

### **Aasta insener 2021 Argo Rosin: rohepööre tõstab inseneride palgad edetabelite tippu**

**Rosin, Argo** Director. Inseneeria 2022 / lk. 22-29 : fot [https://www.ester.ee/record=b1519314\\*est](https://www.ester.ee/record=b1519314*est) <https://director.ee/2022/01/28/aasta-insener-2021-argo-rosin-rohepoore-tostab-inseneride-palgad-edetabelite-tippu/>

### **Accuracy analysis of selected time series and machine learning methods for smart cities based on Estonian electricity consumption forecast**

**Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Korõtko, Tarmo; Biechl, Helmut** 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 425-428 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161690>

### **Aggregated demand-side energy flexibility : a comprehensive review on characterization, forecasting and market prospects**

**Plaum, Freddy; Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako** Energy reports 2022 / p. 9344-9362 <https://doi.org/10.1016/j.egy.2022.07.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Aggregated energy flexibility provision using residential heat pumps**

**Plaum, Freddy; Ahmadihangar, Roya; Rosin, Argo** 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 5 l <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880898>

### **Aggregation ready flexibility management methods for mechanical ventilation systems in buildings**

**Maask, Vahur; Rosin, Argo; Korõtko, Tarmo; Thalfeldt, Martin; Syri, Sanna; Ahmadihangar, Roya** Energy and buildings 2023 / art. 113369, 14 p. : ill <https://doi.org/10.1016/j.enbuild.2023.113369> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **AI applications for power quality issues in distribution systems : A systematic review**

**Nabian Dehaghani, Mitra; Korõtko, Tarmo; Rosin, Argo** IEEE Access 2025 / p. 18346-18365 2025 <https://doi.org/10.1109/ACCESS.2025.3533702>

### **AI applications to enhance resilience in power systems and microgrids - a review**

**Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex; Alhamrouni, Ibrahim** Sustainability 2024 / art. 4959 <https://doi.org/10.3390/su16124959> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **AI technologies and their applications in small-scale electric power systems**

**Shahid, Arqum; Plaum, Freddy; Korõtko, Tarmo; Rosin, Argo** IEEE Access 2024 / p. 109984-110001 <https://doi.org/10.1109/ACCESS.2024.3440067> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **An application - a web-based electrical drives laboratory : objectives, structure and experiments**

**Rosin, Argo; Möller, Taavi; Hõimoja, Hardi** IECON 2009 : 35th Annual Conference of the IEEE Industrial Electronics Society. ICELE 2009 : 3rd IEEE International Conference on E-learning in Industrial Electronics : Porto, Portugal, 3-5 November 2009 : abstracts 2009 / p. 392 <https://ieeexplore.ieee.org/document/5413215/>

### **Analyse of control and diagnostics problems of trams and development of new systems and methods**

**Rosin, Argo** 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 86-92 : ill

### **Analysis and application of light-technical parameters to assure pedestrian safety on roadway crossings with additional lighting**

**Varjas, Toivo; Armas, Jelena; Rosin, Argo** 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. 148-151 : ill [http://www.ester.ee/record=b4650094\\*est](http://www.ester.ee/record=b4650094*est)

### **Analysis of black start strategies for microgrids with renewable distributed generation**

**Armstorfer, Andreas; Biechl, Helmut; Rosin, Argo** IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 2121-2125 : ill <https://doi.org/10.1109/IECON.2019.8926631> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Analysis of consumer energy flexibility and applicability for power system**

**Metsik, Merilin; Rosin, Argo; Maask, Vahur; Agabus, Hannes** 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon) 2024 / 6 p <https://doi.org/10.1109/RTUCon62997.2024.10830882>

### **Analysis of household electricity consumption patterns and economy of water heating shifting and saving bulbs**

**Rosin, Argo; Möller, Taavi; Lehtla, Madis; Hõimoja, Hardi** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2010 / p. 15-20 : ill

### **Analysis of operation times and electrical storage dimensioning for energy consumption shifting and balancing in**

## residential areas

**Rosin, Argo; Auväär, 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](https://www.researchgate.net/publication/268406195_Analysis_of_Operation_Times_and_Electrical_Storage_Dimensioning_for_Energy_Consumption_Shifting_and_Balancing_in_Residential_Areas)

**Analysis of traditional and alternative methods for solving voltage problems in low voltage grids : an Estonian case study**  
**Rosin, Argo; Drovtar, Imre; Mölder, Heigo; Haabel, Kaija; Astapov, Victor; Vinnal, Toomas; Korõtko, Tarmo** Energies 2022 / art. 1104 <https://doi.org/10.3390/en15031104> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## Analysis of ventilation load flexibility depending on indoor climate conditions

**Maask, Vahur; Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Korõtko, Tarmo** 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 607-612 <https://doi.org/10.1109/ICIT45562.2020.9067153> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

## 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](#)

## ANN-LSTM based tool for photovoltaic power forecasting

**Zahraoui, Younes; Korõtko, Tarmo; Mekhilef, Saad; Rosin, Argo** 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE) : proceedings 2024 / 6 p. : ill <https://doi.org/10.1109/SGRE59715.2024.10428969>

## Applying reinforcement learning method for real-time energy management

**Borhan Dayani, Aida; Fazlollahabadi, Hamed; Ahmadihangar, Roya; Rosin, Argo** 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 5 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783766>

## Argo Rosin : energeetika vajab operatiivset ja arukat tegutsemist

**Rosin, Argo** err.ee 2022 [Argo Rosin: energeetika vajab operatiivset ja arukat tegutsemist](#)

## Argo Rosin, Imre Drovtar: Rohepöõre transpordis on utoopiline [Võrguväljaanne]

**Rosin, Argo; Drovtar, Imre** postimees.ee 2021 ["Argo Rosin, Imre Drovtar: Rohepöõre transpordis on utoopiline"](#)

## Argo Rosin: ilma insenerideta jääks maailm pimedusse

**Rosin, Argo** delfi.ee 2025 <https://arileht.delfi.ee/artikkel/120374509/argo-rosin-ilma-insenerideta-jaaks-maailm-pimedusse>

## Argo Rosin: kas rohepöõre või rohepöörasus? [Võrguväljaanne]

**Rosin, Argo** postimees.ee 2021 ["Argo Rosin: kas rohepöõre või rohepöörasus?"](#)

## Argo Rosin: kuidas kilplased seakisatööstuse abil hirne peletasid [Võrguväljaanne]

**Rosin, Argo** err.ee 2021 / fot [Argo Rosin: kuidas kilplased seakisatööstuse abil hirne peletasid "](#)

## Argo Rosin: Kuidas kilplased vaimult rikkaks ja õnnelikuks said

**Rosin, Argo** Postimees 2018 / lk. 15 [Kuidas kilplased vaimult rikkaks said](#)

## Argo Rosin: rohepöõre, ülikool ja mängurlus [Võrguväljaanne]

**Rosin, Argo** err.ee 2021 ["Argo Rosin: rohepöõre, ülikool ja mängurlus"](#)

## Argo Rosin: teadmiste roll töö(järg)se ühiskonna kujunemisel

**Rosin, Argo** err.ee 2024 [Argo Rosin: teadmiste roll töö\(järg\)se ühiskonna kujunemisel](#)

## Argo Rosin: tõsiroheline pöõre vajab rohkem insenere [Võrguväljaanne]

**Rosin, Argo** aripaev.ee 2021 ["Argo Rosin: tõsiroheline pöõre vajab rohkem insenere"](#)

## Artificial Hummingbird Algorithm For Optimal Reconfiguration Of Electrical Distribution networks

**Zahraoui, Younes; Bouhanik, Anes; Korõtko, Tarmo; Rosin, Argo; Mekhilef, Saad** 2024 IEEE 22nd Mediterranean Electrotechnical Conference (MELECON) 2024 / p. 225-229 <https://doi.org/10.1109/MELECON56669.2024.10608525>

## Assessing demand side flexibility with renewable energy resources [Electronic resource]

**Mishra, Sambeet; Koduvere, Hardi; Palu, Ivo; Kuhi-Thalfeldt, Reeli; Rosin, Argo** 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.2016.7555546>

**Assessment of pedestrian crossings measuring parameters and implementation of new measuring methods in Estonia**  
**Varjas, Toivo; Kuusik, Marko; Armas, Jelena; Rosin, Argo** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 4 p. : ill  
<https://doi.org/10.1109/RTUCON.2018.8659821>

**Assessment of power system asset dispatch under different local energy community business models**  
**Korõtko, Tarmo; Plaum, Freddy; Häring, Tobias; Mutule, Anna; Lazdins, Roberts; Boršcevisks, 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](#)

#### **Automaatika [Võrguväljaanne]**

**Lehtla, Tõnu; Rosin, Argo** 2001 <http://www.ene.ttu.ee/elektriamid/Leonardo/automaatika/index.html>

#### **Awareness of BSR municipalities about sustainable urban lighting and green public procurements**

**Korõtko, Tarmo; Rosin, Argo; Varjas, Toivo; Ahmadihangar, Roya** 2020 IEEE International Conference on Environment and Electrical Engineering and 2020 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Madrid, Spain, 9-12 June 2020 : proceedings 2020 / 6 p. : ill <https://doi.org/10.1109/EEEIC/ICPSEurope49358.2020.9160761>

#### **Bidirectional operation of the power electronic interface for nearly-zero energy buildings**

**Roasto, Indrek; Jalakas, Tanel; Rosin, Argo** 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2456-2464 : ill <https://ieeexplore.ieee.org/document/8515405>

#### **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

#### **Case study of outdoor digital screens effect on drivers**

**Parker, Martin; Rosin, Argo; Antov, Dago; Varjas, Toivo; Möller, Taavi; Gorislavskaja, Inna** 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 7 p  
<https://doi.org/10.1109/RTUCON62997.2024.10830768>

