

An ultrafast EV charging station demonstrator [Electronic resource]

Hõimoja, Hardi; Rufer, Alfred; Dziechciaruk, Grzegorz; Vezzini, Andrea SPEEDAM 2012 : Sorrento (Italy) - June 20-22, 2012 : 21st edition of the International Symposium on Power Electronics, Electrical drives, Automation and Motion 2012 / p. 1390-1395 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6264617>

Analysis and static mode optimization of simultaneous inductive and capacitive coupled wireless power transfer system

Shevchenko, Viktor; Pakhaliuk, Bohdan; **Husev, Oleksandr**; **Vinnikov, Dmitri**; Strzelecki, Ryszard; Khomenko, Maksym 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 / 5 p <https://doi.org/10.1109/RTUCON60080.2023.10413112>

Analysis of battery charger topologies for an electric vehicle

Jalakas, Tanel; **Roasto, Indrek**; **Vinnikov, Dmitri** BEC 2012 : 2012 13th Biennial Baltic Electronics Conference : proceedings of the 13th Biennial Baltic Electronics Conference : October 3-5, 2012, Tallinn, Estonia 2012 / p. 223-226 : ill

Analysis of distribution substation topologies for energy exchanging between EV and utility networks

Mägi, Marek 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. 158-167 : ill

Bipolar duty cycle control for dual side LCC compensated inductive power transfer system for wide output voltage range

Kishan, D.; **Chub, Andrii**; Vinod, Marupuru IECON Proceedings (Industrial Electronics Conference) IECON 2024 - 50th Annual Conference of the IEEE Industrial Electronics Society 2025 / 4 p <https://doi.org/10.1109/IECON55916.2024.10905524>

Bolt rajas Tallinnasse tõukerataste laadimisdokid [Võrguväljaanne]

postimees.ee 2021 "[Bolt rajas Tallinnasse tõukerataste laadimisdokid](#)"

Charge-discharge behaviour of VRLA batteries : model calibration and application for state estimation and failure detection

Tenno, Ander; Tenno, Robert; Suntio, Teuvo Journal of power sources 2001 / 1, p. 42-53 <https://www.sciencedirect.com/science/article/pii/S0378775301008308>

Charging infrastructure planning for electric vehicle in India : present status and future challenges

Sachan, Sulabh; **Singh, Praveen Prakash** Regional Sustainability 2022 / p. 335 - 345 <https://doi.org/10.1016/j.regsus.2022.11.008>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; **Husev, Oleksandr**; Lytvyn, Oksana; **Matiushkin, Oleksandr** Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A comparison between three-phase conventional two-stage ac-dc and single-stage matrix converter approaches

Mohseni, Parham; **Emiliani, Pietro**; **Husev, Oleksandr**; **Vinnikov, Dmitri**; **Mackay, Laurens** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227438>

Comparison of (N+1) redundancy and fault tolerance approaches in single-stage series-connected isolated MVAC to LVDC converters

Bakeer, Abualkasim Ahmed Ali; **Chub, Andrii**; **Blinov, Andrei**; Bayhan, Sertac; **Vinnikov, Dmitri** 2023 International Conference on Clean Electrical Power (ICCEP) 2023 / p. 469-474 : ill <https://doi.org/10.1109/ICCEP57914.2023.10247478>

A comprehensive review of standards and best practices for utility grid integration with electric vehicle charging stations

Sachan, Sulabh; Deb, Sanchari; **Singh, Praveen Prakash**; Alam, Mohammad Saad; Shariff, Samir M. Wiley Interdisciplinary Reviews: Energy and Environment 2022 / Art. e424 <https://doi.org/10.1002/wene.424> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Concept of wireless low-voltage DC socket for the residential house application

Shevchenko, Viktor; **Husev, Oleksandr**; **Pakhaliuk, Bohdan**; **Vinnikov, Dmitri**; Strzelecki, Ryszard IEEE Access 2024 / p. 143226-143236 <https://doi.org/10.1109/ACCESS.2024.3471691>

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](#)

