

Aggregator based coordinated Transactive Energy trading between Microgrids

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

An analytic model for fault diagnosis in power distribution systems considering unreliable alarms

Wang, Chongyu; Pang, Kaiyuan; Zhang, Yong; **Wen, Fushuan; Palu, Ivo**; Xiong, Wen; Chen, Minghui; Shang, Huiyu 2020 IEEE Power & Energy Society General Meeting (GM 2020) 2020 / 5 I <https://doi.org/10.1109/PESGM41954.2020.9281468>

An optimal model for balancing fluctuating power of large wind parks

Tammoja, Heiki; Palu, Ivo; Agabus, Hannes; Keel, Matti; Oidram, Rein 8th International Workshop on Large Scale Integration of Wind Power and on Transmission Networks for Offshore Wind Farms : Bremen, Germany, 14-15 October, 2009 2009 / p. 647-652

Analysis of electricity meters under distorted load conditions

Haas, Ats; Niitsoo, Jaan; Taklaja, Paul; Palu, Ivo PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 281-284 : ill <https://ieeexplore.ieee.org/document/6256239>

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

Mishra, Sambeet; Koduveru, 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>

Balancing of wind energy using oil-shale based power plants at erroneous wind forecast conditions

Palu, Ivo; Oidram, Rein; Keel, Matti; Tammoja, Heiki Oil shale 2009 / 3S, p. 189-199 : ill

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>

Blockchain for EU electricity market

Crasta, Cletus J.; Agabus, Hannes; Palu, Ivo 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 <https://doi.org/10.1109/EEEIC/ICPSEurope49358.2020.9160575>

Calculating power distribution system reliability indexes from Smart Meter data

Kuhi, Kristjan; Kõrbe Kaare, Kati; Koppel, Ott; Palu, Ivo 2016 IEEE International Energy Conference (ENERGYCON) : [Leuven, Belgium, 4-8 April 2016] 2016 / [5] p. : ill <https://doi.org/10.1109/ENERGYCON.2016.7513905>

Causes of indefinite faults in Estonian 110 kV overhead power grid

Taklaja, Paul; Oidram, Rein; Niitsoo, Jaan; Palu, Ivo Oil shale 2013 / p. 225-243 : ill https://artiklid.elnet.ee/record=b2631741*est

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](#)

Characteristic pulse pattern features of different types of partial discharge sources in power cables

Kiitam, Ivar; Shafiq, Muhammad; Taklaja, Paul; Parker, Martin; Palu, Ivo; Kütt, Lauri IEEE Power Engineering Society Conference and Exposition in Africa, PowerAfrica, IEEE PES/IAS PowerAfrica, Nairobi, Kenya, 23-27 Aug 2021 : proceedings 2021 / 5 p. : ill <https://doi.org/10.1109/PowerAfrica52236.2021.9543366>

Comparison of deep learning models for multivariate prediction of time series wind power generation and temperature

Mishra, Sambeet; Bordin, Chiara; Taharaguchi, Kota; **Palu, Ivo** Energy reports 2020 / p. 273-286 <https://doi.org/10.1016/j.egyr.2019.11.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Critical PQ phenomena and sources of PQ disturbances in PE rich power systems : Deliverable 5.1 [Online resource]

Kilter, Jako; Löper, Mari; Kangro, Triin; Palu, Ivo 2016 [Deliverable 5.1](#)

Current practice on power quality legislation within European transmission systems – results from Horizon 2020 project MIGRATE

Kilter, Jako; Trummal, Tarmo; Löper, Mari; Palu, Ivo 2020 19th International Conference on Harmonics and Quality of Power (ICHQP), 6-7 July 2020, Dubai, UAE 2020 <https://doi.org/10.1109/ICHQP46026.2020.9177907>

Current situation and prospect of grid codes for a power system with integrated photovoltaic generation

Duan, Shuyin; Zhang, Shuyan; **Wen, Fushuan**; Shania, Farhad; **Palu, Ivo**; Zou, Bo; Dai, Pan 2020 International Conference on Smart Grids and Energy Systems (SGES): 23-26 Nov. 2020 2020 / p. 832-836 <https://doi.org/10.1109/SGES51519.2020.00153>

Curricula reforms through structural reforms

Vaimann, Toomas; Rassõlkin, Anton; Palu, Ivo 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2020 / p. 1-5 : ill <https://doi.org/10.1109/ICEPDS47235.2020.9249084>

Cyber contingencies impacts analysis in cyber physical power system

Chen, Keren; **Wen, Fushuan; Palu, Ivo** IEEE International Conference on Energy Internet : ICEI 2019, Nanjing, China, 27-31 May, 2019 : proceedings 2019 / p. 37-41 : ill <http://doi.org/10.1109/ICEI.2019.00013>