#### **Case study of smart city lighting system with motion detector and remote control**

**Kuusik, Marko; Varjas, Toivo; Rosin, Argo** 2016 IEEE International Energy Conference (ENERGYCON) : [Leuven, Belgium, 4-8 April 2016] 2016 / [5] p. : ill <https://doi.org/10.1109/ENERGYCON.2016.7513906>

#### **Catalytic effect of oil shale ash on CO2 gasification of leached wheat straw and reed chars**

**Link, Siim; Tran, Khanh-Quang; Bach, Quang-Vu; Yrjas, Patrik; Rosin, Argo** Energy 2018 / p. 906-913  
<https://doi.org/10.1016/j.energy.2018.04.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Challenges of smart grids implementation**

**Ahmadihangar, Roya; Rosin, Argo; Palu, Ivo; Azizi, Aydin** Demand-side flexibility in smart grid 2020 / p. 1-15  
[https://doi.org/10.1007/978-981-15-4627-3\\_1](https://doi.org/10.1007/978-981-15-4627-3_1) [Journal metrics at Scopus](#) [Article at Scopus](#)

#### **Characterizing energy flexibility of buildings with electric vehicles and shiftable appliances on single building level and aggregated level**

**Azizi, Elnaz; Ahmadihangar, Roya; Rosin, Argo; Bolouki, Sadegh** Sustainable cities and society 2022 / art. 103999  
<https://doi.org/10.1016/j.scs.2022.103999> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Clustering-based penalty signal design for flexibility utilization**

**Rosin, Argo; Ahmadihangar, Roya; Azizi, Elnaz; Sahoo, Subham; Vinnikov, Dmitri; Blaabjerg, Frede; Dragicevic, Tomislav; Bolouki, Sadegh** IEEE Access 2020 / p. 208850-208860 <https://doi.org/10.1109/ACCESS.2020.3038822> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Comparison between equivalent circuit diagrams and fractional rational functions in the frequency domain for Lithium-ion battery modeling**

**Rahmoun, Ahmad; Biechl, Helmuth; Rosin, Argo** 13th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 14-19, 2013 2013 / p. 55-58 : ill

#### **Comparison of machine learning based methods for residential load forecasting**

**Shabbir, Noman; Ahmadihangar, Roya; Kütt, Lauri; Rosin, Argo** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818267>

#### **Comparison of renewable electricity generation options with household electrical load patterns**

**Auväärt, Aivar; Rosin, Argo; Rosin, Kai; Drovtar, Imre; Lehtla, Madis** Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 1555-1560 : ill

<https://ieeexplore.ieee.org/document/6699364> <https://doi.org/10.1109/IECON.2013.6699364> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### **Comparison of the impact of different household occupancies on load matching algorithms**

**Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo;** Biechl, Helmuth; **Korõtko, Tarmo** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 6 p. : ill <https://doi.org/10.1109/PQ.2019.8818270>

### **A competitive framework for the participation of multi-microgrids in the community energy trading market: A case study**

**Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo;** Zidane, Tekai Eddine Khalil; **Agabus, Hannes;** Mekhilef, Saad IEEE Access 2024 / p. 68232-68248 <https://doi.org/10.1109/ACCESS.2024.3399168> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Complexities associated with modeling of residential electricity consumption**

**Iqbal, Muhammad Naveed; Kütt, Lauri; Rosin, Argo** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659812>

### **A comprehensive market mechanism for decentralized P2P energy trading platform**

**Zahraoui, Younes; Korõtko, Tarmo; Agabus, Hannes; Rosin, Argo** 2024 IEEE 22nd Mediterranean Electrotechnical Conference (MELECON) 2024 / p. 972-977 <https://doi.org/10.1109/MELECON56669.2024.10608740>

### **A conceptual design method for the general electric vehicle**

**Sell, Raivo; Tamre, Mart; Lehtla, Madis; Rosin, Argo** Estonian journal of engineering 2008 / 1, p. 3-16 : ill <https://doi.org/10.3176/eng.2008.1.01>

### **Contribution of nano- and microgrids to topological power plants regarding voltage and frequency control = Nano- ja mikrovõrkude mõju topoloogilistele elektrijaamadele pingele ja sageduse juhtimise kontekstis**

**Helguero Cruz, Jorge Luis** 2023 <https://doi.org/10.23658/taltech.60/2023> <https://digikogu.taltech.ee/et/Item/ccf279f0-5c4e-4784-a6d7-a8c310ac489b> [https://www.ester.ee/record=b5641245\\*est](https://www.ester.ee/record=b5641245*est)

### **Contributions to ventilation system demand response: a case study of an educational building**

**Maask, Vahur; Mikola, Alo; Korõtko, Tarmo; Rosin, Argo; Thalfeldt, Martin** E3S Web Conference: Cold Climate HVAC and Energy 2021 / art. 11001, 6 p <https://doi.org/10.1051/e3sconf/202124611001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Control and operation diagnostics of light rail electric transport : research and development**

**Rosin, Argo** 2011 <https://www.amazon.com/Control-Operation-Diagnostics-Electric-Transport/dp/3844333673>

### **Control basics of a flywheel-powered uninterruptible motor drive**

**Hõimoja, Hardi; Vinnikov, Dmitri; Rosin, Argo** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 289-292 : ill

### **Control of bidirectional grid-forming inverter for nearly zero energy buildings**

**Roasto, Indrek; Jalakas, Tanel; Rosin, Argo** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659848>

### **Control of ultracapacitors energy exchange [Electronic resource]**

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

### **Control strategies of ultracapacitors**

**Roasto, Indrek; Lehtla, Tõnu; Rosin, Argo** 3rd International Symposium "Topical Problems of Education in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology : Kuressaare, Estonia, January 16-21, 2006 2006 / p. 85-88

### **Control, supervision and operation diagnostics of light rail electric transport**

**Rosin, Argo; Lehtla, Tõnu** 2005 [https://www.ester.ee/record=b2073559\\*est](https://www.ester.ee/record=b2073559*est)

### **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>



### **Cost/comfort-oriented clustering-based extended time of use pricing**

**Azizi, Elnaz**; Shotorbani, R.; **Ahmadihangar, Roya**; Mohammadi-Ivatloo, B.; **Rosin, Argo**; Sadiq, R. Sustainable cities and society 2021 / art. 102673, 10 p. : ill <https://doi.org/10.1016/j.scs.2020.102673> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cost-effective optimization of load shifting in the industry by using intermediate storages**

**Uuemaa, Priit**; **Kilter, Jako**; **Valtin, Juhan**; **Drovtar, Imre**; **Rosin, Argo**; **Puusepp, Andres** Conference proceedings of IEEE ISGT Europe 2013 : 4th IEEE/PES Innovative Smart Grid Technologies Europe 2013 / [5] p

### **Cyber-physical microgrids : toward flexible energy districts**

**Rosin, Argo**; **Ahmadihangar, Roya**; Martins, Joao; Sahoo, Subham; Blaabjerg, Frede Cyber Security for Microgrids 2022 / p. 161-178 : ill [https://doi.org/10.1049/PBPO196E\\_ch8](https://doi.org/10.1049/PBPO196E_ch8)

### **Data communication with InTouch application over Windows DDE**

Möller, Taavi; **Rosin, Argo** The 4th Research Symposium of Young Scientists : Actual Problems of Electrical Drives and Industry Automation : Tallinn, Estonia, May 17-21, 2003 2003 / p. 75-76 : ill

### **Data-driven quantification and aggregation of demand-side flexibility for symmetrical bidding in energy balancing markets**

**Shahid, Arqum**; **Ahmadihangar, Roya**; **Kilter, Jako**; **Rosin, Argo** Electric Power Systems Research 2025 / art. 111823 <https://doi.org/10.1016/j.epr.2025.111823>

### **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](#)

### **Defining the light-technical parameters and applying the recommended measuring methods for creating the smart crossings**

**Varjas, Toivo**; **Möller, Taavi**; **Rosin, Argo** 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 111-113 : ill [http://ise.elnet.ee/record=b2950028~S2\\*est](http://ise.elnet.ee/record=b2950028~S2*est)

### **Demand side management in small power systems - the Estonian case study**

**Drovtar, Imre**; **Rosin, Argo**; **Kilter, Jako** Elektronika ir elektrotehnika = Electronics and electrical engineering 2016 / p. 13-19 : ill <https://doi.org/10.5755/j01.eie.22.3.15308> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Demand side management possibilities and viability for voltage support services in Estonia = Tarbimise juhtimise võimaluste uurimine ning rakendatavus pingereguleerimise teenusteks Eestis**

**Drovtar, Imre** 2016 [http://digi.lib.ttu.ee/record=b2950028~S2\\*est](http://digi.lib.ttu.ee/record=b2950028~S2*est) [https://www.ester.ee/record=b4601226\\*est](https://www.ester.ee/record=b4601226*est)

### **Demand side management potential in Estonia - a case study for the wood industry**

**Drovtar, Imre**; **Rosin, Argo**; **Kilter, Jako** 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. 94-97 : ill

### **Demand-side Flexibility in Smart Grid**

**Ahmadihangar, Roya**; **Rosin, Argo**; **Palu, Ivo**; Azizi, Aydin 2020 <https://doi.org/10.1007/978-981-15-4627-3>

### **Design of devices for advanced protection, voltage-quality and load priority control in residential microgrids**

**Lehtla, Madis**; **Rosin, Argo**; **Möller, Taavi**; **Pikner, Rando** EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010 / p. T6-97 - T6-100 <https://ieeexplore.ieee.org/document/5606611> <https://doi.org/10.1109/EPEPEMC.2010.5606611>

### **Design of renewable micro generation monitoring and control application**

**Lehtla, Madis**; **Kõivastik, Ivar**; **Möller, Taavi**; **Kallaste, Ants**; **Rosin, Argo** PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 105-110 : ill

