskaja, Diana 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144690>

Research and development of energy storage control strategies for residential area microgrids = Energiasalvestite juhtimisstrateegiate uurimine ja arendamine elamupiirkondade mikrovõrkudele

Häring, Tobias 2022 <https://doi.org/10.23658/taltech.21/2022> <https://digikogu.taltech.ee/et/Item/f8a267fc-bc0b-43be-80d0-b10d151d4174> https://www.ester.ee/record=b5499801*est

Research and development of storage based energy management system for households = Energiasalvestil põhineva energiahaldussüsteemi uurimine ja väljatöötamine kodumajapidamistele

Lebedev, Denis 2017 <https://digi.lib.ttu.ee/i/?7387> https://www.ester.ee/record=b4671372*est

Residential energy management system to support increased renewable penetration = Taastuvenergiaallikate kasutustihedust toetav energiahaldussüsteem

Shabbir, Noman 2022 <https://doi.org/10.23658/taltech.37/2022> <https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48fefb7fc7aa> https://www.ester.ee/record=b5503996*est

A review of optimal control methods for energy storage systems - energy trading, energy balancing and electric vehicles

Machlev, Ram; Zargari, Noa; Chowdhury, N; Belikov, Juri; Levron, Yoash Journal of energy storage 2020 / art. 101787, 16 p

<https://doi.org/10.1016/j.est.2020.101787> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Salvestiga mikrovõrk edendab hajustootmist : [TTÜ energeetikateaduskonna doktorandi Tarmo Korõtko sõnul]

Feldmann, Mati TööstusEST 2016 / lk. 20-23 : ill https://artiklid.elnet.ee/record=b2756749*est

A series partial power converter based on dual active bridge converter for residential battery energy storage system

Hassanpour, Naser; Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Abdelrahim Abdelghafour, Omar Mohamed 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 15-17 Nov. 2021 : conference proceedings 2021 / p. 1-6 : ill <https://doi.org/10.1109/RTUCON53541.2021.9711725>

Single-phase power electronics transformer with active functions for smart grid

Minambres-Marcos, Victor; Roasto, Indrek; Romero-Cadaval, Enrique; Strzelecki, Ryszard; Barrero-Gonzalez, Fermin 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 528-533 : ill <http://dx.doi.org/10.1109/CPE.2015.7231131>

Single-phase qZS-based PV inverter with integrated battery storage for distributed energy generation

Husev, Oleksandr; Makovenko, Elena; Vinnikov, Dmitri; Jalakas, Tanel 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 508-513 : ill <https://doi.org/10.1109/CPE.2018.8372570>

Sissejuhatus energiatehnikasse

Risthein, Endel 2007 http://www.ester.ee/record=b2290665*est

Skeleton ja Taltech teevad Eestist energia salvestamise tehnoloogiate kompetentsikeskuse [Võrguväljaanne]

toostusuudised.ee 2021 "[Skeleton ja Taltech teevad Eestist energia salvestamise tehnoloogiate kompetentsikeskuse](https://www.ester.ee/record=b2290665*est)"

Skeleton Technologies ja Tallinna Tehnikaülikool hakkavad koos arendama Eestit energia salvestamise tehnoloogiate kompetentsi- ja arenduskeskuseks [Võrguväljaanne]

Soft-switching current-FED flyback converter with natural clamping for low voltage battery energy storage applications
Kosenko, Roman; Vinnikov, Dmitri Technological Innovation for Smart Systems : 8th IFIP WG 5.5/SOCOLNET Advanced Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2017, Costa de Caparica, Portugal, May 3–5, 2017 : proceedings 2017 / p. 429–436 https://doi.org/10.1007/978-3-319-56077-9_42 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Solid electrolytes for fluoride ion batteries : ionic conductivity in polycrystalline tysonite-type fluorides
Rongeat, Carine; Reddy, M. Anji; **Witter, Raiker**; Fichtner, Maximilian ACS applied materials and interfaces ACS applied materials & interfaces 2014 / p. 2103-2110 : ill <https://doi.org/10.1021/am4052188> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stability and eigenvalue sensitivity analysis of a BESS model in a microgrid
Rahmoun, Ahmad; Beg, Nauman; **Rosin, Argo**; **Biechl, Helmuth** 2018 IEEE International Energy Conference (ENERGYCON 2018) : Limassol, Cyprus 3-7 June 2018 2018 / p. 342-347 : ill <http://dx.doi.org/10.1109/ENERGYCON.2018.8398792>