Decarbonization dispatching strategy for electric vehicles based on life cycle analysis

Li, Zhonghui; Xu, Chengwei; Deng, Qing; **Wen, Fushuan; Palu, Ivo** 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 / 5 p. : ill <https://doi.org/10.1109/EEEIC/ICPSEurope49358.2020.9160631>

Decomposition model of contract for difference considering market power mitigation

Xu, Chengwei; Pang, Kaiyuan; **Wen, Fushuan; Palu, Ivo**; Gong, Jianrong; Xie, Yuzhe; Chen, Cheng 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 / 5 p <https://doi.org/10.1109/EEEIC/ICPSEurope49358.2020.9160725>

Defektide ja rikete seoste analüüs : lepingu Lep16039 aruanne [Võrguväljaanne]

Palu, Ivo; Keel, Matti; Tammoja, Heiki 2016 https://www.elektrilevi.ee/-/doc/6305157/ettevotttest/defektide_rikete_aruanne.pdf

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>

Determining the unknown faults of the HV overhead lines

Taklaja, Paul; Niitsoo, Jaan; Palu, Ivo Proceedings of the 13th International Scientific Conference Electric Power Engineering 2012 : EPE 2012 : Brno. Vol. 1 2012 / p. 187-192 : ill

Development of robust participation strategies for an aggregator of electric vehicles in multiple types of electricity markets

Liu, Weijia; **Wen, Fushuan**; Dong, ZhaoYang; **Palu, Ivo** Energy Conversion and Economics 2020 / p. 104-123 <https://doi.org/10.1049/enc2.12010>

Diagnostics analysis of partial discharge events of the power cables at various voltage levels using ramping behavior analysis method

Mishra, Sambeet; **Singh, Praveen Prakash; Kiitam, Ivar; Shafiq, Muhammad; Palu, Ivo**; Bordin, Chiara Electric power systems research 2024 / art. 109988 <https://doi.org/10.1016/j.epsr.2023.109988>

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

"Discount" - the renewable energy production impact on electricity price

Ulm, Lauri; Koduver, Hardi; Palu, Ivo 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/RTUCON51174.2020.9316611>

Distance learning in technical education on example of Estonia and Poland

Vaimann, Toomas; Stepień, Mariusz; Rassõlkin, Anton; Palu, Ivo 2020 XI International Conference on Electrical Power Drive Systems (ICEPDS), Saint-Petersburg, Russia, October 4-7, 2020 2020 / p. 285-288 : ill <https://doi.org/10.1109/ICEPDS47235.2020.9249317>

Distsantsõppe tehnikahariduses

Vaimann, Toomas; Palu, Ivo Elektriala 2020 / lk. 10-12 : portr http://www.ester.ee/record=b1240496*est

Distorted load impacts on distribution grid [Electronic resource]

Niitsoo, Jaan; Palu, Ivo Proceedings of the 12th International Scientific Conference Electric Power Engineering 2011, Kouty nad Desnou, Czech Republic, May 17-19, 2011 2011 / p. 37-40 : ill. [CD-ROM]

Dynamic network tariff in practices : key issues and challenges

Singh, Praveen Prakash; Wen, Fushuan; Palu, Ivo 2021 IEEE 4th International Conference on Computing, Power and Communication Technologies (GUCON) 2021 / p. 1-6 <https://doi.org/10.1109/GUCON50781.2021.9573767>

EcoGrid EU Bornholmi saarel - targa võrgu prototüüp

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

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>

Eesti elektrisüsteemi laiseiresüsteemi arendamine ja analüüs (WAMPAC) : uurimustöö 1.1-4/13/232 / Lep13118 I etapi aruanne [Võrguväljaanne]

Palu, Ivo; Valdma, Mati; Meldorf, Mati; Keel, Matti; Šuvalova, Jelena; Šlenduuhov, Vadim; Kangro, Triin; Vaino, Sander; Sarnet, Tanel; Kilter, Jako; Ülavere, Eero; Reinson, Andrus 2014

Eesti elektrisüsteemi laiseiresüsteemi arendamine ja analüüs (WAMPAC) : uurimustöö 1.1-4/13/232 / Lep13118 II etapi aruanne [Võrguväljaanne]

Palu, Ivo; Meldorf, Mati; Šuvalova, Jelena; Liiv, Innar; Tuttelberg, Kaur; Kangro, Triin; Astapov, Victor; Sarnet, Tanel; Šlenduuhov, Vadim; Kilter, Jako; Ülavere, Eero; Reinson, Andrus 2014

Eesti Elektroenergeetika Seltsi juubelikonverents

Palu, Ivo; Pent, Brenda Elektriala 2022 / lk. 14-16 : fot https://www.ester.ee/record=b1240496*est

Electric vehicles charging infrastructure demand and deployment : challenges and solutions