Current harmonic aggregation cases for contemporary loads

Daniel, Kamran; **Kütt, Lauri**; **Iqbal, Muhammad Naveed**; **Shabbir, Noman** Energies 2022 / art. 437

DC fast charging of electric vehicles : a review on architecture and power conversion technology

Arena, Gabriele; **Emiliani, Pietro**; **Chub, Andrii**; **Vinnikov, Dmitri**; de Carne, Giovanni 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227492>

Development and control of energy exchange processes between electric vehicle and utility network = Elektriauto energiasalvesti ja elektrijaotusvõrgu energiyahetusprotsesside uurimine ja juhtimine

Mägi, Marek 2013 https://www.ester.ee/record=b2966194*est

Development of power management and control system for an infrastructure for Plug-in Hybrid Electric Vehicle charging

Kõivastik, Ivar; **Pettai, Elmo** 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. 86-88 : ill

Eesti kihutab kiirlaadijatega rikkast Norrastki mööda : [elektriautode kiirlaadijatest : Elmo Pettai kommentaariga]

Paas, Kadri Maaleht 2012 / lk. 11

Eesti talv ja tootja promo: millised on tegelikud väljakutsed elektriautode akude arendamisel? Teemat avab TalTechi professor

Rassõlkin, Anton digi.geenius.ee 2024 [Eesti talv ja tootja promo: millised on tegelikud väljakutsed elektriautode akude arendamisel? Teemat avab TalTechi professor](#)

Eestis ollakse elektriautode võidukäigu suhtes pigem positiivsed [Võrguväljaanne]

Uibo, Veronika err.ee 2022 [Eestis ollakse elektriautode võidukäigu suhtes pigem positiivsed](#)

Electric vehicle charger load current harmonics variations due to supply voltage level differences - case examples

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo**; **Niitsoo, Jaan** 2014 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) : 18-20 June, 2014, Ischia, Italy : proceedings 2014 / p. 917-922 : ill

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

Energy saving estimates for regenerative braking and downhill driving of battery electric vehicles

Vodovozov, Valery; **Rassõlkin, Anton**; **Lillo, Nikolai**; **Raud, Zoja** BEC 2014 : 2014 14th Biennial Baltic Electronics Conference : proceedings of the 14th Biennial Baltic Electronics Conference : Tallinn University of Technology, October 6-8, 2014, Tallinn, Estonia 2014 / p. 237-240 : ill

Energy storage for mitigating grid congestion caused by electric vehicles : a techno-economic analysis using a computationally efficient graph-based methodology

Navon, Aviad; Nitskansky, Ran; Lipman, Eshel; **Belikov, Juri**; Gal, Nurit; Orda, Ariel; Levron, Yoash Journal of energy storage 2023 / art. 106324 <https://doi.org/10.1016/j.est.2022.106324> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimating the harmonic distortions in a distribution network supplying EV charging load using practical source data - case example

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo**; **Niitsoo, Jaan** 2014 IEEE Power and Energy Society General Meeting : National Harbor, MD, USA, 27-31 July 2014 2014 / [5] p. : ill

Estonians rather optimistic about EV revolution [Online resource]

Uibo, Veronika news.err.ee 2022 [Estonians rather optimistic about EV revolution](#)

Experimental verification of light electric vehicle charger multiport topology

Jalakas, Tanel; **Zakis, Janis** 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 415-418 : ill <http://dx.doi.org/10.1109/CPE.2015.7231111>

Feasibility investigation for residential battery sizing considering EV charging demand

Shabbir, Noman; **Kütt, Lauri**; **Daniel, Kamran**; **Astapov, Victor**; **Raja, Hadi Ashraf**; **Iqbal, Muhammad Naveed**; **Husev, Oleksandr** Sustainability 2022 / art. 1079 <https://doi.org/10.3390/su14031079> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

First charging cycle model of a lithium-ion battery and its experimental verification

Peterson, Kristjan 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. 118-122 : ill

A full bridge series-series resonant IPT system optimized for charging electric vehicle batteries across an extensive range

Kishan, Dharavath; Vinod, Marupuru; **Chub, Andrii** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604397>