### **Determination methods for controller parameters of back-to-back converters in electric power grids**

Beg, Nauman; **Rahmoun, Ahmad**; **Armstorfer, Andreas**; **Rosin, Argo**; **Biechl, Helmuth** PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 157-164 : ill <https://doi.org/10.1109/PQ.2016.7724106>

### **Determination of the impedance of lithium-ion batteries using methods of digital signal processing**

**Rahmoun, Ahmad**; Loske, Moritz; **Rosin, Argo** Energy procedia 2014 / p. 204-213 : ill <https://doi.org/10.1016/j.egypro.2014.01.174> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Determining optimisation framework for local energy communities**

Drovtar, Imre; **Korõtko, Tarmo**; Mutule, Anna; Kairisa, Evita; **Rosin, Argo** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 7 p <https://doi.org/10.1109/ENERGYCON53164.2022.9830444>

### **Development of a battery sizing tool for nearly zero energy buildings**

**Ahmadihangar, Roya**; Husev, Oleksandr; **Blinov, Andrei**; Karami, Hossein; **Rosin, Argo** IECON 2020 The 46th Annual Conference of the IEEE Industrial Electronics Society 2020 / p. 5149-5154 : ill <https://doi.org/10.1109/IECON43393.2020.9254557>  
[Conference proceeding Article at Scopus Article at WOS](#)

### **Development of control and diagnostics system for Tallinn trams**

**Rosin, Argo**; **Pettai, Elmo**; **Lehtla, Tõnu** BEC 2004 : proceedings of the 9th Biennial Baltic Electronics Conference : October 3-6, 2004, Tallinn, Estonia 2004 / p. 327-330 : ill

### **Development of energy reserve optimization methodology for households with renewable power systems = Taastuva energia allikatega kodumajapidamiste energiareservi optimeerimise meetodika väljatöötamine**

**Auväärt, Aivar** 2014 [http://www.ester.ee/record=b4412783\\*est](http://www.ester.ee/record=b4412783*est)

### **Development of experimental load management system for nearly zero-energy building**

**Maask, Vahur**; **Rosin, Argo**; **Roasto, Indrek** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 5 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659826>

### **Development of prosumer logical structure and object modeling**

**Korõtko, Tarmo**; **Rosin, Argo**; **Ahmadihangar, Roya** 2019 IEEE 13th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : [proceedings] 2019 / 6 p. : ill <https://doi.org/10.1109/CPE.2019.8862390>

### **Development of realtime co-simulation platform harnessing consumer energy flexibility through an aggregator to provide grid support**

**Shabbir, Noman**; **Ahmadihangar, R**; **Rosin, Argo**; **Kilter, Jako**; Martins, Joao IEEE Transactions on Consumer Electronics 2024 / p. 6641-6652 <https://doi.org/10.1109/TCE.2024.3470241> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

### **Digital twins for designing energy management systems for microgrids: Implementation example based on TalTech Campuse project**

**Korõtko, Tarmo**; **Zahraoui, Younes**; **Rosin, Argo**; **Agabus, Hannes** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227475>

### **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](https://www.researchgate.net/publication/261124704_Dimensioning_of_electricity_storage_according_to_small_wind_turbine_power_generation_and_household_load_patterns)

### **Distributed energy supply system for electric vehicles**

**Pettai, Elmo**; **Laugis, Juhan**; **Lehtla, Tõnu**; **Joller, Jüri**; **Rosin, Argo** EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 6 of 7, Mechatronics, industrial drive systems, power electronics and drives in transport, EMC and design of PE systems 2004 / p. 6-218 - 6-221

### **Dual-Mode magnetically integrated photovoltaic microconverter with adaptive mode change and global maximum power point tracking**

**Mashinchi Maheri, Hamed**; **Vinnikov, Dmitri**; **Chub, Andrii**; **Korkh, Oleksandr**; **Rosin, Argo**; Babaei, Ebrahim IET renewable power generation 2021 / p. 86-98 <https://doi.org/10.1049/rpg2.12007> [Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS](#)

### **ECOGRID EU Project – real time price based load control and economic benefits in a wind production based system**

Aleixo, Luis; **Rosin, Argo**; Saele, Hanne; Morch, Andrei Z.; Grande, Ove S.; **Palu, Ivo** CIRED 2013 : 22nd International Conference and Exhibition on Electricity Distribution : special reports 2013 <https://doi.org/10.1049/cp.2013.1253>  
<https://ieeexplore.ieee.org/document/6683856>

### **Economic impact of renewable electricity generation on the Baltic region's electricity market**

**Drovtar, Imre**; Landsberg, Mart; **Kilter, Jako**; **Rosin, Argo** Przegląd elektrotechniczny = Electrical review 2012 / p. 161-165 : ill [https://www.academia.edu/80501050/Economic\\_impact\\_of\\_renewable\\_electricity\\_generation\\_on\\_the\\_Baltic\\_regions\\_electricity\\_market](https://www.academia.edu/80501050/Economic_impact_of_renewable_electricity_generation_on_the_Baltic_regions_electricity_market)

### **Effects of PV microgeneration on rural LV network voltage quality - harmonics and unbalance**

**Hürmeýdan, Semih**; **Rosin, Argo**; **Vinnal, Toomas** PQ2016 : the 10th International Conference 2016 Electric Power Quality and

Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 97-100 : ill  
<https://doi.org/10.1109/PQ.2016.7724096>

#### **Effects of PV microgeneration on rural LV network voltage quality [Online resource]**

**Hürmeydan, Semih; Rosin, Argo; Vinnal, Toomas; Jagomägi, Andri** 2016 57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) : October 13, 14, 2016 : conference proceedings 2016 / [4] p. : ill  
<https://doi.org/10.1109/RTUCON.2016.7763083>

#### **E-laboratory in the field of electrical drives**

**Hõimoja, Hardi; Rosin, Argo; Möller, Taavi; Müür, Margus** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 77 <https://ieeexplore.ieee.org/document/4635560>

#### **E-laboratory in the field of electrical drives [Electronic resource]**

**Hõimoja, Hardi; Rosin, Argo; Möller, Taavi; Müür, Margus** EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 2028-2033 : ill. [CD-ROM]  
<https://ieeexplore.ieee.org/document/4635560>

#### **Electrical drives remote laboratory at the TUT**

**Hõimoja, Hardi; Möller, Taavi; Rosin, Argo; Müür, Margus** 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. 177-182 : ill

#### **Electricity consumption analysis and power quality monitoring in commercial buildings**

**Drovtar, Imre; Niitsoo, Jaan; Rosin, Argo; Kilter, Jako; Palu, Ivo** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 107-112 : ill  
<https://ieeexplore.ieee.org/document/6256212>

#### **Electricity price and load forecast based new energy management system for households**

**Lebedev, Denis; Melentjev, Sergei; Rosin, Argo** 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. 73-77 : ill

#### **Elekter ja soojus**

**Rosin, Argo** Postimees 1999 / 21. jaan., Tallinn, lk. 2

#### **Elektriautode projekt annab unikaalse kogemuse**

**Rosin, Argo** Eesti Päevaleht 2011 / lk. 3

#### **Elektriku kalender 1999**

Jõeveer, Mihkel; **Laugis, Juhan; Lehtla, Tõnu; Risthein, Endel; Rosin, Argo** 1998 [https://www.ester.ee/record=b1194736\\*est](https://www.ester.ee/record=b1194736*est)

#### **Elektritarkvõrgud ja virtuaalsed elektrijaamad**

**Rosin, Argo; Korõtko, Tarmo** TööstusEST 2018 / lk. 32-34 : ill [http://www.ester.ee/record=b4481084\\*est](http://www.ester.ee/record=b4481084*est)  
<https://toostusest.ee/uudis/2018/09/04/virtuaalsed-elektrijaamad/> [https://artiklid.elnet.ee/record=b2865323\\*est](https://artiklid.elnet.ee/record=b2865323*est)

#### **Enam kui 30 aastat koostööd Kempteni Kõrgkooliga**

**Rosin, Argo** Mente et Manu 2023 / lk. 44-45 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

#### **Energeetikaekspertid lasevad valitsusliidu energiaplaani sõelapõhjaks**

Pott, Toomas err.ee 2025 [Energeetikaekspertid lasevad valitsusliidu energiaplaani sõelapõhjaks](#)

#### **Energiasalvestid ja -salvestustehnoloogiad**

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

#### **Energiaatramise juhtimisel on tarkades majades kandev roll**

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

#### **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 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 dimensioning and feasibility analysis for household consumption scheduling based on fluctuations of**

### **Nord Pool Spot price**

**Rosin, Argo; Auväärt, Aivar; Lebedev, Denis** Przegląd elektrotechniczny = Electrical review 2012 / p. 37-40 : ill  
<http://pe.org.pl/articles/2012/1a/7.pdf>

### **Energy storage expansion planning in microgrid**

**Ahmadihangar, Roya; Baharvandi, Amir; Rosin, Argo; Häring, Tobias; Azizi, Elnaz; Korötko, Tarmo; Shabbir, Noman** Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 433-437 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161502>

### **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](#)

### **Enhancing PV hosting capacity and mitigating congestion in distribution networks with deep learning based PV forecasting and battery management**

**Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Daniel, Kamran; Jawad, Muhammad; Husev, Oleksandr; Rosin, Argo; Martins, Joao** Applied energy 2024 / art. 123770 <https://doi.org/10.1016/j.apenergy.2024.123770> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Ettevõtluse ja teaduse koostööst inseneri pilgu läbi**