Singh, Praveen Prakash; Wen, Fushuan; Palu, Ivo; Sachan, Sulabh; Deb, Sanchari Energies 2023 / art. 7 <https://doi.org/10.3390/en16010007>

Electrical and mechanical properties of service-aged medium voltage porcelain support insulators

Kiitam, Ivar; Saarna, Mart; Taklaja, Paul; Tealane, Marko; Palu, Ivo 2020 6th IEEE International Energy Conference (ENERGYCon) 2020 / p. 702-706 <https://doi.org/10.1109/ENERGYCon48941.2020.9236596>

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 market regulation: Global status, development trend, and prospect in China

Xu, Chengwei; Wen, Fushuan; Palu, Ivo Energy Conversion and Economics 2020 / p. 151-170 <https://doi.org/10.1049/enc2.12020>

Elektriraudtee ja selle mõjud elektrisüsteemi talitlusele

Kilter, Jako; Kangro, Triin; Sarnet, Tanel; Palu, Ivo 2015 https://www.ester.ee/record=b4495599*est

Elektritootmine Eestis - kuhu edasi?

Palu, Ivo; Tull, Marek Elektriala 2023 / lk. 8-10 https://www.ester.ee/record=b1240496*est
<https://dea.digar.ee/article/AKelektriala/2023/10/0/10.1>

Elektrituulikute ühendamisest Eesti energiasüsteemi

Palu, Ivo Keskkonnatehnika 2005 / 8, lk. 36-38 : ill

Energeetikateaduskond : [tutvustus]

Kalve, Heiki; Palu, Ivo Mente et Manu 2005 / Uudistaja, lk. 3 : fot https://www.ester.ee/record=b1242496*est

Energy co-pricing in an integrated energy system for promoting electric energy substitution

Wang, Yizheng; Duan, Shuyin; Wen, Fushuan; Palu, Ivo; Xue, Yusheng 2020 International Conference on Smart Grids and Energy Systems (SGES): 23-26 Nov. 2020 / p. 60-65 <https://doi.org/10.1109/SGES51519.2020.00018>

Energy management for an integrated energy system with data centers considering carbon trading

Wang, Yizheng; Li, Zhonghui; Wen, Fushuan; Palu, Ivo; Sun, Yikai; Zhang, Lijun; Gao, Meijin 2020 IEEE Power & Energy Society General Meeting (GM 2020) 2020 / 5 I <https://doi.org/10.1109/PESGM41954.2020.9281980>

EU electricity market design issues and solutions for increased RES penetration

Crasta, Cletus J.; Agabus, Hannes; Palu, Ivo 2020 17th International Conference on the European Energy Market (EEM 2020) 2020 <https://doi.org/10.1109/EEM49802.2020.9221997>

Event-triggered cooperative control of distributed generators in a distribution network subject to jamming attacks

Xu, Yan; Wen, Fushuan; Palu, Ivo 2020 International Conference on Smart Grids and Energy Systems (SGES): 23-26 Nov. 2020 / p. 95-99 <https://doi.org/10.1109/SGES51519.2020.00024>

Experiences with dynamic PMU compliance testing using standard relay testing equipment [Electronic resource]

Kilter, Jako; Palu, Ivo; Almas, Muhammad Shoaib; Vanfretti, Luigi 2015 IEEE Power and Energy Society Innovative Smart Grid Technologies Conference (ISGT 2015) : 18-20 February 2015, Washington, DC, USA 2015 / [5] p. : ill. [USB]
<http://dx.doi.org/10.1109/ISGT.2015.7131833>

Facing distorted current and undesirable consumption in smart grids

Niitsoo, Jaan; Šuvalova, Jelena; Haas, Ats; Palu, Ivo; Taklaja, Paul 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. 142-146 : ill

Fast path-oriented strategy for power system restoration

Liang, Bomiao; Xu, Yan; **Wen, Fushuan; Palu, Ivo;** Liu, Weijia; Shan, Huiyu 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärđla, Estonia, June 12-15, 2019 : proceedings 2019 / 8 p <https://doi.org/10.1109/PQ.2019.8818244>

Fault diagnosis and identification of malfunctioning protection devices in a power system via time series similarity matching

Xu, Bing; Wang, Chongyu; **Wen, Fushuan; Palu, Ivo;** Pang, Kaiyuan Energy Conversion and Economics 2020 / p. 81-92
<https://doi.org/10.1049/enc2.12008>

Features extraction of wind ramp events from a virtual wind park

Mishra, Sambeet; Ören, Esin; Bordin, Chiara; **Wen, Fushuan; Palu, Ivo** Energy reports 2020 / p. 237-249
<https://doi.org/10.1016/j.egy.2020.08.047> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Harmonic levels of domestic and electrical vehicle loads in residential distribution networks

