

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

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>

Analysis of protection and control functions of low voltage part of substation for smart grid applications
Mägi, Marek; Peterson, Kristjan; Pettai, Elmo PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 297-304 : ill
<https://ieeexplore.ieee.org/document/6256243>

Bidding strategy of a microgrid considering risk interdependence between electricity and carbon markets
Yan, Yuan; Lin, Zihan; **Wen, Fushuan; Palu, Ivo** 2019 IEEE Power & Energy Society General Meeting (PESGM) 2019 / 5 p. : ill
<https://doi.org/10.1109/PESGM40551.2019.8974139>

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>

Challenges of microgrids in remote communities: a STEEP model application
Akinyele, Daniel; **Belikov, Juri; Levron, Yoash** Energies 2018 / art. 432, 35 p. : ill <https://doi.org/10.3390/en11020432> Journal metrics at Scopus Article at Scopus Journal metric at WOS Article at WOS

A chameleon algorithm for solving economic dispatch problem in microgrid system
Zahraoui, Younes; Alhamrouni, Ibrahim; Mekhilef, Saad; Korõtko, Tarmo; Jusoh, Awang; Sutikno, Tole Bulletin of electrical engineering and informatics 2023 / p. 1982-1992 : ill <https://doi.org/10.11591/eei.v12i4.4700> Journal metrics at Scopus Article at Scopus

Coordinated PI-based frequency deviation control of isolated hybrid microgrid : an online multi-agent tuning approach via reinforcement learning
Nosrati, Komeil; Tepljakov, Aleksei; Petlenkov, Eduard; Levron, Yoash; Škiparev, Vjatšeslav; Belikov, Juri 2022 IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT-Europe) : proceedings 2022 / p. 1-5 : ill <https://doi.org/10.1109/ISGT-Europe54678.2022.9960311>

Development of prosumer logical structure and object modeling
Korõtko, Tarmo; Rosin, Argo; Ahmadiahangar, 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>

Digital twins for designing energy management systems for microgrids: Implementation example based on TalTech Campulse 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>

Energy efficient behavior modeling for demand side recommender system in solar microgrid applications using multi-agent reinforcement learning model
Onile, Abiodun Emmanuel; Belikov, Juri; Levron, Yoash; Petlenkov, Eduard Sustainable cities and society 2023 / art. 104392, 20 p. : ill <https://doi.org/10.1016/j.scs.2023.104392> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Fault tolerant control of a grid-connected microgrid with high penetration of renewable energy
Senanayaka, Jagath; Khang, Huynh Van; **Vaimann, Toomas; Rassõlkin, Anton** 24th International Conference on Electrical Machines and Systems (ICEMS) 2021 / p. 938-943 <https://doi.org/10.23919/ICEMS52562.2021.9634364>

Feasibility study of energy supply in deep North Regions: the case study of Yakutia remote community (Russia)
Trashchenkov, Sergei; **Astapov, Victor; Kull, Karl** 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.2019.8818238>

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>

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

Lifetime-oriented control strategies for hybrid energy storage systems in an islanded microgrid
Cinay, Nazli; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Ahmadiahangar, 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 WOS](#)

Machine learning approach for flexibility characterisation of residential space heating
Häring, Tobias; Ahmadiahangar, 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 WOS](#)

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 WOS](#) [Journal metrics at WOS Article at WOS](#)

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 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>

Microgrid oriented modeling of space heating system based on neural networks
Häring, Tobias; Kull, Tuule Mall; Ahmadiahangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmuth Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.jobe.2021.103150> [Journal metrics at Scopus Article at WOS](#) [Journal metrics at WOS Article at WOS](#)

Modelling of wind energy-based microgrid system implementing MMC
Mishra, Sambeet; Palu, Ivo; Madichetty, Sreedhar; Suresh Kumar, L.V. International Journal of Energy Research 2016 / p. 952-962
<https://doi.org/10.1002/er.3490> [Journal metrics at Scopus Article at WOS](#) [Journal metrics at WOS Article at WOS](#)

A multi-agent system approach for optimal microgrid expansion planning under uncertainty
Mishra, Sambeet; Bordin, Chiara; Tomasdard, Asgeir; Palu, Ivo International journal of electrical power & energy systems 2019 / p. 696-709 : ill <https://doi.org/10.1016/j.ijepes.2019.01.044> [Journal metrics at Scopus Article at WOS](#) [Journal metrics at WOS Article at WOS](#)

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>

Performance evaluation of the universal photovoltaic string converter during the operation in DC microgrid environment
Matiushkin, Oleksandr; Vinnikov, Dmitri; Husev, Oleksandr IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society, 2021 2021 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9589473> [Conference Proceedings at Scopus Article at WOS](#)

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>

A review on real-time simulation and analysis methods of microgrids
Ahmadihangar, 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 WOS](#) [Journal metrics at WOS Article at WOS](#)

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 (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659820>

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>

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

Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo; Ahmadiahangar, 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>

Threat modeling of cyber-physical systems - a case study of a microgrid system

Khalil, Shaymaa MAMDOUH; Bahsi, Hayretdin; Dola, Henry Ochieng; Korõtko, Tarmo; McLaughlin, Kieran; Kotkas, Vahur Computers & Security 2023 / art. 102950, 16 p. : ill <https://doi.org/10.1016/j.cose.2022.102950> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Virtual inertia control of isolated microgrids using an NN-based VFOPID controller

Škiparev, Vjatšeslav; Nosrati, Komeil; Tepljakov, Aleksei; Petlenkov, Eduard; Levron, Yoash; Belikov, Juri; Guerrero, Joseph M. IEEE Transactions on sustainable energy 2023 / p. 1558-1568 <https://doi.org/10.1109/TSTE.2023.3237922> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)