Stability and eigenvalue sensitivity analysis of a BESS model in a microgrid 4 Author(s)
Rahmoun, Ahmad; Beg, Nauman; **Rosin, Argo**; **Biechl, Helmuth** 2018 5th IEEE International Energy Conference (ENERGYCON), Limassol, Cyprus, June 3-7, 2018 : proceedings 2018 / 6 p.: ill <https://doi.org/10.1109/ENERGYCON.2018.8398792>

Thermal stability of amine and carboxylic acid based protic ionic liquids from the perspective of thermal energy storage
Kaljusmaa, Liisa-Maria; Tubli, Diandra; Adamson, Jasper; Konist, Alar; Järvik, Oliver Journal of Molecular Liquids 2025 / art. 127396 <https://doi.org/10.1016/j.molliq.2025.127396>

Stochastic energy management for Battery Storage System-based microgrid considering different forecasting models
Zahraoui, Younes; Korötko, Tarmo; **Rosin, Argo**; **Ahmadihangar, Roya** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227451>

Storage for grid deferral : the case of Israel
Gal, Nurit; Navon, Aviad; Ben Yosef, Gefen; Levron, Yoash; **Belikov, Juri** 2021 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 8-21 October, 2021 : proceedings 2021 / 5 p <https://doi.org/10.1109/ISGTEurope52324.2021.9639938>

Study of battery energy storage operation in droop-controlled residential DC nanogrid
Hasan, Sayeed; Chub, Andrii; Vinnikov, Dmitri; Blinov, Andrei 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 5 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604364>

Supported ionic liquids for efficient thermal energy storage
Kaljusmaa, Liisa-Maria; Koel, Mihkel; Järvik, Oliver Euchemsil 2024 : Book of Abstracts 2024 / p. 111 <https://euchemsil2024.org/book-of-abstracts>

Survey of loss minimization methods in tram systems [Electronic resource]
Hõimoja, Hardi; Vinnikov, Dmitri; Lehtla, Madis; Rosin, Argo; Zakis, Janis SPEEDAM 2010 : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Pisa, Italy, 14th-16th June, 2010 : proceedings 2010 / p. 1356-1361 : [CD-ROM] <https://ieeexplore.ieee.org/document/5544863>

Synthesis of fast fluoride-ion-conductive fluorite-type Ba_{1-x}Sb_xF_{2+x} (0.1 ≤ x ≤ 0.4) : a potential solid electrolyte for fluoride-ion batteries
Mohammad, Irshad; Chable, Johann; **Witter, Raiker**; Fichtner, Maximilian; Reddy, M. Anji ACS applied materials and interfaces ACS applied materials & interfaces 2018 / p. 17249–17256 : ill <https://doi.org/10.1021/acsami.8b04108> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tallinna tehnikaülikooli energiaruuter loob majadele omaette elektrivõrgu
Eesti Ekspress 2018 / lk. [23] <https://ekspress.delfi.ee/artikkel/84721243/tallinna-tehnikaulikooli-energiaruuter-loob-majadele-omaette-elektrivorgu>

TalTechi energeetikud esitlesid uudset energiasalvestit
ehitusuudised.ee 2019 [TalTechi energeetikud esitlesid uudset energiasalvestit](#)

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

TalTechi teadlased töötasid välja avatud platvormi energiavoogude juhtimiseks
digi.geenius.ee 2024 [TalTechi teadlased töötasid välja avatud platvormi energiavoogude juhtimiseks](#)

TalTechi teadur tahab viia elektrikulud nulli lähedale

arileht.delfi.ee 2023 [TalTechi teadur tahab viia elektrikulud nulli lähedale](#)

Teadlane: elekter läheb odavamaks, võrgutasud kallimaks

Rosin, Argo novaator.err.ee 2024 [Teadlane: elekter läheb odavamaks, võrgutasud kallimaks](#)

Techno-economic analysis of hydrogen buffers for distributed energy systems

Andrijanoviš, Anna 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. 96-100 : ill

Tehnikaülikooli vastulause: uuringus rakendatud lähteandmed on põhjendatud

postimees.ee 2025 <https://majandus.postimees.ee/8191726/tehnikaulikooli-vastulause-uuringus-rakendatud-lahteandmed-on-pohjendatud>

