

A method for battery impedance analysis

Tenno, Ander; Tenno, Robert; Suntio, Teuvo Journal of the Electrochemical Society 2004 / 6, p. A806-A824
<https://iopscience.iop.org/article/10.1149/1.1697413>

Advances in room temperature fluoride-ion batteries

Molaiyan, Palanivel; Mohammad, Irshad; Witter, Raiker 20th International Conference on Advanced Energy Materials and Research, August 13-14, 2018, Dublin, Ireland : posters 2018 / p. 94 : ill <https://doi.org/10.4172/2576-1463-C1-003>

Analysis and design of ultracapacitor-boosted back-up power supply for tramcars [Electronic resource]

Hõimoja, Hardi; Vinnikov, Dmitri; Jalakas, Tanel EUROCON 2009 : International IEEE Conference devoted to the 150-anniversary of Alexander S. Popov : May 18-23, 2009 Saint Petersburg, Russia 2009 / p. 598-604 [CD-ROM]
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Battery impedance and its relation to battery characteristics

Tenno, Ander; Tenno, Robert; Suntio, Teuvo Proc. 24th INTELEC Conf., Montreal, Canada, 2002 2002 / p. 176-183
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Battery impedance characterization through inspection of discharge curve and testing with short pulses

Tenno, Ander; Tenno, Robert; Suntio, S. Journal of power sources 2006 / 2, p. 1029-1033 : ill
<https://www.sciencedirect.com/science/article/pii/S0378775305015879>

Battery storage technologies for electrical applications : impact in stand-alone photovoltaic systems

Akinyele, Daniel; **Belikov, Juri;** Levron, Yoash Energies 2017 / art. 1760, 39 p. : ill <https://doi.org/10.3390/en10111760>

Bifunctional multi-metallic nitrogen-doped nanocarbon catalysts derived from 5-methylresorcinol

Kisand, Kaarel; Sarapuu, Ave; Kikas, Arvo; Kisand, Vambola; Rähn, Mihkel; Treshchalov, Alexey; Käärik, Maike; Piirsoo, Helle-Mai; Aruväli, Jaan; **Paiste, Päärn** Electrochemistry communications 2021 / art. 106932 <https://doi.org/10.1016/j.elecom.2021.106932> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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](#)

Clustering and outlier analysis for key performance indicators in battery energy storage systems applications

Gilbert Zequera, Rolando Antonio; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227417>

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>

Concept of hardware-in-the-loop test platform for microgrid with multi-agent approach

Kuzin, Aleksei; Lukichev, Dmitry; **Demidova, Galina;** Anuchin, Alecksey 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 <https://doi.org/10.1109/RTUCON51174.2020.9316626>

Concept of universal AC/DC-DC EV onboard battery charger with minimal redundancy and high-power density

Mohseni, Parham 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. 73-74 : ill https://www.ester.ee/record=b5504019*est

Congestion control strategies for increased renewable penetration of photovoltaic in LV distribution networks

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Husev, Oleksandr; Ahmadiyahangar, Roya; Wen, Fushuan; Kull, Karl Energy reports 2022 / p. 217-223 <https://doi.org/10.1016/j.egyr.2022.10.184> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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<https://ieeexplore.ieee.org/document/4778599>

Crystal phase and surface defect driven synthesis of Pb1-xSnxF2 solid solution electrolyte for fluoride ion batteries

Molaiyan, Palanivel; Witter, Raiker Journal of electroanalytical chemistry 2019 / p. 154-159
<https://doi.org/10.1016/j.jelechem.2019.04.063> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Data science-based techniques for modelling and diagnostics of battery cells based on end-of-life criteria

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Palamar, Andriy; Karpinsky, Mykola; Vodovozov, Valery CPE 2011 : 7th International Conference-Workshop Compatibility and Power Electronics : June 1-3, 2011, Tallinn, Estonia : conference guide 2011 / p. 173-177 [CD-ROM]
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Ahmadihangar, Roya; Husev, Oleksandr; Blinov, Andrei; Karami, Hossein; Rosin, Argo IECON 2020 The 46th Annual Conference of the IEEE Industrial Electronics Society 2020 / p. 5149-5154 : ill <https://doi.org/10.1109/IECON43393.2020.9254557>
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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