Niitsoo, Jaan; Kilter, Jako; Palu, Ivo; Taklaja, Paul; Kütt, Lauri Proceedings of IEEE AFRICON 2013 Conference : 9-12 September 2013, Mauritius 2013 / p. 184-188

Heiki Tammoja : 24.01.1947 - 13.10.2021 : in memoriam

Palu, Ivo Elektriala 2021 / lk. 30 : portr https://www.ester.ee/record=b1240496*est

Hiiumaa large-scale offshore wind park integration into Estonian grid

Agabus, Hannes; Tammoja, Heiki; Palu, Ivo Proceedings [of] 7th International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Farms : 26-27 May, 2008, Madrid, Spain 2008 / p. 498-501 : ill

Identification and location of PD defects in medium voltage underground power cables using high frequency current transformer

Shafiq, Muhammad; **Kiitam, Ivar; Taklaja, Paul; Kütt, Lauri;** Kauhaniemi, Kimmo; **Palu, Ivo** IEEE Access 2019 / art. 8771171, p. 103608 - 103618 : ill <https://doi.org/10.1109/ACCESS.2019.2930704> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of wind parks on power system containing thermal power plants = Tuuleparkide mõju soojuselektrijaamadega energiasüsteemile

Palu, Ivo 2009 https://www.ester.ee/record=b2508519*est

Impacts of various maintenance tasks on life-cycle costs of a power grid project

Zhang, Shuyan; Duan, Shuyin; **Wen, Fushuan;** Shahnian, Farhad; Chen, Qingfang; **Palu, Ivo** 2020 International Conference on Smart Grids and Energy Systems (SGES): 23-26 Nov. 2020 2020 / p. 888-892 <https://doi.org/10.1109/SGES51519.2020.00163>

Improved quantification of partial discharges for reliable diagnostics of multipath connections in MV substations

Shafiq, Muhammad; Kiitam, Ivar; Isa, Muzamir; Taklaja, Paul; Palu, Ivo; Kütt, Lauri 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2021 / 6 p
<https://doi.org/10.1109/RTUCON53541.2021.9711585>

Impulse characteristics of 24 kV overhead line pin insulators

Taklaja, Paul; Hyvönen, Petri; Niitsoo, Jaan; Palu, Ivo; Klüss, Joni 12th International Conference on Environment and Electrical Engineering (EEEIC) : Wrocław, Poland, 5-8 May 2013 2013 / p. 641-645 : ill

Influence of electric railway system on voltage unbalance distribution between high voltage and low voltage electrical networks

Sarnet, Tanel; Kilter, Jako; Palu, Ivo Electrical and control technologies : proceedings of the 8th International Conference on Electrical and Control Technologies ECT-2013 : Kaunas, Lithuania, 2-3 May 2013 2013 / p. 168-171

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](#)

Investigating the progression of insulation degradation in power cable based on partial discharge measurements

Hassan, Waqar; Shafiq, Muhammad; Hussain, Ghulam Amjad; Choudhary, Maninder; Palu, Ivo Electric power systems research

2023 / art. 109452 <https://doi.org/10.1016/j.epsr.2023.109452>

Investigation of partial discharge characteristics in XLPE cable insulation under increasing electrical stress

Choudhary, Maninder; Shafiq, Muhammad; Kiitam, Ivar; Palu, Ivo; Hassan, Waqar; Singh, Praveen Prakash Engineering failure analysis 2024 / art. 108006 <https://doi.org/10.1016/j.engfailanal.2024.108006>

Investigation of undesirable consumption and distorted current

Niitsoo, Jaan; Palu, Ivo Proceedings of the 13th International Scientific Conference Electric Power Engineering 2012 : EPE 2012 : Brno. Vol. 1 2012 / p. 287-291 : ill

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>

[Juhtkiri]

Palu, Ivo Elektriala 2021 / lk. 5 : portr https://www.ester.ee/record=b1240496*est

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](#)

Main bird excrement contamination type causing insulator flashovers in 110 kV overhead power lines in Estonia

Taklaja, Paul; Oidram, Rein; Niitsoo, Jaan; Palu, Ivo Oil shale 2013 / p. 211-224 : ill https://artiklid.elnet.ee/record=b2631738*est

Model verification for analysis of wind power impact to transient stability in isolated power system using combined relay protection and dynamics modelling approach

Maripuu, Rain; Tsernobrovkin, Oleg; Palu, Ivo; Kilter, Jako PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 169-174 : ill

<https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=6256222>

Modelling EVs in residential distribution grid with other nonlinear loads [Electronic resource]

Niitsoo, Jaan; Taklaja, Paul; Palu, Ivo; Kiitam, Ivar 2015 IEEE 15th International Conference on Environment and Electrical

