

Adaptive chaotic class topper optimization to solve Non-convex CHPED problems in power systems

Gupta, Pradeep Kumar; Tuttlberg, Kaur; Kilter, Jako 2024 IEEE PES Innovative Smart Grid Technologies - Asia (ISGT Asia) 2024 / 6 p. <https://doi.org/10.1109/ISGTAsia61245.2024.10876314>

Advanced sensors and on-line measurements for power lines in smart grids

Shabbir, Noman 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 205-206 : ill https://www.ester.ee/record=b5183874*est

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>

Ants Vill: Eesti idufirmad vajavad tugevat toetust ja tugevat fookust

Vill, Ants Trialoog 2025 <https://trialoog.taltech.ee/ants-vill-eesti-idufirmad-vajavad-tugevat-toetust-ja-tugevat-fookust/>

Application of power line communication technology in street lighting control

Farkas, Tekla D.; Kiraly, Tamás; Pardy, Tamas; Rang, Toomas; Rang, Galina International journal of design and nature and ecodynamics 2018 / p. 176–186 : ill <https://doi.org/10.2495/DNE-V13-N2-176-186> [Journal metrics at Scopus](#) [Article at Scopus](#) [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 [Journal metrics at Scopus](#) [Article at Scopus](#)

Consumer electricity information exchange in free market environment

Klesment, Kristo Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK viienda aastakonverentsi artiklite kogumik : 25.-26. novembril 2011, Nelijärve 2011 / p. 117-119 : ill

A cost-effective electric vehicle intelligent charge scheduling method for commercial smart parking lots using a simplified convex relaxation technique

Jawad, Muhammad; Qureshi, Muhammad Bilal; Ali, Sahibzada Muhammad; **Shabbir, Noman;** Khan, Muhammad Usman; Aloraini, Afnan; Nawaz, Raheel Sensors 2020 / p. 1-19 <https://doi.org/10.3390/s20174842> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Data-based energy provision for smart cities

Soe, Ralf-Martin Digital Transformation and Global Society : Second International Conference, DTGS 2017, St. Petersburg, Russia, June 21-23, 2017 : revised selected papers 2017 / p. 319-328 https://doi.org/10.1007/978-3-319-69784-0_27 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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>

Digitaalsete elektrivõrkude lävel : [noorteadlaste konkursi Teadus kolme minutiga ettekanne]

Uuemaa, Madis Teadus kolme minutiga : 2017-2019 2019 / lk. 144-147 : portr., ill https://www.ester.ee/record=b5245642*est

Dispersed generation accommodation into smart grid

Vaimann, Toomas; Niitsoo, Jaan; Kivipõld, Tanel The 52nd Annual International Scientific Conference of Riga Technical University : abstract book and electronic proceedings : Latvia, Riga, 12.-14. October, 2011 2011 / p. ID-42

EcoGrid EU Bornholmi saarel - targa võrgu prototüüp

Palu, Ivo; Tuttlberg, Kaur Keskkonnatehnika 2012 / lk. 22-23 https://artiklid.elnet.ee/record=b2475308*est

Eesti tööstus on tarka võrku investeerimisel õigel teel, kuid napib insenere : ABB podcast

geenius.ee 2024 [Eesti tööstus on tarka võrku investeerimisel õigel teel, kuid napib insenere : ABB podcast](#)

An efficient authentication and key agreement scheme for secure smart grid communication services

Hammami, Hamza; Obaidat, Mohammad S.; **Ben Yahia, Sadok** International journal of communication systems 2020 / art. e4558, p. 1–13 <https://doi.org/10.1002/dac.4558> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Elektritarkvõrgud ja virtuaalsed elektrijaamad

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

Elektrivõrkude arengust

Korõtko, Tarmo; Pettai, Elmo Elektriala 2018 / lk. 10-13 : ill http://www.ester.ee/record=b1240496*est
https://artiklid.elnet.ee/record=b2865343*est

Emerging role of industry 5.0 digital twins in demand response electricity market and applications

Onile, Abiodun Emmanuel; Belikov, Juri; Petlenkov, Eduard; Levron, Yoash IEEE PES Innovative Smart Grid Technologies Conference Europe (ISGT Europe 2023) : proceedings 2023 / 6 p <https://doi.org/10.1109/ISGTEUROPE56780.2023.10407322>

Energeetika tulevik - otsapidi tarkvõrkude küljes

Lehtla, Tõnu Horisont 2012 / lk. 32-37 : ill https://artiklid.elnet.ee/record=b2481026*est

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

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

Extended reality in power distribution grid : applications and future trends

Nosrati, Komeil; Alsaleh, Saleh; Tepljakov, Aleksei; Petlenkov, Eduard; Onile, Abiodun Emmanuel; Škiparev, Vjatšeslav; Belikov, Juri 27th International Conference on Electricity Distribution (CIRED 2023) : Rome, 12-15 June 2023 2023 / p. 3615 - 3619
<https://doi.org/10.1049/icp.2023.0788> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