**Rosin, Argo** Äripäev 2019 / Tööstusuudised, lk. 16-17

### **Euroopa perutav roheratsu**

**Rosin, Argo; Drovtar, Imre** Postimees 2021 / Lk. 6-7

### **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

### **Experimental sand-filter system in Tallinn water treatment plant**

**Rosin, Argo; Laugis, Juhan; Lehtla, Tõnu** PLCOpen-Industrial Control Programming Conference 2000 2000 / p. 6

### **Experimental sand-filter systems in Tallinn Water Treatment Plant**

**Rosin, Argo; Lehtla, Tõnu; Laugis, Juhan** 4th International PLCOpen Conference on Industrial Control Programming : ICP 2000 conference : October 10 and 11, 2000, Utrecht, The Netherlands 2000 / p. 39-44 : ill

### **Experimental water treatment systems control and monitoring via multipoint interface**

**Rosin, Argo; Lehtla, Tõnu** BEC 2002 : proceedings of the 8th Biennial Baltic Electronics Conference : October 6-9, 2002, Tallinn, Estonia 2002 / p. 397-400 : ill

### **Exploratory data analysis for demand-side flexibility quantification**

**Shahid, Arqum; Ahmadihangar, Roya; Rosin, Argo; Maask, Vahur; Martins, João F.** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227408>

### **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>

### **A fast current harmonic detection and mitigation strategy for shunt active filter**

**Firouzjah, Khalil Gorgani; Ahmadihangar, Roya; Rosin, Argo; Häring, Tobias** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019 / 5 p. : ill <https://doi.org/10.1109/PQ.2019.8818253>

### **Flexibility enhancement of hybrid microgrids using optimal H<sup>∞</sup> filtering-based fuzzy control of UIPC**

**Zolfaghari, Mahdi; Ahmadihangar, Roya; Gharehpetian, Gevork B.; Häring, Tobias; Rosin, Argo** Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 451-455 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161545>

### **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>



### **Forecasting available demand-side flexibility**

**Ahmadihangar, Roya; Rosin, Argo; Palu, Ivo;** Azizi, Aydin Demand-side flexibility in smart grid 2020 / p. 39-49  
[https://doi.org/10.1007/978-981-15-4627-3\\_4](https://doi.org/10.1007/978-981-15-4627-3_4) [Journal metrics at Scopus](#) [Article at Scopus](#)

### **Forecasting demand-side flexibility of a household with dynamic consumer behavior analysis**

**Shahid, Arqum; Ahmadihangar, Roya; Rosin, Argo; Korõtko, Tarmo** IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863005>

### **Forecasting PV energy generation using transformer-based architectures: A comparative study of Lag-Llama, TFT, and DeepAR**

**Amjad, Furqan; Korõtko, Tarmo; Rosin, Argo** 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830763>

### **Forecasting short term wind energy generation using machine learning**

**Shabbir, Noman; Ahmadihangar, Roya; Kütt, Lauri; Iqbal, Muhammad Naveed; Rosin, Argo** 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 4 p <https://doi.org/10.1109/RTUCON48111.2019.8982365>

### **GSM and Internet based industry automation systems in the training process**

**Rosin, Argo** Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 96-100 : ill

### **Hoia raha kokku : kuidas kodus säästlikult energiat tarbida**

Kongas, Kerttu Postimehe lisa 2024 [Hoia raha kokku: kuidas kodus säästlikult energiat tarbida](#)

### **A holistic D-PMU optimal placement framework considering pragmatic constraints in smart grids**

Farhizadan, Mohammadreza; Karrari, Mehdi; Gharehpetian, Gevorg B.; **Ahmadihangar, Roya; Kilter, Jako; Rosin, Argo** IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 7 p.  
<https://doi.org/10.1109/CPE-POWERENG54966.2022.9880881>

### **Hybrid Attention-Based LSTM and XGBoost Model for Short-Term Residential Load Forecasting**

**Shabbir, Noman; Shahid, Arqum; Daniel, Kamran; Jawad, M.; Rosin, Argo;** Martins, Joao 2025 IEEE the 13th International Conference on Smart Energy Grid Engineering (SEGE 2025) 2025

### **Hybrid energy storage lifetime-oriented control strategy in islanded microgrids : a real time simulation case study**

**Häring, Tobias; Link, Luca; Rosin, Argo; Biechl, Helmuth** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022  
<https://doi.org/10.1109/ENERGYCON53164.2022.9830437>

### **Identification of Estonian weak low voltage grid topologies [Electronic resource]**

**Vill, Kaija; Rosin, Argo** 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) : 6-9 June, 2017, Milan, Italy : conference proceedings 2017 / [5] p. : ill. [DVD] <https://doi.org/10.1109/EEEIC.2017.7977757>

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

**Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo; Biechl, Helmuth** 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](#)

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

**Ahmadihangar, Roya; Plaum, Freddy; Häring, Tobias; Drovtar, Imre; Korõtko, 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](#)

### **Impacts of large scale wind integration on the Baltic region's thermal power plant economics and electricity market in 2025 [Electronic resource]**

**Drovtar, Imre; Landsberg, Mart; Kilter, Jako; Rosin, Argo** SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 684-689 : ill [CD-ROM]  
[https://www.researchgate.net/publication/261155311\\_Impacts\\_of\\_large\\_scale\\_wind\\_integration\\_on\\_the\\_baltic\\_region's\\_thermal\\_power\\_plant\\_economics\\_and\\_electricity\\_market\\_in\\_2025](https://www.researchgate.net/publication/261155311_Impacts_of_large_scale_wind_integration_on_the_baltic_region's_thermal_power_plant_economics_and_electricity_market_in_2025)

### **Improving dynamic stability of deregulated power system**

Rouhani, Seyed Hossein; **Ahmadihangar, Roya; Häring, Tobias; Rosin, Argo** 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 <https://doi.org/10.1109/RTUCON51174.2020.9316618>

### **Improving Residential Load Forecasting : A Probabilistic Tree-based Approach for Multi-Step Ahead Prediction**

**Shabbir, Noman; Daniel, Kamran; Jawad, M.; Rosin, Argo; Martins, J.** International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST) 2025

**Info-gap-based optimization of microgrids integrated with power, cooling and hydrogen generation units**

**Mahmoudnezhad, Fayeze; Mirzaei, Mohammad Amin; Plaum, Freddy; Ahmadihangar, Roya; Kilter, Jako; Rosin, Argo** 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 7 / <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880860>

**Integrating Attention-Based LSTM with XGBoost for Improved Residential DC Load Forecasting**

**Shabbir, Noman; Shahid, Arqum; Daniel, Kamran; Rosin, Argo; Kilter, Jako; Martins, Joao** 2025 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2025

**Intelligent control and diagnostics system for Tallinn trams**

**Rosin, Argo; Lehtla, Madis; Möller, Taavi** EPE-PEMC 2004 : 11th International Power Electronics and Motion Control Conference : 2-4 September 2004, Riga, Latvia : proceedings. Vol. 6 of 7, Mechatronics, industrial drive systems, power electronics and drives in transport, EMC and design of PE systems 2004 / p. 6-185 - 6-188 : ill

**Investigating different sources of flexibility in power system**

**Ahmadihangar, Roya; Rosin, Argo; Palu, Ivo; Azizi, Aydin** Demand-side flexibility in smart grid 2020 / p. 27-37  
[https://doi.org/10.1007/978-981-15-4627-3\\_3](https://doi.org/10.1007/978-981-15-4627-3_3) [Journal metrics at Scopus](#) [Article at Scopus](#)

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

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

**Kas Eesti kõrgharidus teenindab toodet või klienti?**

**Rosin, Argo** Õpetajate Leht 2015 / lk. 9 <https://opleht.ee/2015/11/kas-eesti-korgharidus-teenindab-toodet-voi-klienti/>

**Kas lollikeste tüssamine või geniaalne leiutus? Hiina imeriist lubab poole väiksemaid elektriarveid.**

**Väli, Kristjan; Rosin, Argo** Õhtuleht 2018 / lk. 4-5

**Kas teaduse indekseerimine on mõistuse mõõteriist või riistapuu?**

**Rosin, Argo** Sirp 2016 / lk. 2 <http://www.sirp.ee/s1-artiklid/c21-teadus/kas-teaduse-indekseerimine-on-moistuse-mootheriist-voi-riistapuu/>

**Kergrööbassõidukite ajamid ja juhtimine**

**Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis** 2008  
[http://www.estar.ee/record=b2394445\\*est](http://www.estar.ee/record=b2394445*est)

**3. liinile sõidab nutikas tramm : trammipark ja tehnikaülikool ehtasid vanast trammist pardaarvutiga sõiduki : [Argo Rosin räägib rekonstrueeritud trammist]**

**Peensoo, Piret; Rosin, Argo** Eesti Päevaleht 2004 / 10. märts, Tallinn, lk. 1 : fot <https://epl.delfi.ee/artikkel/50978611/3-liinile-soidab-nutikas-tramm>

**Kuidas analüüsida valguslahendusi?**

**Puusild, Harro; Rosin, Argo** Äripäev 2016 / Tööstus, lk. 40-41

**Kuldvasikad vs. insenerid**

**Rosin, Argo** Postimees 2019 / lk. 15 <https://arvamus.postimees.ee/6498915/argo-rosin-eestis-kuulatakse-liiga-vahe-inseneride-arvamus>  
<http://dea.digar.ee/publication/postimees>

**Large scale electric vehicle integration and its impact on the Estonian power system**

**Drovtar, Imre; Rosin, Argo; Landsberg, Mart; Kilter, Jako** IEEE PowerTech 2013, Grenoble, France, 16-20 June 2013 : proceedings 2013 / [6] p  
[https://www.researchgate.net/publication/261398872\\_Large\\_scale\\_electric\\_vehicle\\_integration\\_and\\_its\\_impact\\_on\\_the\\_Estonian\\_power\\_system](https://www.researchgate.net/publication/261398872_Large_scale_electric_vehicle_integration_and_its_impact_on_the_Estonian_power_system)

**Large-scale wind integration impact on the Baltic region's electricity market participants in 2025 - with and without RES subsidies**

**Drovtar, Imre; Landsberg, Mart; Kilter, Jako; Rosin, Argo** 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. 117-121 : ill