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<https://doi.org/10.1109/MPEL.2022.3196565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hybrid inverter and control strategy for enabling the PV generation dispatch using extra-low-voltage batteries

Meneghetti, Luiz Henrique; **Carvalho da Silva, Edivan Laercio**; Carati, Emerson Giovanni; Denardin, Gustavo Weber; da Costa, Jean Patric; de Oliveira Stein, Carlos Marcelo; Cardoso, Rafael Energies 2022 / art. 7539 <https://doi.org/10.3390/en15207539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Implementation of burst control based on sigma-delta modulation in low-cost microcontroller

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Hiimaa, Maido; Tamre, Mart Proceedings of the 7th International Conference of DAAAM Baltic Industrial Engineering : 22-24th April 2010, Tallinn, Estonia. [III] 2010 / p. 542-547 : ill

Interface converters for residential battery energy storage systems : practices, difficulties and prospects

Galkin, Ilya; **Blinov, Andrei**; Vorobyov, Maxim; Bubovich, Alexander; Saltanovs, Rodions; Pefitsis, Dimosthenis Energies 2021 / art. 3365 <https://doi.org/10.3390/en14123365> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ka patareide äraviskamiseks on valem : [vestlus K.-L. Ojanurmega]

Hannolainen, Aivar; Ojanurm, Kai-Ly Tehnikaülikool 1998 / 19. jaan., lk. 4-5 https://www.ester.ee/record=b5309277*est

Li-Ion battery equivalent circuit modelling

Hokmabad, Hossein Nourollahi 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. 97-98 : ill
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Mechanochemical synthesis of solid-state electrolyte Sm_{1-x}CaxF_{3-x} for batteries and other electrochemical devices

Molaiyan, Palanivel; Witter, Raiker Materials letters 2019 / p. 22-26 <https://doi.org/10.1016/j.matlet.2019.02.034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modeling battery energy storage systems based on remaining useful lifetime through regression algorithms and binary classifiers

Gilbert Zequera, Rolando Antonio; Rjabtsikov, Viktor; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants Applied sciences 2023 / art. 7597 <https://doi.org/10.3390/app13137597>

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Annuk, Andres; Yaici, Wahiba; **Blinov, Andrei**; Märss, Maido; Trashchenkov, Sergei; Miidla, Peep Symmetry 2021 / art. 647
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Modular self-balancing battery charger concept for cost-effective power-assist wheelchairs

Galkin, Ilya; **Blinov, Andrei**; Verbytskyi, Ievgen; **Zinchenko, Denys** Energies Special Issue Power Electronic Systems for Efficient and Sustainable Energy Supply 2019 / art. en12081526, 21 p. : ill <https://doi.org/10.3390/en12081526> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multiport converter with integrated energy storage for hydrogen buffer interfacing with renewable energy systems

[Electronic resource]

Andrijanovič, Anna; Blinov, Andrei; Husev, Oleksandr; Vinnikov, Dmitri 2012 IEEE International Conference on Industrial Technology : proceedings CD 2012 / p. 235-240 : ill [CD-ROM] <https://ieeexplore.ieee.org/document/6209943>

New carbon-based catalyst synthesis from spent li-ion batteries for electrochemical oxygen reduction

Kazemi, Maryam; Liivand, Kerli; Kruusenberg, Ivar; **Walke, Peter; Mikli, Valdek; Uibu, Mai**; Macdonald, Digby D. GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 42 https://fmdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Optimized energy scheduling of residential DC building: Case of Nordic climate

Sidorova, Aleksandra; Blinov, Andrei; Ahmadihangar, Roya; Vinnikov, Dmitri; Vösa, Karl-Villem; Kurnitski, Jarek 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227437>

Overview of battery energy storage systems readiness for digital twin of electric vehicles

Gilbert Zequera, Rolando Antonio; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants IET Smart Grid 2023 / p. 5-16 <https://doi.org/10.1049/stg2.12101>