FESDA : fog-enabled secure data aggregation in smart grid IoT network

Saleem, Ahsan; Khan, Abid; Malik, Saif Ur Rehman; Pervaiz, Haris; Malik, Hassan; Alam, Masoom; Jindal, Anish IEEE Internet of Things Journal 2020 / p. 6132-6142 <https://doi.org/10.1109/JIOT.2019.2957314> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting available demand-side flexibility

Ahmadiyahangar, 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 [Journal metrics at Scopus](#) [Article at Scopus](#)

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

Shahid, Arqum; Ahmadiyahangar, 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>

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

Farhizadan, Mohammadreza; Karrari, Mehdi; Gharehpetian, Gevork B.; Ahmadiyahangar, 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>

Home energy management systems: A review of the concept, architecture, and scheduling strategies

Han, Binghui; Zahraoui, Younes; Mubin, Marizan; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex IEEE Access 2023 / p. 19999-20025 <https://doi.org/10.1109/ACCESS.2023.3248502> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

IEC 61850 and measurements

Dmitrenko, Igor Elektronika ir elektrotehnika = Electronics and electrical engineering 2011 / p. 106-110 : ill

Industrial and technological applications of power electronics systems

2021 <https://doi.org/10.3390/books978-3-0365-0823-8>

The influence of solar energy on the development of the mining industry in the republic of Cuba

Shklyarskiy, Yaroslav E.; Guerra, Dias Daniel; Iakovleva, Emilia V.; Rassõlkin, Anton Journal of Mining Institute 2021 / p. 427 - 440
<https://doi.org/10.31897/PMI.2021.3.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An information modeling method for electric micro grids

Korõtko, Tarmo 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. 205-208 : ill

Insulation fault diagnosis for MV cables under smart grid operation

Shafiq, Muhammad 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tallinn, Estonia, September 8-10, 2021 2021 / p. 13-14 : ill
https://www.ester.ee/record=b5457278*est

Integrating smart energy management system with internet of things and cloud computing for efficient demand side management in smart grids

Saleem, M. Usman; Shakir, Mustafa; Usman, M. Rehan; Bajwa, M. Hamza Tahir; Shabbir, Noman; Shams Ghahfarokhi, Payam;

Daniel, Kamran Energies 2023 / art. 4835 : ill <https://doi.org/10.3390/en16124835> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Ivo Palu : tuleviku tarkvõrk vajab kõiki oskusi, mis TalTechi majast leida võib

Palu, Ivo Mente et Manu 2018 / lk. 4-7 : fot http://www.ester.ee/record=b1242496*est <http://dea.digar.ee/publication/AKmenteetmanu>
<https://taltech.ee/avalehekulg/?id=10641&category=128006#newsTabsMenu> https://artiklid.elnet.ee/record=b2866957*est

Legal challenges in developing a digitalised electricity market in the EU: The case of Estonia

Keypour, Javad Scientific Papers of the University of Pardubice, Series D : Faculty of Economics and Administration 2024 / art. 2091 <https://doi.org/10.46585/sp32022091> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Leveraging digital twins and demand side recommender Chatbot for optimizing smart grid energy efficiency

Onile, Abiodun Emmanuel; Belikov, Juri; Petlenkov, Eduard; Levron, Yoash 2023 IEEE PES Innovative Smart Grid Technologies - Asia, ISGT Asia 2023 2023 / 5 p <https://doi.org/10.1109/ISGTAsia54891.2023.10372761>

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

Cinay, Nazli; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Ahmadihangar, 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](#)

A linear integer programming model for fault diagnosis in active distribution systems with bi-directional 'fault monitoring devices installed

Wang, Chongyu; Pang, Kaiyuan; Xu, Yan; Wen, Fushuan; Palu, Ivo; Feng, Changsen IEEE Access 2020 / p. 106452-106463
<https://doi.org/10.1109/ACCESS.2020.2999519> [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

Mikrovõrk võimaldab energiakasutust tõhusamalt juhtida

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

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

A novel anonymous authentication and key agreement scheme for smart grid

Hammami, Hamza; Obaidat, Mohammad S.; Ben Yahia, Sadok Proceedings of the 17th International Joint Conference on e-Business and Telecommunications, ICETE 2020 - Volume 3: ICE-B, Lieusaint, Paris, France, July 8-10, 2020 2020 / p. 357-362
<https://doi.org/10.5220/0009824203570362>

A novel efficient and lightweight authentication scheme for secure smart grid communication systems

Hammami, Hamza; Ben Yahia, Sadok; Obaidat, Mohammad S. The Journal of Supercomputing 2023 / p. 7360 - 7376
<https://doi.org/10.1007/s11227-022-04944-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel renewable powered stand-alone electric vehicle parking-lot model