Engineering : conference proceedings : June 10-13, 2015, Rome 2015 / p. 1543-1548 : ill. [CD-ROM]

<http://dx.doi.org/10.1109/EEEIC.2015.7165401>

Modelling of solar-wind hybrid renewable energy system architectures

Mishra, Sambeet; Koduvere, Hardi; Palu, Ivo; Kuhl-Thalfeldt, Reeli 2016 IEEE International Energy Conference (ENERGYCON)

: [Leuven, Belgium, 4-8 April 2016] 2016 / [6] p. : ill <https://doi.org/10.1109/ENERGYCON.2016.7513942>

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 multihorizon approach for the reliability oriented network restructuring problem, considering learning effects, construction time, and cables maintenance costs

Bordin, Chiara; Mishra, Sambeet; Palu, Ivo Renewable Energy 2021 / p. 878-895 : ill <https://doi.org/10.1016/j.renene.2020.12.105>

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

Multi-objective energy management in a residential area with a P2G-based storage system

Yang, Wentao; Liu, Weijia; Wen, Fushuan; Palu, Ivo 2019 IEEE Power & Energy Society General Meeting (PESGM) 2019 / 5 p. : ill

<https://doi.org/10.1109/PESGM40551.2019.8973951>

Multi-objective planning of electric vehicles charging in distribution system considering priority-based vehicle-to-grid scheduling

Singh, Praveen Prakash; Das, Soumyabrata; Wen, Fushuan; Palu, Ivo; Singh, Asheesh K.; Thakur, Padmanabh Swarm and

evolutionary computation 2023 / art. 101234, 16 p. : ill <https://doi.org/10.1016/j.swevo.2023.101234>

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 new evaluation mechanism on investment effectiveness of a production and technical transformation project in a power system

Wang, Yucui; Wang, Yuanxiang; **Wen, Fushuan; Palu, Ivo;** Shahnian, Farhad; Liu, Fuyan; Zeng, Xiao 2020 International Conference on Smart Grids and Energy Systems (SGES): 23-26 Nov. 2020 / p. 773-777 <https://doi.org/10.1109/SGES51519.2020.00143>

Nordic and Baltic wind generation influence to Estonian thermal power plants production

Ulm, Lauri; Palu, Ivo PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 171-174 <https://doi.org/10.1109/PQ.2016.7724108>

Numerical demonstration of a transactive energy trading model for microgrids

Crasta, Cletus J.; Mishra, Sambeet; Agabus, Hannes; Palu, Ivo; Wen, Fushuan IET renewable power generation 2022 / p. 792-806 <https://doi.org/10.1049/rpg2.12431> [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](#)

Operation optimization of an integrated energy service provider with ancillary service provision

Lai, Xinyi; Xie, Zhihan; Xu, Danlu; Ying, Shuyang; Zeng, Yiming; Jiang, Chenwei; Wang, Fei; **Wen, Fushuan; Palu, Ivo** Energies 2022 / art. 4376, 15 p. : ill <https://doi.org/10.3390/en15124376> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Partial discharge pulse shape analysis for progression of insulation degradation in medium voltage cable

Choudhary, Maninder; Shafiq, Muhammad; Kiitam, Ivar; Palu, Ivo; Hassan, Waqar 2023 International Electrical Engineering Congress (IEECON) 2023 / p. 332-336 <https://doi.org/10.1109/IEECON56657.2023.10126589>

Performance comparison of PD data acquisition techniques for condition monitoring of medium voltage cables

Shafiq, Muhammad; **Kiitam, Ivar;** Kauhaniemi, Kimmo; Taklaja, Paul; **Kütt, Lauri; Palu, Ivo** Energies 2020 / art. 4272, 14 p. : ill <https://doi.org/10.3390/en13164272> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance evaluation of additive manufacturing based test samples for studies of defects in electrical insulation

Shafiq, Muhammad; Taklaja, Paul; Kiitam, Ivar; Tiismus, Hans; Palu, Ivo; Kütt, Lauri 2021 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2021 / 6 | <https://doi.org/10.1109/ICECET52533.2021.9698476>

Phasor measurement units performance assessment during power system disturbances using real-time digital simulator

Trummal, Tarmo; Kilter, Jako; Löper, Mari; Palu, Ivo 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 / 8 p. : ill <https://doi.org/10.1109/PQ.2019.8818247>

Pingekvaliteet elektrituulikuid sisaldavas nõrgas elektrivõrgus

Palu, Ivo Taastuvate energiaallikate uurimine ja kasutamine : seitsmenda konverentsi kogumik : [13. okt. 2005], Tartu, Estonia 2006 / lk. 25-30 : ill

Possibilities and analysis of integration of large-scale offshore wind parks into Estonian power system