Overview of battery energy storage systems readiness for digital twin of electric vehicles

Zequera, Rolando Antonio Gilbert 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. 103-104 https://www.ester.ee/record=b5504019*est

An Overview of bidirectional AC-DC grid connected converter topologies for low voltage battery integration

Kroics, Kaspars; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; **Zakis, Janis**; Veligorskyi, Oleksandr International Journal of Power Electronics and Drive System (IJPEDS) 2018 / p. 1223-1239 : ill <https://doi.org/10.11591/ijpeds.v9.i3.pp1223-1239>

Profitability of energy storages for household load scheduling

Lebedev, Denis; Rosin, Argo; Auväärt, Aivar 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. 70-75 : ill

Rahvusvaheline elektrotehnika sõnastik. Osa 482, Primaar- ja sekundaareleemendid ja -patareid [Võrguteavik] =

International Electrotechnical Vocabulary. Part 482: Primary and secondary cells and batteries (IEC 60050-482:2004 + IEC 60050-482:2004/Amd 1:2016 - IEC 60050-482:2004/Amd 2:2020, identical)
2020 <https://www.evs.ee/StandardDownload/DownloadPreview?productId=134267&language=43>

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](#)

Robert Krautmann, "Päikesepatareid annavad vunki värvõrguseadmetele". Teadus 3 minutiga 2022.11.02

Krautmann, Robert Eesti Teaduste Akadeemia : Youtube kanal 2022 / video [Robert Krautmann, "Päikesepatareid annavad vunki värvõrguseadmetele". Teadus 3 minutiga 2022.11.02 „Teadus 3 minutiga“ finaalgala 2022. 11.02.2022](#)

Sekundaareleemendid ja -patareid, mis sisaldavad leeliselisi või teisi mittehappelisi elektrolüüte. Liitiumpatareid ja sekundaareleemendid kaasaskantavatele rakendustele = Secondary cells and batteries containing alkaline or other non-acid electrolytes. Secondary lithium cells and batteries for portable applications (IEC 61960:2011)

2012 https://www.ester.ee/record=b2746738*est

SOC estimation for Li-Ion batteries based on equivalent circuit diagrams and the application of a Kalman filter

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 273-276 : ill https://www.researchgate.net/publication/261507418_SOC_estimation_for_Li-Ion_batteries_based_on_equivalent_circuit_diagrams_and_the_application_of_a_Kalman_filter

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Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** 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. 125-128 : ill

A structurally flexible halide solid electrolyte with high ionic conductivity and air processability

Karkera, Guruprakash; Soans, Mervyn; Akbaş, Ayça; **Witter, Raiker**; Euchner, Holger; Diemant, Thomas; Cambaz, Musa Ali; Meng, Zhen; Dasari, Bosubabu; Chandrappa, Shivaraju Guddehalli; Menezes, Prashanth W.; Fichtner, Maximilian Advanced energy materials 2023 <https://doi.org/10.1002/aenm.202300982>

Surface defect-enhanced conductivity of calcium fluoride for electrochemical applications

Molaiyan, Palanivel; Witter, Raiker Material design & processing communications 2019 / art. e44, 10 p. : ill <https://doi.org/10.1002/mdp2.44>

Valesti äravisatud patareid ohustavad kõiki. Need võivad süttida, plahvatada ja mürgitada

Kontro, Kristin Eesti Päevaleht 2023 / Lk. 18-19 https://dea.digar.ee/article/eestipaevaleht/2023/01/04/19.3_Valesti_äravisatud_patareid_ohustavad_kõiki._Need_võivad_süttida,_plahvatada_ja_mürgitada

Värvõrgule võivad tulevikus vunki anda päikesepatareid [võrguväljaanne]

Krautmann, Robert novaator.err.ee 2022 "[Värvõrgule võivad tulevikus vunki anda päikesepatareid](#)"

О возможности оптимального регулирования конденсаторных батарей в распределительных сетях по местным параметрам

Seier, Gustav; Tiigimägi, Eeli Материалы XXII Литовской республиканской научно-технической конференции (31 января - 5 февраля 1972 г.) 1972 / с. 227-228