Jawad, Muhammad; Asghar, Hira; Arshad, Jehangir; Javed, Abbas; Qureshi, Muhammad Bilal; Ali, Sahibzada Muhammad; Shabbir, Noman; Rassõlkin, Anton Sustainable energy, grids and networks 2023 / art. 100992, 14 p. : ill
<https://doi.org/10.1016/j.segan.2022.100992> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Overview of information and communication issues for smart grid solutions

Kivipõld, Tanel; Niitsoo, Jaan 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. 108-112

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

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

Perspective solutions of SmartGrid and Vehicle-to-grid connectivity problems

Soots, Georg; Hõimoja, Hardi; Pettai, Elmo 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 / p. 113-116 : ill

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>

Possibilities of integrating the industrial robot systems to smart grids

Beldjajev, Viktor; Lehtla, Tõnu EPE-PEMC 2010 : 14th International Power Electronics and Motion Control Conference : 6-8 September 2010, Ohrid, Republic of Macedonia 2010

Power quality issues in dispersed generation and smart grids

Vaimann, Toomas; Niitsoo, Jaan; Kivipõld, Tanel; Lehtla, Tõnu Elektronika ir elektrotehnika = Electronics and electrical engineering 2012 / p. 23-26 : ill <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=573c03a0753bcfce3929ba739ff032b16882acf5>

Preface to "Industrial and Technological Applications of Power Electronics Systems"

Strzelecki, Ryszard; Demidova, Galina; Vinnikov, Dmitri Industrial and Technological Applications of Power Electronics Systems 2021 / p. ix <https://doi.org/10.3390/books978-3-0365-0823-8>

Research and development of electricity auction for microgrids = Mikrovõrkude elektrioksioni uurimine ja väljatöötamine

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

Review of LLMs Applications in Electrical Power & Energy Systems

Amjad, Furqan; Korõtko, Tarmo; Rosin, Argo IEEE Access 2025 / p. 150951-150969 <https://doi.org/10.1109/ACCESS.2025.3599922>
<https://ieeexplore.ieee.org/document/11129042>

Review of wireless technologies for the Smart Grid

Ruban, Jelena 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 50-53 : ill

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

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

Scalable and efficient authentication scheme for secure smart grid communication

Hammami, Hamza; Ben Yahia, Sadok; Obaidat, Mohammad S. IET Networks 2020 / p. 165-169 <https://doi.org/10.1049/iet-net.2019.0225> [Journal metrics at Journal](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Smart cities : from silos to cross-border approach

Soe, Ralf-Martin International journal of e-planning research (IJEPR) 2018 / p. 70-88 <https://doi.org/10.4018/IJEPR.2018040105> [Journal metrics at Scopus](#) [Article at Scopus](#)

Smart grid implementation

Klesment, Kristo Info- ja kommunikatsioonitehnoloogia doktorikooli IKTDK kuuenda aastakonverentsi artiklite kogumik : 3.-5. oktoobril 2012, Laulasmaa 2012 / p. 29-34 : ill

Smartgrid-based hybrid digital twins framework for demand side recommendation service provision in distributed power systems

Onile, Abiodun Emmanuel; Petlenkov, Eduard; Levron, Yoash; Belikov, Juri Future generation computer systems 2024 / p. 142-156 : ill <https://doi.org/10.1016/j.future.2024.03.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

State of the art of active power electronic transformers for smart grids

Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao; Smolenski, Robert IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5241-5246 : ill <https://ieeexplore.ieee.org/document/6389543>

Super resolution perception for smart meter data

Liu, Guolong; Gu, Jinjin; Zhao, Junhua; Wen, Fushuan; Liang, Gaoqi Information sciences 2020 / p. 263-273 : ill

<https://doi.org/10.1016/j.ins.2020.03.088>

Tarkvõrk : terminoloogia = Smart grid : terminology [Võrguteavik]

2016 http://www.ester.ee/record=b4615584*est

Tehisintellekt päästab tuleviku tarkvõrgud halvast elektrist

Rosin, Argo novaator.err.ee 2021 ["Tehisintellekt päästab tuleviku tarkvõrgud halvast elektrist"](#)

Using a private desktop grid system for accelerating drug discovery

Kovacs, Jozsef; Kacsuk, Peter; **Lomaka, Andre** Future generation computer systems 2011 / p. 657-666 : ill

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

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

Utility-scale energy storage systems : converters and control

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

Water vapor generation in residential buildings: comparing probabilistic simulations and field measurements

Glass, Samuel V.; **Kalamees, Targo**; Pallin, S.; Vinha, Juha Thermal performance of the exterior envelopes of whole buildings 2022 / p. 472-482 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85167591181&origin=inward&txGid=6bb7b57e373ee6b64dd8c3c7e54094a1>

Väljakutsed energeetikas : [avatud platvorm energiavoogude juhtimiseks]

Korõtko, Tarmo Tehnikamaailm 2024 / lk. 74-75 : fot https://www.ester.ee/record=b1073050*est