

### **Battery technologies in electric vehicles : improvements in electric battery packs**

**Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri;** Strzelecki, Ryszard; Romero-Cadaval, Enrique; Tokarski, Igor IEEE industrial electronics magazine 2023 / p. 55-65 <https://doi.org/10.1109/MIE.2023.3252265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Bidirectional isolated current source DAB converter with extended ZVS/ZCS range and reduced energy circulation for storage applications**

**Blinov, Andrei; Kosenko, Roman; Vinnikov, Dmitri;** Parsa, Leila IEEE transactions on industrial electronics 2020 / p. 10552-10563 <https://doi.org/10.1109/TIE.2019.2958291> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Bidirectional soft switching current source DC-DC converter for residential DC microgrids**

**Blinov, Andrei; Kosenko, Roman; Chub, Andrii; Vinnikov, Dmitri** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6059-6064 : ill <https://doi.org/10.1109/IECON.2018.8591103>

### **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>

### **Considerations regarding the concept of cost-effective power-assist wheelchair subsystems (case study and initial evaluation)**

Galkin, Ilja; Podgornovs, Andrejs; **Blinov, Andrei; Kosenko, Roman** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 71-80 : ill <https://doi.org/10.2478/ecce-2018-0008>

### **DC-DC перетворювач з широким діапазоном забезпечення режиму природної комутації в нулях напруги**

**Blinov, Andrei; Vinnikov, Dmitri;** Ivakhno, Volodymyr; Zamaruev, Volodymyr; Styslo, Bogdan Вісник НТУ "Харківський політехнічний інститут". Серія: Електричні машини та електромеханічне перетворення енергії = Bulletin of the NTU "Kharkiv Polytechnic Institute". Series: Electrical Machines and Electromechanical Energy Conversion 2019 / с. 14-19 : іл <https://doi.org/10.20998/2409-9295.2019.20.02>

### **Evaluation of equivalent circuit diagrams and transfer functions for modeling of lithium-ion batteries**

Rahmoun, Ahmad; Biechl, Helmuth; **Rosin, Argo** Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 34-39 : ill

### **Full-bridge fault-tolerant isolated DC-DC converters : overview of technologies and application challenges**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri** IEEE Power Electronics Magazine 2022 / p. 45-55 <https://doi.org/10.1109/MPEL.2022.3196565> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Health and charge indicators for battery energy storage systems in electric vehicles applications**

**Gilbert Zequera, Rolando Antonio; 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**

**Gilbert Zequera, Rolando Antonio; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants** Energy Reports 2025 / p. 2664-2677 <https://doi.org/10.1016/j.egy.2025.02.002>

### **NFT-based life cycle management for batteries of e-cars**

**Prause, Gunnar; Gerlitz, Laima** Transport and telecommunication journal 2024 / p. 378-391 <https://doi.org/10.2478/tjt-2024-0028>

### **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](https://www.researchgate.net/publication/261507418_SOC_estimation_for_Li-Ion_batteries_based_on_equivalent_circuit_diagrams_and_the_application_of_a_Kalman_filter)

### **State of charge estimation for Li-ion batteries based on equivalent circuit diagrams and the application of a Kalman filter**

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