Implementation issues of droop controlled DC nanogrids: State of charge management of battery energy storage and impact of sensor gain tolerance

Hasan, Sayeed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830832>

Investigation of supercapacitor bidirectional power flow system

Rankis, Ivars; **Zakis, Janis** Scientific journal of Riga Technical University. Serija 4, Power and electrical engineering = Rīgas Tehniskās universitātes zinātniskie raksti. Serija 4. Energētika un elektrotehnika 2012 / p. 35-40 : ill <https://ortus.rtu.lv/science/en/publications/13864>

Juhtmevaba elekter on veel lapsekingades

Saar, Sandra; Rosin, Jakob novaator.err.ee 2024 [Juhtmevaba elekter on veel lapsekingades](https://doi.org/10.1109/JESTPE.2020.3041565)

Kui elektrivõrku pole käepärast, ehk, Vantame mobiiltelefoni aku täis

Jaanus, Martin Praktiline Arvutikasutaja 2007 / 6, lk. 36-37 : ill https://artiklid.elnet.ee/record=b1058798*est

Linearity and stability analysis of a class of phase-frequency detectors

Männama, Vello; Paavle, Toivo Iranian journal of electrical and computer engineering 2002 / 1, p. 51-53

Mikrovõrk võimaldab energiakasutust tõhusamalt juhtida

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

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>

Modified inductive multi-coil wireless power transfer approach based on Z-source network

Pakhaliuk, Bohdan; **Husev, Oleksandr**; Shevchenko, Viktor; Zakis, Janis; Khomenko, Maksym; Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2021 / p. 4906-4917: ill <https://doi.org/10.1109/JESTPE.2020.3041565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modular MV naturally balanced converter with high-frequency isolation and no DC-Link capacitor for EV fast charging

Blinov, Andrei; Chub, Andrii; Guler, Naki; Bayhan, Sertac; Parsa, Leila; **Vinnikov, Dmitri** IEEE Transactions on Transportation Electrification 2024 / 9 p <https://doi.org/10.1109/TTE.2024.3399329>

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

Optimal operation of multi-energy microgrids in presence of hydrogen fueling stations and electric vehicle lots

Mahmoudnezhad, Fayeze 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 109-110 : ill https://www.ester.ee/record=b5504019*est

Optimizing EV driving-recharge time ratio a under limited grid connection

Tsimomeny, M.; **Hõimoja, Hardi** 7th IET International Conference on Power Electronics, Machines and Drives (PEMD 2014) : Manchester, United Kingdom, 8-10 April 2014. Vol. 2 2014 / p. 903-908 : ill

Overview of development in the field of energy exchange between electric vehicles and utility network

Mägi, Marek 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. 123-124 : ill

Power factor correction with vehicle-to-grid STATCOM implementation

Rassõlkin, Anton; Kallaste, Ants; Hõimoja, Hardi PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 177-180 : ill

Power interfaces and storage selection for an ultrafast EV charging station

Hõimoja, Hardi; Vasiladiotis, M.; Rufer, A. PEMD 2012 : Power Electronics, Machines and Drives : 27-29 March 2012, University Bristol, UK : [proceedings] 2012 / 6 p. : 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

Prediction of optimal location for electric vehicle charging stations

Singh, Praveen Prakash 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 81-82 : ill
https://www.ester.ee/record=b5570906*est

Päikeseenergia laadimispunkt TTÜ tudengimaja kohvikus : [lühiteade]

HEI = Hea Eesti Idee 2011 / nov., lk. 6

Päikeseenergia laadimispunkt tudengimaja kohvikus! : [TTÜ Säästva Arengu Klubi eestvedamisel]

Tamm, Tõnu Studioosus 2011 / lk. 21

Päikesest aku täis : [foto TTÜ tudengimaja kohviku päikeseenergia laadimispunktist]

Arvutimaailm 2011 / 11, lk. 15 : fot

Reliability analysis of battery energy storage system for various stationary applications

Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Shen, Yanfeng; Sangwongwanich, Ariya Journal of energy storage 2022 / art. 104217 <https://doi.org/10.1016/j.est.2022.104217> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A review of the effects of electric vehicle charging on distribution network operation and power quality

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** Electrical and Control Technologies : proceedings of the 8th International Conference on Electrical and Control Technologies : ECT-2013 2013 / p. 162-167

A review of the harmonic and unbalance effects in electrical distribution networks due to EV charging

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** 12th International Conference on Environment and Electrical Engineering (EEEIC) : 5-8 May 2013 2013 / [6] p

Single-stage series-connected isolated converters for MVAC to DC applications

Blinov, Andrei; Chub, Andrii; Vinnikov, Dmitri; Bayhan, Sertac Workshop on Smart Grid and Renewable Energy (SGRE) 2022 / 4 p <https://doi.org/10.1109/SGRE53517.2022.9774185>

Sliding mode control based on super twisting algorithm for single-stage on-board charger

Guler, Naki; Komurcugil, Hasan; Bayhan, Sertac; **Vinnikov, Dmitri; Blinov, Andrei** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227481>

Sound transmission in automotive turbochargers

Tiikoja, Heiki; Rämmal, Hans; Abom, Mats; Boden, Hans SAE Technical Papers 2011 / [12] p
<https://www.sae.org/publications/technical-papers/content/2011-01-1525/>

Survey of harmonic emission of electrical vehicle chargers in the European market

Collin, A. J.; Xu, Xiao; Djokic, S. Z.; Möller, F.; Meyer, Jan; **Kütt, Lauri**; Lehtonen, Matti SPEEDAM 2016 - proceedings : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Capri (Italy), 22nd-24th June 2016 2016 / p. 1208-1213 : ill <https://doi.org/10.1109/SPEEDAM.2016.7526005>

A three-phase unfolding-based PFC topology with two inductors for electric vehicles battery charging

Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Matiushkin, Oleksandr; Vosoughi Kurdkandi, Naser 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, October 9-11, 2023 : conference proceedings 2023 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10413182>

Travel activity based stochastic modelling of load and charging state of electric vehicles

Iqbal, Muhammad Naveed; Kütt, Lauri; Lehtonen, Matti; Millar, Robert John; Püvi, Verner; **Rassõlkin, Anton; Demidova, Galina** Sustainability 2021 / art. 1550, 14 p. : ill <https://doi.org/10.3390/su13031550> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

TTÜ hakkab sülearvuteid laadima päikese abil

Kruise, Merilin Eesti Päevaleht 2009 / 26. aug., lk. 8 <https://epl.delfi.ee/artikkel/51176312/ttu-hakkab-sulearvuteid-laadima-paikese-abil>

TTÜ üliõpilased hakkavad päikeseenergiaga sülearvuteid laadima : [TTÜ Säästva Arengu Klubi liikmed paigutavad ülikooli katusele 3 päikesepaneeli]

Vahtras, Maarja Studioosus 2009 / oktoober, lk. 15 https://www.ester.ee/record=b1558644*est

Tänavavalgustus aitab peagi elektriautosid laadida

Raudmäe, Egeli Tartu Postimees 2023 / Lk. 3 <https://dea.digar.ee/article/tartupostimees/2023/09/26/6.1>

Uudne laadija võimaldaks odavamalt elektriautode laadimisvõrku tihendada [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 [Uudne laadija võimaldaks odavamalt elektriautode laadimisvõrku tihendada](#)

Valida on tava-, poolkiire ja kiirlaadimise vahel : [ka TTÜ teadurite tööst elektriautode alal]

Meresmaa, Andres Inseneria 2011 / lk. 17-18 https://www.ester.ee/record=b1519314*est

Wireless charging solutions for autonomous industrial systems

Zinchenko, Denys 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. 167-168 : ill https://www.ester.ee/record=b5183874*est

Wireless charging station design for electric scooters : case study analysis

Shevchenko, Viktor; Pakhaliuk, Bohdan; Husev, Oleksandr; Vinnikov, Dmitri; Strzelecki, Ryszard Energies 2024 / art. 2472 <https://doi.org/10.3390/en17112472>