Artificial Intelligence-Based Predictive Analytics for Battery Energy Storage Systems in Electric Vehicle Applications = Tehisintellektil põhinev ennustav andmeanalüüs akupõhiste energiasalvestussüsteemide jaoks elektrisõidukites
Zequera, Rolando Antonio Gilbert 2025 https://www.ester.ee/record=b5758189*est https://digikogu.taltech.ee/et/Item/7ecb1e38-a591-47c5-b37e-7c2e901d05f1 https://doi.org/10.23658/taltech.61/2025

Battery energy storage systems modelling based on remaining useful lifetime through regression algorithms and binary classifiers
Zequera, Rolando Antonio Gilbert 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. 93-94 : ill https://www.ester.ee/record=b5570906*est

Charge Diagnostics and State Estimation of Battery Energy Storage Systems Through Transformer Models
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** IEEE Access 2025 / p. 17733–17744 : ill https://doi.org//10.1109/ACCESS.2025.3532858

Clustering and outlier analysis for key performance indicators in battery energy storage systems applications
Zequera, Rolando Antonio Gilbert; **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

Data science-based techniques for modelling and diagnostics of battery cells based on end-of-life criteria
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** 2023 International Conference on Electrical Drives and Power Electronics (EDPE) 2023 / 6 p https://doi.org/10.1109/EDPE58625.2023.10274007

Deep Learning methodology for charging management applications in battery cells based on Neural Networks
Zequera, Rolando Antonio Gilbert; **Rjabtšikov, Viktor**; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** IEEE Transactions on Intelligent Vehicles 2025 / p. 668-682 https://doi.org/10.1109/TIV.2024.3417216

Electric and hybrid vehicles : From smart energy storage systems to mechanical transmission
Sekhri, Even; **Mohamed, Mahmoud Ibrahim Hassanin**; **Zequera, Rolando Antonio Gilbert**; **Rassõlkin, Anton** Smart Electric and Hybrid Vehicles : Advancements in Materials, Design, Technologies, and Modeling 2025 / p. 71-126 https://doi.org/10.1002/9781394225040.ch3

Health and charge indicators for battery energy storage systems in electric vehicles applications
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC) : Brasov, Romania, 25-28 Sept. 2022 : proceedings 2022 / p. 427-432 https://doi.org/10.1109/PEMC51159.2022.9962858

Kolmogorov-Arnold networks for algorithm design in battery energy storage system applications
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** Energy Reports 2025 / p. 2664-2677 https://doi.org/10.1016/j.egyr.2025.02.002

Meetod, seade, arvutiloetav andmekandja juhiste salvestamiseks ja tarkvaratoode akude energiasalvestussüsteemi (BESS) haldamiseks, kasutades Kolmogorov-Arnoldi võrke (KAN-e)
Zequera, Rolando Antonio Gilbert 2025 https://www.etis.ee/Portal/IndustrialProperties/Display/156fcb87-e2dc-46ea-80f0-6345f2b27baa

Modeling battery energy storage systems based on remaining useful lifetime through regression algorithms and binary classifiers
Zequera, Rolando Antonio Gilbert; **Rjabtšikov, Viktor**; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** Applied sciences 2023 / art. 7597 https://doi.org/10.3390/app13137597 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Overview of battery energy storage systems readiness for digital twin of electric vehicles
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Vaimann, Toomas**; **Kallaste, Ants** IET Smart Grid 2023 / p. 5-16 https://doi.org/10.1049/stg2.12101 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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

Overview of digital twin platforms for EV applications
Mohamed, Mahmoud Ibrahim Hassanin; **Rjabtšikov, Viktor**; **Zequera, Rolando Antonio Gilbert** Sensors 2023 / art. 1414, 15 p. : ill https://doi.org/10.3390/s23031414 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Remote data transfer and comparative performance through PyBaMM and mathematical techniques in battery

applications
Zequera, Rolando Antonio Gilbert; **Rassõlkin, Anton**; **Belolipetskaja, Diana** 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p http://doi.org/10.1109/ICDCM63994.2025.11144690

Vehicle energy management system: a survey
Maradey Lázaro, Jessica Gissella; Rincón Quintero, Arly Dario; Garrido Silva, Gianina; **Zequera, Rolando Antonio Gilbert** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 https://doi.org/10.1109/CPE-POWERENG58103.2023.10227455