

### **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>

### **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; **Korötko, Tarmo**; Jusoh, Awang; Sutikno, Tole Bulletin of electrical engineering and informatics 2023 / p. 1982-1992 <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, Vjatseslav; 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**

**Korötko, Tarmo; Rosin, Argo; Ahmadiyahangar, 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**

**Korötko, 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), Kärda, 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; Korötko, 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](#)

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

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

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

**Zahraoui, Younes; Korötko, 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 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 / [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; Ahmadihangar, 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 Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A multi-agent system approach for optimal microgrid expansion planning under uncertainty**

**Mishra, Sambeet; Bordin, Chiara; Tomasgard, 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 Scopus](#) [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 / p. 1-6 : ill <https://doi.org/10.1109/IECON48115.2021.9589473> [Conference Proceedings at Scopus](#) [Article 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 / 6 p.  
<https://doi.org/10.1109/IECON.2017.8216617>

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

**Ahmadihangar, Roya; Rosin, Argo; Nabavi Niaki, Ali; Palu, Ivo; Korötko, 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](#)

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

**Korötko, 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 / 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; Korötko, Tarmo; Rosin, Argo; Ahmadihangar, Roya** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227451>

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

**Khalil, Shaymaa Mamdouh; Bahsi, Hayretdin; Dola, Henry Ochieng; Korötko, 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](#)