Tesla konkurendiks pürgiv Eesti superakude tootja Skeleton kutsus Tallinna Tehnikaülikooli appi maailma tippkeskust looma [Võrguväljaanne]

geenius.ee 2021 ["Tesla konkurendiks pürgiv Eesti superakude tootja Skeleton kutsus Tallinna Tehnikaülikooli appi maailma tippkeskust looma"](#)

Testing Mg as an anode against BiF 3 and SnF 2 cathodes for room temperature rechargeable fluoride ion batteries

Mohammad, Irshad; Witter, Raiker Materials Letters 2019 / p. 159 - 162 <https://doi.org/10.1016/j.matlet.2019.02.052> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The role of storage degradation in energy management problems: an optimal control perspective

Chowdhury, Nilanjan Roy; Belikov, Juri; Beck, Yuval; Levron, Yoash; Baimel, Dmitry Journal of Energy Storage 2023 / art. 107412, 10 p <https://doi.org/10.1016/j.est.2023.107412> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Thermal modelling of a control center for flexibility analysis in nZEB nanogrids

Häring, Tobias; Rosin, Argo; Kull, Tuule Mall; Helguero Cruz, Jorge Luis; Biechl, Helmuth 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/RTUCON51174.2020.9316568>

Thermoelectric applications for energy harvesting in domestic applications and micro-production units. Part I : thermoelectric concepts, domestic boilers and biomass stoves

Kütt, Lauri; Millar, John; Karttunen, Antti; Karppinen, Maarit Renewable and Sustainable Energy Reviews 2018 / p. 519-544 <https://doi.org/10.1016/j.rser.2017.03.051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A three-phase full soft-switching current-fed naturally clamped DC-DC converter for high-power energy storage applications

Chub, Andrii; Kosenko, Roman; Blinov, Andrei 2016 2nd International Conference on Intelligent Energy and Power Systems (IEPS) : Kyiv, Ukraine, June 7-11, 2016 : conference proceedings 2016 / [5] p. : ill <https://doi.org/10.1109/IEPS.2016.7521884>

Three-port flyback converter for photovoltaic module integration in bipolar DC microgrids

Chub, Andrii; Zinchenko, Denys; Vinnikov, Dmitri; Blinov, Andrei 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 909-914 <https://doi.org/10.1109/ICIT45562.2020.9067237> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Torque control in blended antilock braking systems of electric vehicles [Online resource]

Vodovozov, Valery; Petlenkov, Eduard; Raud, Zoja; Aksjonov, Andrei BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018 2018 / 4 p.: ill <https://doi.org/10.1109/BEC.2018.8600978>

Towards modern electricity grids

Pikner, Rando 6th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : [Kuressaare, January 12-17, 2009] 2009 / p. 113-116 : ill

Transient computing pour les réseaux de capteurs sans fil à récolte d'énergie : méthodes d'hibernation et aspects architecturaux

Le Moullec, Yannick; Diguët, Jean-Philippe Compas 2016 : Conférence d'informatique en Parallélisme, Architecture et Système 2016 : Lorient, France, 5-8 July 2016 2016 / [8] p

TTÜ energeetikud arendavad Eesti esimest energiasalvestit [Võrguväljaanne]

Lauri, Vahur novaator.err.ee 2019 / video [TTÜ energeetikud arendavad Eesti esimest energiasalvestit](#)

Tuleviku elektriarveid võib vähendada nutikas algoritm [Võrguväljaanne]

Harrik, Airika novaator.err.ee 2022 ["Tuleviku elektriarveid võib vähendada nutikas algoritm"](#)

Ultracapacitors as an innovative teaching topic in Tallinn University of Technology [Electronic resource]

Roasto, Indrek; Vinnikov, Dmitri; Lehtla, Tõnu 19th International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Speedam 2008 : Ischia (Italy), June 11th-13th, 2008 : conference proceedings 2008 / p. 475-480 : ill. [CD-ROM]
<https://www.semanticscholar.org/paper/Ultracapacitors-as-an-innovative-teaching-topic-in-Roasto-Vinnikov/d858917563c7de2fc0ffe1b30c5b39cd08a078db>

Ultrasound assisted mixing of zinc active mass with conductive ceramic additives for Ni-Zn battery