**Leveraging the machine learning techniques for demand-side flexibility - a comprehensive review**

**Shahid, Arqum; Ahmadihangar, Roya; Rosin, Argo; Blinov, Andrei; Korotko, Tarmo; Vinnikov, Dmitri** Electric power systems research 2025 / art. 111185 <https://doi.org/10.1016/j.epsr.2024.111185>

### **Lifetime-oriented control strategies for hybrid energy storage systems in an islanded microgrid**

**Cinay, Nazli; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Ahmadiyahangar, Roya; Biechl, Helmuth** 2021 22nd IEEE International Conference on Industrial Technology (ICIT) : proceedings 2021 / p. 1-6 <https://doi.org/10.1109/ICIT46573.2021.9453617>  
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Lift monitoring and process control over PLC integrated HTML server**

**Kruus, Reivo; Rosin, Argo; Steinbrunn, Johannes** Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 89-92 : ill

### **Lighting the Baltuc [i.e. Baltic] Sea region - cities accelerate the deployment of sustainable and smart urban solutions**

**Rosin, Argo** 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. 11-12 : map [https://www.ester.ee/record=b5291755\\*est](https://www.ester.ee/record=b5291755*est)

### **Lihtsad sammud elektri säästmiseks**

Kodu & Ehitus : TM 2023 / lk. 40-42 : fot [https://www.ester.ee/record=b1740684\\*est](https://www.ester.ee/record=b1740684*est)

### **Lihtsad sammud, kuidas kodus elektrit säästa**

postimees.ee 2023 [Lihtsad sammud, kuidas kodus elektrit säästa](#)

### **Load control implementation in the energy intensive industry**

**Uuemaa, Priit; Valtin, Juhan; Kilter, Jako; Puusepp, Allan; Drovtar, Imre; Rosin, Argo** 17th IEEE Mediterranean Electrotechnical Conference, Beirut, Lebanon, 13-16 April 2014 2014 / p. 213-218 : ill <https://doi.org/10.1109/MELCON.2014.6820534> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Load flow modelling in local energy community electric power systems**

**Korõtko, Tarmo; Drovtar, Imre; Mutule, Anna; Kairisa, Evita; Rosin, Argo** 2022 IEEE 7th International Energy Conference (ENERGYCON) 2022 / 7 p <https://doi.org/10.1109/ENERGYCON53164.2022.9830203>

### **Load leveling and loss minimization in tram systems - possibilities and challenges**

**Vinnikov, Dmitri; Hõimoja, Hardi; Rosin, Argo; Egorov, Mikhail** Технічна електродинаміка 2009 / Тематический выпуск: Силова електроніка та енергоефективність. 1, с. 83-88 : ill

### **Load shifting in the existing distribution network and perspectives for EV charging - case study**

**Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; Rosin, Argo; Mölder, Heigo** 2014 5th IEEE PES Innovative Smart Grid Technologies Europe (ISGT Europe) : October 12-15, Istanbul 2014 / p. 1-6 : ill

### **Lucia Compendium : Sustainable and Smart Urban Lighting**

**Bunte, Heike; Jacob, Thomas; Haapanen, Topi; Enevold, Sif; Le Moullec, Yannick** 2020 <https://digikogu.taltech.ee/et/Item/f4d273f6-e506-4b7f-b658-13bc225b6960> [https://www.ester.ee/record=b5375097\\*est](https://www.ester.ee/record=b5375097*est)

### **Machine learning and deep learning techniques for residential load forecasting : a comparative analysis**

**Shabbir, Noman; Kütt, Lauri; Raja, Hadi Ashraf; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr** 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2021 / p. 1-5 <https://doi.org/10.1109/RTUCON53541.2021.9711741>

### **Machine learning approach for flexibility characterisation of residential space heating**

**Häring, Tobias; Ahmadiyahangar, Roya; Rosin, Argo; Biechl, Helmuth** IECON 2021 - 47th Annual Conference of the IEEE Industrial Electronics Society, Toronto, Canada, Oct. 13-16, 2021 2021 / 6 p. : ill <https://doi.org/10.1109/IECON48115.2021.9589216>  
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Madal- ja liginullenergiahooned : büroohoonete põhilahendused eskiis- ja eelprojekti**

**Kurnitski, Jarek; Thalfeldt, Martin; Kalamees, Targo; Voll, Hendrik; Uutar, Aivar; Rosin, Argo** 2013

### **Maintenance analyses, control and supervision system design of light rail - an application in Estonia**

**Rosin, Argo; Möller, Taavi; Laugis, Juhan** The 32nd Annual Conference of the IEEE Industrial Electronics Society, Conservatoire National des Arts & Metiers : Paris, France, November 7-10, 2006 2006 / ? p <https://ieeexplore.ieee.org/document/4153101>

### **Market mechanisms and trading in microgrid local electricity markets : a comprehensive review**

**Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo; Agabus, Hannes** Energies 2023 / art. 2145, 52 p. : ill  
<https://doi.org/10.3390/en16052145> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

## **Mathematical modeling and control strategies for islanded microgrids = Saartalitluses mikrovõrkude matemaatilise modelleerimine ja juhtimisstrateegiad**

**Armstorfer, Andreas** 2022 <https://doi.org/10.23658/taltech.71/2022> <https://digikogu.taltech.ee/et/Item/077a5b65-1320-40ac-b105-607deaa9a900> [https://www.ester.ee/record=b5528446\\*est](https://www.ester.ee/record=b5528446*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>

## **Mechatronic - new profession in Estonia**

**Rosin, Argo; Laugis, Juhan; Lehtla, Tõnu** Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists : Tallinn, Estonia, May 31 - June 5, 1999 1999 / p. 79-81 : ill

## **Mechatronics in initial vocational training**

**Rosin, Argo; Lehtla, Tõnu; Laugis, Juhan** The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 225-228 : ill

## **Meid valitsevad juhutarkus ja juhuelekter**

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

## **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?](#)

## **Microgrid oriented modeling of space heating system based on neural networks**

**Häring, Tobias; Kull, Tuule Mall; Ahmadihangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmuth** Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.jobee.2021.103150> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **MicroGRID, ehk, väike-tarkvõrk Tallinna Tehnikaülikoolis**

**Rosin, Argo** Elektriala 2012 / lk. 22-24 : ill [https://artiklid.elnet.ee/record=b2537298\\*est](https://artiklid.elnet.ee/record=b2537298*est)

## **Mida peaks teadma automaatikasüsteemi tellija ja/või projekteerija?**

**Rosin, Argo** Keskkonnatehnika 2007 / 1, lk. 22-23 [https://artiklid.elnet.ee/record=b1020255\\*est](https://artiklid.elnet.ee/record=b1020255*est)

## **Miks liitumakud süttivad? Süüdi on ohtlikud laadijad, löökidest tekkinud mõrad, praak ja kuumus**

**Lõugas, Hans; Rosin, Argo** Eesti Päevaleht 2015 / lk. 18 <https://epl.delfi.ee/artikkel/72276075/miks-liitumakud-syttivad-suudi-on-ohtlikud-laadijad-lookidest-tekkinud-morad-praak-ja-kuumus>

## **Miks peab eri valdkondade areng olema tasakaalus**

**Rosin, Argo** Tallinna Tehnikaülikooli aastaraamat 2013 2014 / lk. 31-35

## **Missugused varutoiteallikad valida, et elada üle elektrikatkestused**

**Thalfeldt, Martin; Rosin, Argo** maakodu.delfi.ee 2023 [Missugused varutoiteallikad valida, et elada üle elektrikatkestused](#)

## **Modeling of demand side management scenarios in apartment buildings**

**Vill, Kaija; Rosin, Argo; Lehtla, Madis** PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 113-118 : ill  
<https://doi.org/10.1109/PQ.2016.7724099>

## **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

**Modernisation issues of diesel-electric shunting locomotive power units**

**Hõimoja, Hardi; Jalakas, Tanel; Rosin, Argo; Rassõlkin, Anton** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering 2010 / p. 57-62 : ill <https://ui.adsabs.harvard.edu/abs/2010SJRP...26...58H/abstract>

**Modernisation of trams in Estonia**

**Laugis, Juhan; Lehtla, Tõnu; Pettai, Elmo; Joller, Jüri; Rosin, Argo; Lehtla, Madis; Vinnikov, Dmitri** The 6-th International Conference on Unconventional Electromechanical and Electrical Systems : UEES'04. Vol. 2 of 3 2004 / p. 561-564

**Multiport interface converter with an energy storage for nanogrids**

**Roasto, Indrek; Rosin, Argo; Jalakas, Tanel** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6088–6093 : ill <https://doi.org/10.1109/IECON.2018.8591104>

**Muutustehirmul on suured silmad**

**Rosin, Argo** Postimees 2019 / lk. 15 [Argo Rosin: teaduse rahastamise muutustes – hirmul on suured silmad](#)

**New approaches for increasing demand-side flexibility**

**Ahmadihangar, Roya; Rosin, Argo; Palu, Ivo; Azizi, Aydin** Demand-side flexibility in smart grid 2020 / p. 51-62 [https://doi.org/10.1007/978-981-15-4627-3\\_5](https://doi.org/10.1007/978-981-15-4627-3_5) [Journal metrics at Scopus](#) [Article at Scopus](#)

**A new master-slave based centralized control method for an AC microgrid with multiple distributed energy resources**

**Habibnia, Saba; Mahdavi, Mohammad Saeed; Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo; Vinnikov, Dmitri** IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 p. <https://doi.org/10.1109/PEDG54999.2022.9923216>

**Non-intrusive load monitoring based smart energy management system for smart buildings**

**Jawad, Muhammad; Shabbir, Noman; Ahmadihangar, Roya; Rosin, Argo; Khaleel, T.; Tahir, W.** 2024 7th International Conference on Information and Computer Technologies (ICICT) : proceedings 2024 / p. 46-50 <https://doi.org/10.1109/ICICT62343.2024.00014>