Kilter, Jako; Tšernobrovkin, Oleg; Landsberg, Mart; Agabus, Hannes; Palu, Ivo 8th International Workshop on Large Scale Integration of Wind Power and on Transmission Networks for Offshore Wind Farms : Bremen, Germany, 14-15 October, 2009 2009 / p. 624-629

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 quality in weak grids containing wind turbines

Palu, Ivo; Agabus, Hannes; Oidram, Rein 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 125-130 : ill

Power quality issues concerning photovoltaic generation and electrical vehicle loads in distribution grids

Niitsoo, Jaan; Taklaja, Paul; Palu, Ivo; Klüss, Joni Smart grid and renewable energy 2015 / p. 164-177 : ill

Power quality issues concerning photovoltaic generation in distribution grids

Niitsoo, Jaan; Jarkovoi, Marek; Taklaja, Paul; Klüss, Joni; Palu, Ivo Smart grid and renewable energy 2015 / p. 148-163 : ill

Precision and accuracy of pulse propagation velocity measurement in power cables

Kiitam, Ivar; Shafiq, Muhammad; Choudhary, Maninder; Parker, Martin; Palu, Ivo; Taklaja, Paul Energies 2023 / art. 2702
<https://doi.org/10.3390/en16062702>

Preventing bird streamer outages using alternative tower configurations

Taklaja, Paul; Hyvönen, Petri; Klüss, Joni; Niitsoo, Jaan; Palu, Ivo IEEE transactions on power delivery 2014 / p. 2402-2409 : ill

Problems related to grid connection in Pakri Wind Park

Oidram, Rein; Landsberg, Mart; Agabus, Hannes; Attikas, Raivo; Ojangu, Jaanus; Palu, Ivo Nordic Wind Power Conference - NWPC'2006 : Grid Integration and Electrical Systems of Wind Turbines and Wind Farms : 22-23 May 2006, Hanasaari, Espoo, Finland 2006 / [4] p. : ill

Ramping behaviour analysis of wind farms

Mishra, Sambeet; Leinakse, Madis; Palu, Ivo; Kilter, Jako 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (IEEEIC / I&CPS Europe), 12-15 June 2018 : conference proceedings 2018 / 5 p.: ill <https://doi.org/10.1109/IEEEIC.2018.8493720>

Reaktiivenergia tarbimise analüüs Tallinna Tehnikaülikooli hoonetes [Elektrooniline publikatsioon]

Kangro, Triin; Kilter, Jako; Palu, Ivo 2015

Reaktiivvõimsuse kompenseerimine Eesti elektrisüsteemis : Lep 17056 lõpparuanne [Võrguteavik]

Palu, Ivo; Leinakse, Madis; Treufeldt, Ülo; Meldorf, Mati; Sarnet, Tanel; Šuvalova, Jelena; Kull, Karl; Salumäe, Uku;AVINGU, Annemai; Trummal, Tarmo 2017

https://elering.ee/sites/default/files/attachments/20180220_reaktiivv%C3%B5imsuse_aruanne_v2_Limited.pdf
https://issuu.com/Elering/docs/20180220_reaktiivv_imsuse_aruanne

Receding-horizon based optimal dispatch of virtual power plant considering stochastic dynamic of photovoltaic generation

Xu, Yan; Liu, Zuoyu; Wen, Fushuan; Palu, Ivo Energy Conversion and Economics 2021 / p. 45–53 <https://doi.org/10.1049/enc2.12027>

Reliability framework for power network assessment

Mishra, Sambeet; Bordin, Chiara; Fornes, Jordi Mateo; Palu, Ivo 2018 International Conference on Renewable Energy and Environment Engineering (REEE 2018) 2019 / art. 02005, 7 p. : ill <https://doi.org/10.1051/e3sconf/20198002005> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Residential load harmonics in distribution grid

Niitsoo, Jaan; Palu, Ivo; Kilter, Jako; Taklaja, Paul; Vaimann, Toomas The 3rd International Conference on Electric Power and Energy Conversion Systems (EPECS 2013) : [proceedings] 2013 / p. 1-6 : ill

A resilience-enhancing system restoration method considering voltage balance

Pang, Kaiyuan; Wang, Yizheng; Wen, Fushuan; Palu, Ivo; Yang, Zeng; Chen, Minghui; Zhao, Hongwei; Shang, Huiyu 2020 IEEE Power & Energy Society General Meeting (GM 2020) 2020 / 5 I <https://doi.org/10.1109/PESGM41954.2020.9281725>

Resiliency oriented control of a smart microgrid with photovoltaic modules

Mishra, Sambeet; Peterson, Kristjan; Hilimon, Tauno; Šuvalova, Jelena; Wen, Fushuan; Palu, Ivo Global Energy Interconnection 2021 / p. 441-452 <https://doi.org/10.1016/j.gloi.2021.11.008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A review of aging models for electrical insulation in power cables