Petrova, V.; Stoyanova-Ivanova, Angelina; Lilov, P.; Petkov, O.; Ivanova, B.; Karamanova, B.; Stoyanova, A.; Mikli, Valdek ECS transactions 2019 / p. 227-234 <https://iopscience.iop.org/article/10.1149/09501.0227ecst> <https://doi.org/10.1149/09501.0227ecst> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Universal galvanically isolated DC-DC converters with topology morphing control = Universaalsed topoloogiat muutva juhtimisega galvaaniliselt isoleeritud alalispingemuundurid

Sidorov, Vadim 2023 <https://doi.org/10.23658/taltech.17/2023> <https://digikogu.taltech.ee/et/Item/96dbe736-5976-431c-ae55-7fc2d4ead55e>
https://www.ester.ee/record=b5558654*est

Universal single-phase voltage converter for illumination, heating and ventilation systems

Gevorkov, Levon 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. 125-128 : ill

Usage models of energy storage systems for optimization of long-term cost to the society

Pärl, Ahto 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. 101-102 : ill https://www.ester.ee/record=b5570906*est

Use of hydrogen and AI as an opportunities to increase energy autarky and create business more sustainable

Krzos, G.; Piwoni-Krzeszowska, E.; Kowalski, J.; Prause, Gunnar Klaus Procedia computer science 2023 / p. 3276-3285
<https://doi.org/10.1016/j.procs.2023.10.321> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Using electric vehicles to enhance power supply resilience of buildings during emergencies and critical situations

Carvalho da Silva, Edivan Laercio; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Kyselova, Anna 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p
<https://doi.org/10.1109/RTUCON62997.2024.10830812>

Utility-scale energy storage systems : a comprehensive review of their applications, challenges, and future directions

Luo, Wensheng; Stynski, Sebastian; Chub, Andrii; Franquelo, Leopoldo G.; Malinowski, Mariusz; Vinnikov, Dmitri IEEE industrial electronics magazine 2021 / p. 17-27 <https://doi.org/10.1109/MIE.2020.3026169> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Utility-scale energy storage systems : converters and control

Stynski, Sebastian; Luo, Wensheng; Chub, Andrii; Vinnikov, Dmitri IEEE industrial electronics magazine 2020 / p. 32-52
<https://doi.org/10.1109/MIE.2020.3011655> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uued materjalid annavad päikeseautodele elulootuse

Sibinski, Maciej novaator.err.ee 2024 [Uued materjalid annavad päikeseautodele elulootuse](#)

Value stream mapping for evaluation of load scheduling possibilities in a district heating plant

Melsas, Raivo; Rosin, Argo; Drovtnar, Imre Transactions on environment and electrical engineering 2016 / p. 62-67 : ill
<http://dx.doi.org/10.22149/teee.v1i3.34>

Value stream mapping for evaluation of load scheduling possibilities in a district heating plant [Electronic resource]

Melsas, Raivo; Rosin, Argo; Drovtnar, Imre 2016 IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC) : 7-10 June 2016, Florence, Italy : conference proceedings 2016 / [6] p. : ill. [CD-ROM]
<https://doi.org/10.1109/EEEIC.2016.7555696>

Vanemteadur: päikeseenergeetika peab muutuma buumi harjal nutikamaks

Oidermaa, Jaan-Juhan novaator.err.ee 2025 <https://novaator.err.ee/1609748670/vanemteadur-paikeseenergeetika-peab-muutuma-buumi-harjal-nutikamaks>

Versatile power electronic building block for residential DC microgrids

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

Vertikaalse, kahetasandiliselt toimiva heliofarmi omadused

Tomson, Teolan TEUK VIII & IX : Taastuvate energiaallikate uurimine ja kasutamine : kaheksanda ja üheksanda konverentsi kogumik 2007 / lk. 65-75 : ill https://artiklid.elnet.ee/record=b1060792*est

Wide voltage gain current-fed isolated buck-boost series-resonant DC-DC converter with active clamp for DC microgrid

applications

Khan, Salman; Chub, Andrii; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald; Sachin, Chauhan 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <https://doi.org/10.1109/ICDCM63994.2025.11144687>
<https://ieeexplore.ieee.org/document/11144687>