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

**Auväart, 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

**NordPoolSpot price pattern analysis for households energy management [Electronic resource]**

**Auväart, Aivar; Rosin, Argo; Belonogova, Nadezhda; Lebedev, Denis** CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 103-106 [CD-ROM] <https://www.semanticscholar.org/paper/NordPoolSpot-price-pattern-analysis-for-households-Auvaart-Rosin/8165d88c07fc5c57716b46658ce03035f9182f>

**Novel quantification method of aggregated energy flexibility based on power-duration curves**

**Plaum, Freddy; Rosin, Argo; Ahmadihangar, Roya** IEEE Access 2024 / p. 132825-132837 <https://doi.org/10.1109/ACCESS.2024.3461151> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Nutikas spetsialiseerumine Kilplas : [arvamuslugu]**

**Rosin, Argo** Mente et Manu 2013 / lk. 15 : ill [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Nutikas tramm : [TTÜ teadlaste osalusel rekonstrueeritud trammist]**

**Rosin, Argo** Elektriala 2004 / 2, lk. 16-18 : ill

**On the concept of flexibility in electrical power systems : signs of inflexibility**

**Ahmadihangar, Roya; Rosin, Argo; Palu, Ivo; Azizi, Aydin** Demand-side flexibility in smart grid 2020 / p. 17-26 [https://doi.org/10.1007/978-981-15-4627-3\\_2](https://doi.org/10.1007/978-981-15-4627-3_2) [Journal metrics at Scopus](#) [Article at Scopus](#)

**Operation of district heat network in electricity and balancing markets with the power-to-heat sector coupling**

**Javanshir, Nima; Syri, Sanna; Tervo, Seela; Rosin, Argo** Energy 2023 / art. 126423 <https://doi.org/10.1016/j.energy.2022.126423> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Optimal energy management of grid-connected multi-microgrid systems considering demand-side flexibility : a two-stage multi-objective approach**

**Karimi, Hamid; Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo** Electric power systems research 2023 / art. 108902 <https://doi.org/10.1016/j.epsr.2022.108902> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Optimal operation of district heat network in electricity and balancing markets**

Javanshir, Nima; Syri, Sanna; **Tervo, Seela; Rosin, Argo** SSRN 2022 / 38 | <https://doi.org/10.2139/ssrn.4074474>

### **Optimal scheduling of HVACs in islanded residential microgrids to reduce BESS size considering effect of discharge duration on voltage and capacity of battery cells**

Sanjareh, Mehrdad Bagheri; Nazari, Mohammad Hassan; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo** Sustainable Energy, Grids and Networks 2021 / art. 100424 <https://doi.org/10.1016/j.segan.2020.100424> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Optimization of energy flows in public electric transportation**

**Hõimoja, Hardi; Rosin, Argo** 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. 108-112 : ill

### **Output voltage regulation of isolated PV-vonnected boost converters with variable loads using converted hysteresis sliding mode controller**

Zolfaghari, Mahdi; Zolfaghari, A.; **Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227386>

### **Overview - pumped-hydro energy storage for balancing wind energy forecast errors**

**Raudsaar, Urmas; Drovtar, Imre; Rosin, Argo** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 133-138 : ill

### **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](#)

### **Pitfalls of machine learning methods in smart grids : a legal perspective**

**Antonov, Alexander; Häring, Tobias; Korõtko, Tarmo; Rosin, Argo; Kerikmäe, Tanel; Biechl, Helmuth** 2021 International Symposium on Computer Science and Intelligent Controls : (ISCSIC 2021), 12-14 November 2021, Rome, Italy : proceedings 2021 / p. 248-256 <https://doi.org/10.1109/ISCSIC54682.2021.00053>

### **PLC based control of remote laboratory experiments**

**Möller, Taavi; Rosin, Argo; Hõimoja, Hardi; Müür, Margus** BEC 2008 : 2008 International Biennial Baltic Electronics Conference : proceedings of the 11th Biennial Baltic Electronics Conference : Tallinn University of Technology : October 6-8, 2008, Tallinn, Estonia 2008 / p. 273-276 : ill

### **Potential Assessment of Closed Distribution System Uptake in Estonia**

**Agabus, Hannes; Korõtko, Tarmo; Kull, Katrin; Rosin, Argo; Palu, Ivo** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 5 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227469>

### **Power electronic interface converter for resource efficient buildings**

**Roasto, Indrek; Rosin, Argo; Jalakas, Tanel** IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society : proceedings : China National Convention Center, Beijing, China, 29. October - 01. November, 2017 2017 <https://doi.org/10.1109/IECON.2017.8216617>

### **Power quality improvement in DG based distribution systems : A review**

**Nabian Dehaghani, Mitra; Korõtko, Tarmo; Rosin, Argo** Renewable and Sustainable Energy Reviews 2026 / art. 116184 <https://doi.org/10.1016/j.rser.2025.116184> <https://www.sciencedirect.com/science/article/pii/S1364032125008573>

### **Power smoothing in smart buildings using flywheel energy storage**

**Plaum, Freddy; Häring, Tobias; Ahmadihangar, Roya; Rosin, Argo** Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 473-477 <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161458>

### **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>

### **Process visualization for industry automation study and training process**

**Ristoja, Joel; Rosin, Argo** Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 93-95 : ill

### **Profitability of energy storages for household load scheduling**

**Lebedev, Denis; Rosin, Argo; Auväärt, 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

### **Programmable logic controllers teaching and using in Estonian industry**

**Rosin, Argo** Actual Problems of Electrical Drives and Industry Automation : the research symposium of young scientists, Lohusalu, Estonia, June 1-8, 1997 1997 / p. 42-43

### **Programmeeritavad kontrollid**

**Rosin, Argo** Elektriku kalender 1999 1998 / lk. 156-162: ill

### **Programmeeritavad kontrollid SIMATIC S7**

**Rosin, Argo** 2000 [https://www.ester.ee/record=b1354419\\*est](https://www.ester.ee/record=b1354419*est)

### **Provision of ancillary services of a nanogrid in grid connected mode**

**Helguero Cruz, Jorge Luis; Rosin, Argo; Biechl, Helmuth** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, Estonia, June 12-15, 2019 : proceedings 2019 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818255>

### **Provision of reactive power by nanogrids as part of a topological power plant in a low voltage network**

**Helguero Cruz, Jorge Luis; Galeano, Santiago; Rosin, Argo; Biechl, Helmuth** 3rd International Conference on Smart Energy Systems and Technologies (SEST), Istanbul, Turkey, 7-9 September 2020 2020 / 6 p. : ill <https://doi.org/10.1109/SEST48500.2020.9203456>

### **Prügist elekter ja soojus või haigused**

**Rosin, Argo** Keskkonnatehnika 1999 / 1, lk. 25 [https://artiklid.elnet.ee/record=b1000348\\*est](https://artiklid.elnet.ee/record=b1000348*est)

### **Päike, tuul, vesi ja biomass - elektri mikrotootja visalt ära tasuvad sõbrad**

**Rosin, Argo** Inseneria 2013 / lk. 12-14, 16 : ill [https://artiklid.elnet.ee/record=b2620643\\*est](https://artiklid.elnet.ee/record=b2620643*est)

### **Päikeseenergia rakendamine ja tasuvus Eestis**

**Rosin, Argo** Eesti põlevloodusvarad ja -jätmed 2014 = Estonian combustible natural resources and wastes 2014 2014 / lk. 26-27 : ill

### **Püramiidita ei ole püramiidi tippu : miks peab eri valdkondade areng olema tasakaalus?**

**Rosin, Argo** Sirp 2014 / lk. 34-35 <https://www.sirp.ee/s1-artiklid/c21-teadus/2014-03-06-13-42-37-2/>

### **Raskeid rahapakkisid siiski silm ei näe**

**Rosin, Argo** Postimees 2011 / lk. 13 <https://leht.postimees.ee/395264/argo-rosin-raskeid-rahapakkisid-siiski-silm-ei-nae>

### **Reactive power sharing and voltage control for islanded microgrids at low voltage level**

**Helguero Cruz, Jorge Luis; Hutter, T.; Armstorfer, Andreas; Rosin, Argo; Biechl, Helmuth** 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 133-137 : ill [http://ise.elnet.ee/record=b2950045~S2\\*est](http://ise.elnet.ee/record=b2950045~S2*est)

### **A real-time simulation for P2P energy trading using a distributed algorithm**

**Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo; Khalil Zidane, T. E.; Mekhilef, Saad** IEEE Access 2024 / p. 44135-44146 <https://doi.org/10.1109/ACCESS.2024.3369899> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Reliability and operation diagnostics of light rail electric transport in Estonia [Electronic resource]**

**Rosin, Argo; Lehtla, Tõnu; Möller, Taavi** EPE-PEMC 2006 : 12th International Power Electronics and Motion Control Conference : Portorož, Slovenia, August 30 - September 1, 2006 : proceedings 2006 / p. 1751-1756 : ill. [CD-ROM]

### **Remote laboratory of electrical drives - PLC based control and algorithms**

**Müür, Margus; Möller, Taavi; Hõimoja, Hardi; Rosin, Argo** 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. 128-133 : ill

### **Research and development of electricity auction for microgrids = Mikrovõrkude elektriüksjoni uurimine ja väljatöötamine**

**Korõtko, Tarmo** 2019 <https://digi.lib.ttu.ee/i/?12306>

### **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](https://www.ester.ee/record=b5499801*est)

### **Research and development of explicit demand flexibility management methods for ventilation systems =**

**Ventilatsioonisüsteemidele otsese energiapaindlikkuse juhtimismeetodite uurimine ja arendamine**

**Maask, Vahur** 2023 <https://doi.org/10.23658/taltech.70/2023> <https://digikogu.taltech.ee/et/Item/0aa8feb6-5799-4f78-a035-a0f3d01f4127>  
[https://www.ester.ee/record=b5645517\\*est](https://www.ester.ee/record=b5645517*est)