Choudhary, Maninder; Shafiq, Muhammad; Kiitam, Ivar; Hussain, Amjad; Palu, Ivo; Taklaja, Paul Energies 2022 / Art. nr. 3408
<https://doi.org/10.3390/en15093408> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review on realtime 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 Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Short-circuit wave transient measurements in HV power network

Kütt, Lauri; Kilter, Jako; Palu, Ivo 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 37-41 : ill

Soojuselektrijaama koostöö elektrituulikutega

Palu, Ivo Keskkonnatehnika 2007 / 8, lk. 22-24 : ill

State coordinated voltage control in an active distribution network with on-load tap changers and photovoltaic systems

Singh, Praveen Prakash; Palu, Ivo Global Energy Interconnection 2021 / 9 p. : ill <https://doi.org/10.1016/j.gloi.2021.05.005> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A stochastic nonlinear excitation controller for transient stabilization in a power system

Xu, Yan; Wen, Fushuan; **Palu, Ivo**; **Yang, Zeng**; Chen, Minghui; Zhao, Hongwei; Shang, Huiyu 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. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982375>

Strength analysis of medium voltage overhead line crossarms for updating conductor

Kiitam, Ivar; **Taklaja, Paul**; **Pohlak, Meelis**; **Põdra, Priit**; **Palu, Ivo** 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.2019.8818235>

Study of the behaviour of partial discharges for proactive diagnostics in medium voltage cables

Shafiq, Muhammad; **Kiitam, Ivar**; **Taklaja, Paul**; **Parker, Martin**; **Palu, Ivo**; **Kütt, Lauri** 2021 IEEE PES/IAS PowerAfrica, PowerAfrica 2021 2021 / p. 1-5 <https://doi.org/10.1109/PowerAfrica52236.2021.9543233>

Study on the progression of surface partial discharge in power cables

Choudhary, Maninder; **Shafiq, Muhammad**; **Kiitam, Ivar**; **Palu, Ivo**; **Taklaja, Paul** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / 6 p <https://doi.org/10.1109/RTUCON56726.2022.9978804>

Technologies and practical implementations of air-conditioner based demand response

Waseem, Muhammad; Lin, Zhenzhi; Ding, Yi; **Wen, Fushuan**; Liu, Shengyuan; **Palu, Ivo** Journal of Modern Power Systems and Clean Energy 2021 / p. 1395 - 1413 <https://doi.org/10.35833/MPCE.2019.000449> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The in-depth evaluation of wind power forecasting accuracy in Estonia : the role of technical availability

Ulm, Lauri; **Palu, Ivo** 13th Wind Integration Workshop : International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants : 11-13 November, 2014, Berlin, Germany : proceedings 2014 / [4] p. : ill

The possibilities to improve local electrical power grid : case of TUT campus [Electronic resource]

Astapov, Victor; **Palu, Ivo** 2016 17th International Scientific Conference on Electric Power Engineering (EPE) : proceedings 2016 / [5] p. : ill. [USB] <https://doi.org/10.1109/EPE.2016.7521793>

The Use of DigSilent Power Factory Simulator for "Introduction into Power Systems" Lectures

Astapov, Victor; **Palu, Ivo**; **Vaimann, Toomas** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 95–99 : ill <https://doi.org/10.2478/ecce-2018-0011>

Thermal power plant cooperation with wind turbines

Palu, Ivo; **Tammoja, Heiki**; **Oidram, Rein** Estonian journal of engineering 2008 / 4, p. 317-324 : ill

Thermal power plant cooperation with wind turbines

Palu, Ivo; **Tammoja, Heiki**; **Oidram, Rein** 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. 129-132 : ill

TTÜ elektroenergeetika ja mehhatroonika instituudi doktoriõppe tulemustest

Palu, Ivo Elektriala 2021 / lk. 8-11 : ill https://www.eester.ee/record=b1240496*est

TTÜ struktuurimuutuste tulemustest

Palu, Ivo Elektriala 2018 / lk. 14-15 http://www.eester.ee/record=b1240496*est

TTÜ struktuurimuutustest

Palu, Ivo Elektriala 2017 / lk. 12-13 : ill http://www.eester.ee/record=b1240496*est

Tulevasi elektriinseneri ootab ees avar tööpõld

Alvela, Ain; **Palu, Ivo** toostusest.ee 2023 [Tulevasi elektriinseneri ootab ees avar tööpõld](#)

Two-Stage Self-Healing Restoration Strategy Considering Operating Performance

Pang, Kaiyuan; Wang, Chongyu; **Wen, Fushuan**; **Palu, Ivo**; Feng, Changsen; Yang, Zeng; Chen, Minghui; Zhao, Hongwei; Shang, Huiyu Journal of Energy Engineering 2020 [https://doi.org/10.1061/\(ASCE\)EY.1943-7897.0000683](https://doi.org/10.1061/(ASCE)EY.1943-7897.0000683) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Undesirable usage of energy in residential house