Wind park cost efficiency increase through direct cooperation with demand side response provider [Online resource]
Melsas, Raivo; Rosin, Argo; Drovtar, Imre 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [5] p. : ill
<https://doi.org/10.1109/RTUCON.2016.7763119>

Virtsu-Kuivastu liinile hangitakse Eesti esimene elektriläev, mida peab saama toita nii vesiniku kui diisliga
Pau, Aivar forte.delfi.ee 2023 [Virtsu-Kuivastu liinile hangitakse Eesti esimene elektriläev, mida peab saama toita nii vesiniku kui diisliga](https://www.delfi.ee/aiar-pau-virtsu-kuivastu-liinile-hangitakse-eesi-esimene-elektrilae-v-mida-peab-saama-toita-nii-vesiniku-kui-diisliga)

Virtual energy storage model of ventilation system for flexibility service
Maask, Vahur; Rosin, Argo; Korõtko, Tarmo 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227482>

Voltage balancing circuit for modular step-down DC/DC converter
Uljans, Austris; **Zakis, Janis** 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 329-332 : ill

Väljakutsed energeetikas : [avatud platvorm energiavoogude juhtimiseks]
Korõtko, Tarmo Tehnikamaailm 2024 / lk. 74-75 : fot https://www.ester.ee/record=b1073050*est

Üksiku kahepositsiooniliselt juhitava heliokollektori omadused
Tomson, Teolan Taastuvate energiaallikate uurimine ja kasutamine : seitsmenda konverentsi kogumik : [13. okt. 2005], Tartu, Estonia 2006 / lk. 112-121 : ill

Ülikondensaatorid
Vinnikov, Dmitri Elektriala 2002 / 4, lk. 18-19

В будущем "умный" алгоритм сможет уменьшить счета за электричество [Online resource]
Harrik, Airika rus.err.ee 2022 ["В будущем "умный" алгоритм сможет уменьшить счета за электричество"](https://rus.err.ee/2022/05/24/v-budushem-umnyy-algoritm-smozhet-umenshit-scheta-za-elektrichestvo)

Введение в энерготехнику
Risthein, Endel 2008 https://www.ester.ee/record=b2412915*est

Горнодобывающая промышленность: Палдисское водохранилище – большой блеф
rus.postimees.ee 2025 [Горнодобывающая промышленность: Палдисское водохранилище – большой блеф](https://energiasalv.ee/wp-content/uploads/2024/12/TALTECH-GNEISSKILLUSTIKU-KASUTUSELEVOTU-MAJANDUSANALUUS-2024.pdf) <https://energiasalv.ee/wp-content/uploads/2024/12/TALTECH-GNEISSKILLUSTIKU-KASUTUSELEVOTU-MAJANDUSANALUUS-2024.pdf>

Разработчик ГАЭС в Палдиски рассчитывает реализовать гнейс в дорожном строительстве
Hindre, Madis rus.err.ee 2024 [Разработчик ГАЭС в Палдиски рассчитывает реализовать гнейс в дорожном строительстве](https://rus.err.ee/2024/05/24/razrabotchik-gaes-v-paldiski-rasschityvaet-realizovat-gneys-v-dorozhnom-stroitelstve)

Советы ученого: как снизить риск возгорания аккумулятора
Blinov, Andrei nauka.err.ee 2024 [Советы ученого: как снизить риск возгорания аккумулятора](https://nauka.err.ee/2024/05/24/sovet-ucheno-go-kak-snizit-risk-vozgoreniya-akkumulyatora)

Строительные материалы и изделия с дискретными аккумуляторами тепла и влаги : автореф. дисс. на соиск. учен. степ. канд. техн. наук : (05.23.05)
Russ, Malvina 1990 https://www.ester.ee/record=b1562948*est

Строительные материалы и изделия с дискретными аккумуляторами тепла и влаги : автореферат ... кандидата технических наук (05.23.05)
Russ, Malvina 1990 http://www.ester.ee/record=b1562948*est

Строительные материалы и изделия с дискретными аккумуляторами тепла и влаги : дисс. на соиск. учен. степ. канд. техн. наук : 05.23.05 - строительные материалы и изделия
Russ, Malvina 1990

Строительные материалы и изделия с дискретными аккумуляторами тепла и влаги : диссертация ... кандидата технических наук : 05.23.05 - строительные материалы и изделия
Russ, Malvina 1990 http://www.ester.ee/record=b2479687*est