**Research and development of improved value stream mapping methodology for evaluation of demand side management possibilities in the industry sector = Väärtusahela kaardistamise metoodika uurimine ja arendamine tarbimise juhtimise võimaluste hindamiseks tööstussektoris**

**Melsas, Raivo** 2018 <https://digi.lib.ttu.ee/i/?9925> [https://www.ester.ee/record=b5051133\\*est](https://www.ester.ee/record=b5051133*est)

**Research and development of measurement solution and methodology for assessment of light reflection from surfaces = Mõõtelahenduse ja -metoodika uurimine ning arendamine pindadelt valguse peegeldumise hindamiseks**

**Varjas, Toivo** 2021 [https://www.ester.ee/record=b5473279\\*est](https://www.ester.ee/record=b5473279*est) <https://digikogu.taltech.ee/et/Item/8a29147b-e21f-4273-aa1e-424bce74d20e>  
<https://doi.org/10.23658/taltech.60/2021>

**Research and development of quantification methods for aggregated energy flexibility = Agregeeritud energiapaindlikkuse kvantifitseerimismeetodi uurimine ja arendamine**

**Plaum, Freddy** 2025 <https://digikogu.taltech.ee/et/Item/3e244995-0b3a-4efd-8f68-6e7e4268576f> [https://www.ester.ee/record=b5746292\\*est](https://www.ester.ee/record=b5746292*est)  
<https://doi.org/10.23658/taltech.28/2025>

**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](https://www.ester.ee/record=b4671372*est)

**Residential DC load forecasting using long short-term memory network (LSTM)**

**Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr; Jalakas, Tanel; Martins, Joao** 2023 IEEE 11th International Conference on Smart Energy Grid Engineering (SEGE) 2023 / p. 131-136  
<https://doi.org/10.1109/SEGE59172.2023.10274596>

**Residential electricity consumption and loads pattern analysis**

**Rosin, Argo; Hõimoja, Hardi; Möller, Taavi; Lehtla, Madis** PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 111-116 : ill

**Residential energy flexibility characterization using non-intrusive load monitoring**

**Azizi, Elnaz; Ahmadiyahangar, Roya; Rosin, Argo; Martins, Joao; Lopes, Rui Amaral; Beheshti, M. TH.; Bolouki, Sadegh** Sustainable cities and society 2021 / art. 103321, 12 p. : ill <https://doi.org/10.1016/j.scs.2021.103321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Residential load forecasting for flexibility prediction using machine learning-based regression model**

**Ahmadiyahangar, Roya; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Martins, Joao** 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 4 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783634>

**Residential load forecasting using recurrent neural networks**

**Shabbir, Noman; Ahmadiyahangar, Roya; Raja, Hadi Ashraf; Kütt, Lauri; Rosin, Argo** 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 478-481 : ill  
<https://doi.org/10.1109/CPE-POWERENG48600.2020.9161565>

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

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

**A review on realtime simulation and analysis methods of microgrids**

**Ahmadiyahangar, Roya; Rosin, Argo; Nabavi Niaki, Ali; Palu, Ivo; Korõtko, Tarmo** International transactions on electrical energy systems 2019 / art. e12106, 16 p. : ill <https://doi.org/10.1002/2050-7038.12106> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Roheenergia juhuslikkusest aitab kasu lõigata nutikas ventilatsioonisüsteem**

**Rosin, Argo; Maask, Vahur** novaator.err.ee 2024 [Roheenergia juhuslikkusest aitab kasu lõigata nutikas ventilatsioonisüsteem](#)

**Rohepöörde ning ringmajanduse mõjud ja võimalused?**

**Rosin, Argo** Elektriala 2021 / lk. 8-9 : fot [https://www.ester.ee/record=b1240496\\*est](https://www.ester.ee/record=b1240496*est)

**Rohkem kõrghaljastust, vähem reklaami ja fassaadivalgustust. Avalda oma arvamust: kuidas vähendada linnas valgusreostust**

**Paavo, Vambola** pealinn.ee 2023 [Rohkem kõrghaljastust, vähem reklaami ja fassaadivalgustust. Avalda oma arvamust: kuidas vähendada linnas valgusreostust](#) KÜSITLUS Tallinn soovib välja selgitada, millised valgusobjektid linlasi enim häirivad



**Saateks**

**Rosin, Argo** Programmeeritavad kontrollid SIMATIC S7 2000 / lk. 3 [https://www.ester.ee/record=b1354419\\*est](https://www.ester.ee/record=b1354419*est)

**100% taastuenergia - kas rikkus või vaesus?**

**Rosin, Argo** Tallinna Tehnikaülikooli aastaraamat 2012 2013 / lk. 26-28

**Search algorithm development for novel electricity auction in microgrids**

**Korõtko, Tarmo; Rosin, Argo** 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTU) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUON.2018.8659820>

**"Seenelkäik" hariduspoliitika**

**Rosin, Argo** Postimees 2017 / lk. 17

**Sekundaarelemendid ja -patareid, mis sisaldavad leeliseli või teisi mittehappelisi elektrolüüte. Liitumpatareid ja sekundaarelemendid kaasaskantavatele rakendustele = Secondary cells and batteries containing alkaline or other non-acid electrolytes. Secondary lithium cells and batteries for portable applications (IEC 61960:2011)**

2012 [https://www.ester.ee/record=b2746738\\*est](https://www.ester.ee/record=b2746738*est)

**Short-term PV energy generation forecasting using deep learning**

**Shabbir, Noman; Ahmadhanger, Roya; Rosin, Argo; Astapov, Victor; Kilter, Jako** Telematique 2022

<https://www.provinciajournal.com/index.php/telematique/article/view/813>

**Short-term residential DC load forecasting using extreme gradient boost (XgBoost) algorithm**

**Shabbir, Noman; Husev, Oleksandr; Daniel, Kamran; Jawad, Muhammad; Rosin, Argo; Martins, Joao** 2024 IEEE 18th

International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p

<https://doi.org/10.1109/CPE-POWERENG60842.2024.10604392>

**Simulation of real time electricity price based energy management system [Online resource]**

**Lebedev, Denis; Rosin, Argo; Kütt, Lauri** Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics

Society : Florence (Italy), October 24-27, 2016 2016 / p. 2106-2110 : ill <https://doi.org/10.1109/IECON.2016.7793991> [Conference](#)

[Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**SOC estimation for Li-Ion batteries based on equivalent circuit diagrams and the application of a Kalman filter**

**Rahmoun, Ahmad; Biechl, Helmuth; Rosin, Argo** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply

Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 273-276 : ill

[https://www.researchgate.net/publication/261507418\\_SOC\\_estimation\\_for\\_Li-ion\\_batteries\\_based\\_on\\_equivalent\\_circuit\\_diagrams\\_and\\_the\\_application\\_of\\_a\\_Kalman\\_filter](https://www.researchgate.net/publication/261507418_SOC_estimation_for_Li-ion_batteries_based_on_equivalent_circuit_diagrams_and_the_application_of_a_Kalman_filter)

**Solutions and active measures for wind power integration**

**Rosin, Argo; Drovtar, Imre; Kilter, Jako** Large scale grid integration of renewable energy sources 2017 / p. 87-129 : ill

<http://dx.doi.org/10.1049/PBPO098E>

**Solutions and active measures for wind power integration**

**Rosin, Argo; Drovtar, Imre; Kilter, Jako** Large Scale Grid Integration of Renewable Energy Sources : Solutions and technologies

(2nd Ed.) 2024 / p. 91-138 <https://doi.org/10.1049/PBPO222E>

**Stability analysis of a nanogrid considering communication delay time**

**Helguero Cruz, Jorge Luis; Rosin, Argo; Biechl, Helmuth** Stability Analysis of a Nanogrid Considering Communication Delay

Time : 10th International Conference on Electrical and Electronics Engineering (ICEEE), Istanbul, Türkiye, 08-10 May 2023 2023 / p.

139-143 : ill <https://doi.org/10.1109/ICEEE59925.2023.00033>

**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>

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

**Beg, Nauman; Biechl, Helmuth; Rosin, Argo** 2020 2nd Global Power, Energy and Communication Conference (GPECOM) 2020

IEEE 2nd Global Power, Energy and Communication Conference (GPECOM) :Online Conference, 20-23 October, 2020 :

proceedings 2020 / p. 196-201 : ill <https://doi.org/10.1109/GPECOM49333.2020.9247913>

**Stability issues with network impedances and its mitigation in islanded microgrids**

**Beg, Nauman;** Biechl, Helmuth; **Rosin, Argo** NEIS 2019 : Conference on Sustainable Energy Supply and Energy Storage Systems Hamburg, 19-20 September, 2019 2019 / p. 189-194 <https://10times.com/neis-germany> <https://www.vde-verlag.de/buecher/565152/neis-2019.html>

#### **Startup sequence for a grid connected single phase voltage source inverter**

**Roasto, Indrek; Jalakas, Tanel; Rosin, Argo** 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1787-1791 : ill <https://doi.org/10.1109/ISIE.2017.8001519>

#### **State of charge estimation for Li-ion batteries based on equivalent circuit diagrams and the application of a Kalman filter**

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** 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. 125-128 : ill

#### **State-of-the-Art Review of Emerging Trends in Renewable Energy Generation Technologies**

**Tiismus, Hans; Maask, Vahur; Astapov, Victor; Korõtko, Tarmo; Rosin, Argo** IEEE Access 2025 / p. 10820 - 10843 <https://doi.org/10.1109/ACCESS.2025.3528640>

#### **Stochastic energy management for Battery Storage System-based microgrid considering different forecasting models**

**Zahraoui, Younes;** Korõtko, 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>

#### **A study of different aspects for building a thermal model for lithium-ion cells**

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** 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. 47-52 : ill