Niitsoo, Jaan; **Palu, Ivo** 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. 126-128 : ill

A user interface tool for ramping behavior analysis of renewable energy

Mishra, Sambeet; Palu, Ivo PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / p. 175-178 : ill <https://doi.org/10.1109/PQ.2016.7724109>

Uued professorid TalTechis

Durst, Susanne; Partanen, Jenni Vilhelmiina; Kasabov, Edward; Palu, Ivo; Sergejev, Fjodor; Trikkel, Andres; Kalda, Jaan; Aav, Riina Mente et Manu 2020 / lk. 32-37 : portr https://www.ttu.ee/public/m/mente-et-manu/MM_01_2020/mobile/index.html
https://www.ester.ee/record=b1242496*est

Validation of full-converter wind power plant generic model based on actual fault ride-through measurements

Tšernobrovkin, Oleg; Perdana, Abram; Palu, Ivo; Kilter, Jako Journal of energy and power engineering 2010 / 4, p. 54-62

Verification of a wind farm aggregated generic dynamic model based on a real fault ride-through test in the grid

Tšernobrovkin, Oleg; Perdana, Abram; Palu, Ivo; Kilter, Jako Proceedings of 5th Nordic Wind Power Conference 2009 2009 / [6] p

Verification of wind parks and their integration into small-interconnected power systems

Kilter, Jako; Landsberg, Mart; Palu, Ivo; Tšernobrovkin, Oleg IEEE PowerTech 2009 Conference : Bucharest, 28.06-02.07.2009 2009 / ? p

Wet test on naturally polluted glass and composite insulators

Taklaja, Paul; Niitsoo, Jaan; Palu, Ivo PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 261-266 : ill <https://ieeexplore.ieee.org/document/6256236>

50 000 eurot tuuleenergeetika uuringuile : [TTÜ elektroenergeetika instituudi osalemisest projektis EL Phare programmi raames]

Palu, Ivo Mente et Manu 2005 / 5. okt., lk. 4 https://www.ester.ee/record=b1242496*est

Wind and Solar energy optimal integration

Ulm, Lauri; Palu, Ivo; Mishra, Sambeet 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p
<https://doi.org/10.1109/RTUCON48111.2019.8982369>

Wind energy intecration impact on power quality in Estonia

Palu, Ivo; Agabus, Hannes European Wind Energy Conference 2007 : Milano, Italia, 8-10 May 2007 2007 / ? p

Wind energy integration in Estonia

Palu, Ivo Wind Energy in the Baltic Sea Region : Gotland, Sweden 2005 / [15] p

Wind park and transmission network cooperation considering Grid Code requirements

Kilter, Jako; Dubbelman, Edgar; Palu, Ivo; Niitsoo, Jaan Electrical and Control Technologies : proceedings of the the 7th International Conference on Electrical and Control Technologies ECT-2012 2012 / p. 183-188 : ill
https://www.researchgate.net/publication/290252818_Wind_park_and_transmission_network_cooperation_considering_Grid_Code_requirements

Wind power generation impact on Sõrve peninsula network operation in Saaremaa

Bolgov, Viktor; Janson, Kuno; Šklovski, Jevgeni; Palu, Ivo; Laanetu, Margus PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 175-178 : ill
<https://ieeexplore.ieee.org/document/6256223>

Wind power variation identification using ramping behavior analysis

Mishra, Sambeet; Leinakse, Madis; Palu, Ivo Energy procedia 2017 / p. 565-571 : ill <https://doi.org/10.1016/j.egypro.2017.11.075>

Virtual power plants and integrated energy system : current status and future prospects

Mishra, Sambeet; Bordin, Chiara; Leinakse, Madis; Wen, Fushuan; Howlett, Robert J.; Palu, Ivo Handbook of Smart Energy Systems 2022 / p. 1-31 https://doi.org/10.1007/978-3-030-72322-4_73-1

Visiting Hannover Fair 2004

Palu, Ivo Fair Play 2004 2004 / p. 6-8

Volt-time characteristics of medium voltage overhead line porcelain pin insulators

Taklaja, Paul; Hyvönen, Petri; Niitsoo, Jaan; Palu, Ivo; Klüss, Joni; Kütt, Lauri 14th International Scientific Conference on Electric Power Engineering 2013 : Kouty nad Desnou, Czech Republic, 28 – 30 May 2013 : proceedings 2013 / p. 423-427

Ülevaade TTÜ viimase aasta doktoritöödest

Palu, Ivo Elektriala 2019 / lk. 26-28 : ill http://www.ester.ee/record=b1240496*est