#### **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>

#### **Suured muutused energeetikas - meie valikutest sõltub nende mõju**

**Rosin, Argo** TööstusEST 2022 / lk. 44-47 : ill [http://www.ester.ee/record=b4481084\\*est](http://www.ester.ee/record=b4481084*est) <https://toostusest.ee/uudis/2022/12/16/suured-muutused-energeetikas-meie-valikutest-soltub-nende-moju/>

#### **Tallinna valgusreostus luubi all**

**Rosin, Argo; Varjas, Toivo** EhitusEST ehitusest.ee novaator.err.ee 2023 / lk. 20-23 <https://novaator.err.ee/1609115420/tallinna-valgusreostus-on-koroona-jarel-huppeliselt-kasvanud> <https://ehitusest.ee/uudis/2023/10/12/tallinna-valgusreostus-luubi-all/> [https://www.ester.ee/record=b4442657\\*est](https://www.ester.ee/record=b4442657*est)

#### **Tarbimise juhtimine : suurtarbijate koormusgraafikute salvestamine ning analüüs juhtimise rakendamise võimaluste tuvastamiseks**

**Rosin, Argo; Drovtar, Imre; Link, Siim; Hõimoja, Hardi; Mölder, Heigo; Möller, Taavi** 2014 [https://www.ester.ee/record=b4432844\\*est](https://www.ester.ee/record=b4432844*est)

#### **Tarkvõrk : terminoloogia = Smart grid : terminology [Võrguteavik]**

2016 [http://www.ester.ee/record=b4615584\\*est](http://www.ester.ee/record=b4615584*est)

#### **Teadlane: elekter läheb odavamaks, võrgutasud kallimaks**

**Rosin, Argo** novaator.err.ee 2024 [Teadlane: elekter läheb odavamaks, võrgutasud kallimaks](https://novaator.err.ee/1609115420/teadlane-elekter-laheb-odavamaks-vorgutasud-kallimaks)

#### **Tehisintellekt päästab tuleviku tarkvõrgud halvast elektrist**

**Rosin, Argo** novaator.err.ee 2021 ["Tehisintellekt päästab tuleviku tarkvõrgud halvast elektrist"](https://novaator.err.ee/1609115420/tehisintellekt-paastab-tuleviku-tarkvorgud-halvast-elektrist)

#### **Teleservice and monitoring via internet using a webcam and HMI software**

**Liiva, Anti; Rosin, Argo;** Steinbrunn, Johannes Actual Problems of Electrical Drives and Industry Automation : the 3rd Research Symposium of Young Scientists : Tallinn, Estonia, May 19-26, 2001 2001 / p. 85-88 : ill

#### **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>

#### **Toiteliiniga seotud sõidukite energiavahetuse juhtimissüsteem : EE200200424**

**Pettai, Elmo; Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo** 2004 <https://www1.epa.ee/patent/data.asp?NroParam=P200200424&ID=X551997&NID=&offset=&HKR=> <https://www1.epa.ee/patent/kirjeldus/P200200424.pdf>

## **Traction and control of light rail vehicles**

**Laugis, Juhan; Lehtla, Tõnu; Joller, Jüri; Rosin, Argo; Vinnikov, Dmitri; Lehtla, Madis** 2008

[http://www.ester.ee/record=b2394449\\*est](http://www.ester.ee/record=b2394449*est)

## **TTÜ aastal 2020 : töögrupi vahearuanne**

**Ernits, Juhan-Peep; Goi, Anna; Jervan, Gert; Leibak, Alar; Randma-Liiv, Tiina; Otto, Tauno; Rosin, Argo; Sarmiento Guerin,**

**Maria Cecilia** *Mente et Manu* 2009 / 16. veebr., lk. 4 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

## **TTÜ sai veebipõhise elektriagamite labori : [e-õppet]**

**Rosin, Argo** *Keskkonnatehnika* 2009 / 1, lk. 16-20 : ill [https://artiklid.elnet.ee/record=b1077198\\*est](https://artiklid.elnet.ee/record=b1077198*est)

## **Tösiroheline pööre vajab rohkem insenere**

**Rosin, Argo** *Tööstusuudised* : [ajalehe Äripäev lisa] 2021 / Lk. 2 "[Tösiroheline pööre vajab rohkem insenere](#)"

## **Tösiroheliselt, mitte rohepööraselt!**

**Rosin, Argo** *Elektriala* 2021 / lk. 5 : portr [https://www.ester.ee/record=b1240496\\*est](https://www.ester.ee/record=b1240496*est)

## **Tööstuskontrollerite kasutamise koolitus**

**Rosin, Argo** *Pingering* 1998 / 17. apr., lk. 4

## **Use of value stream mapping for evaluation of load conservation and peak clipping possibilities [Electronic resource]**

**Melsas, Raivo; Rosin, Argo** 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) : 6-9 June, 2017, Milan, Italy : conference proceedings 2017 / [6] p. : ill. [DVD] <https://doi.org/10.1109/EEEIC.2017.7977549>

## **Using common household thermal storages to support the PV- and battery system in nearly zero energy buildings in off-grid mode**

**Häring, Tobias; Rosin, Argo; Biechl, Helmuth** *Sustainable energy technologies and assessments* 2019 / p. 12-24 : ill

<https://doi.org/10.1016/j.seta.2019.05.014> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Using demand side management in energy-intensive industries for providing balancing power – the Estonian case study**

**Drovtar, Imre; Uuemaa, Priit; Rosin, Argo; Kilter, Jako; Valtin, Juhan** 2013 IEEE Power and Energy Society General Meeting (PES), Vancouver, Canada, 21-25 July 2013 : proceedings 2013 / [5] p.: ill <https://ieeexplore.ieee.org/document/6672418>

## **Using of industry automation software and hardware in education and training**

**Rosin, Argo; Laugis, Juhan; Lehtla, Tõnu** *CAX Techniques* : proceedings of the 4th International Scientific Colloquium : Bielefeld, Germany, September 13-15, 1999 1999 / p. 119-124 : ill

## **Using V2G technology as virtual active power filter for flexibility enhancement of HVDC systems**

**Zolfaghari, Mahdi; Ahmadihangar, Roya; Gharehpetian, Gevork B.; Rosin, Argo; Plaum, Freddy** *Proceedings : 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG)* : Online - Setúbal, Portugal, 08 - 10 July, 2020 2020 / p. 489-494 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161602>

## **Uus metoodika parandab tarbija elektri kvaliteeti seniselt lihtsamalt**

*Mente et Manu* 2022 / lk. 42 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

## **Uusi tehnikateaduste magistreid : [Priit Arro ja Avo Reinap]**

**Rosin, Argo** *Elektriala* 2000 / lk. 32 [https://artiklid.elnet.ee/record=b1003242\\*est](https://artiklid.elnet.ee/record=b1003242*est)

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

**Melsas, Raivo; Rosin, Argo; Drovtar, 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; Drovtar, 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>

## **Varutoiteallikad aitavad elektrikatkestustest üle**

**Thalfeldt, Martin; Rosin, Argo** *Maakodu* 2023 / lk. 50-52 : fot [https://www.ester.ee/record=b1072539\\*est](https://www.ester.ee/record=b1072539*est)

## **Wide input voltage range operation of the series resonant DC-DC converter with bridgeless boost rectifier**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri; Rosin, Argo** *Energies* 2020 / p. 4220–4237 <https://doi.org/10.3390/en13164220> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Wind energy forecasting using recurrent neural networks**

**Shabbir, Noman; Kütt, Lauri;** Jawad, Muhammad; **Ahmadihangar, Roya; Iqbal, Muhammad Naveed; Rosin, Argo** 2019 Big Data, Knowledge and Control Systems Engineering (BdKCSE) 2019 / 5 p. : ill <https://doi.org/10.1109/BdKCSE48644.2019.9010593>

#### **Wind park cost efficiency increase through direct cooperation with demand side response provider [Online resource]**

**Melsas, Raivo; Rosin, Argo; Drovkar, 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>

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

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

#### **Üldotstarbelised plii-happeakud (ventiilreguleeritavad). Osa 1, Üldnõuded, funktsionaalsed omadused.**

**Katsetamismeetodid = General purpose lead-acid batteries (valve-regulated types). Part 1, General requirements, functional characteristics. Methods of test (IEC 61056-1:2002)**

2012 [https://www.ester.ee/record=b2746930\\*est](https://www.ester.ee/record=b2746930*est)

#### **Ülikool on sild teaduse ja tööstuse vahel**

**Rosin, Argo** Äripäev 2018 / lk. 12 [Ülikool on sild teaduse ja tööstuse vahel](#)

#### **XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data**

**Shabbir, Noman; Ahmadihangar, Roya; Rosin, Argo;** Jawad, Muhammad; **Kilter, Jako;** Martins, Joao 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 6 p <https://doi.org/10.1109/ETFG55873.2023.10407926>

#### **Об опыте Института электропривода и силовой электроники ТТУ в области модернизации электроподвижного состава Таллиннского трамвайного парка**

**Vinnikov, Dmitri; Boiko, Vitali; Lehtla, Madis; Rosin, Argo; Laugis, Juhan** Технічна електродинаміка 2004 / 3, с. 52-55 : ил

#### **Простые советы экономии электричества дома: можно понизить потребление в 10 раз!**

rus.delfi.ee 2025 <https://dekor.delfi.ee/statja/120138514/prostye-sovety-ekonomii-elektrichestva-doma-mozhno-ponizit-potreblenie-v-10-raz>

#### **Эксперты : очень полезные бытовые советы, как эффективно экономить электричество**

**Rosin, Argo** rus.postimees.ee 2023 [Эксперты : очень полезные бытовые советы, как эффективно экономить электричество Простые советы экономии электричества дома: можно понизить потребление в 10 раз!](#)