

### **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](#)

### **Capacitive vs Inductive Coupling Based DC-DC Converter Operating in MHz Switching Frequency Range**

**Pourjafar, Saeed; Mohseni, Parham; Husev, Oleksandr; Strzelecki, Ryszard; Matiushkin, Oleksandr** 2025 IEEE Applied Power Electronics Conference and Exposition (APEC) 2025 / p. 2173-2178 <https://doi.org/10.1109/APEC48143.2025.10977156>

### **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>

### **Comprehensive comparison of isolated high step-up dc-dc converters for low power application**

**Pourjafar, Saeed; Afshari, Hossein; Mohseni, Parham; Husev, Oleksandr; Matiushkin, Oleksandr; Shabbir, Noman** IEEE open journal of power electronics 2024 / p. 1149–1161 <https://doi.org/10.1109/OJPEL.2024.3433554> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **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](https://www.ester.ee/record=b5504019*est)

### **FCB-MPC-based cycle skipping control for soft-switched isolated AC-DC converter with reduced inductors in PFC stage**

**Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald; Kurdkandi, Naser Vosoughi** 2025 IECON – 51st Annual Conference of the IEEE Industrial Electronics Society 2025 / 6 p <https://doi.org/10.1109/IECON58223.2025.11221499>

### **Feasibility study of high-power density of modified isolated CLLC DC-DC interface with wide range of voltage/current regulation**

**Husev, Oleksandr; Matiushkin, Oleksandr; Mohseni, Parham; Canales, Francisco** PCIM Europe 2024 2024 / 10 p <https://doi.org/10.30420/566262111> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Isolated high step-up current-fed DC-DC converter with low input current ripple and wide full-soft-switching capability**

**Mohseni, Parham; Pourjafar, Saeed; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri** IEEE transactions on industry applications 2025 / 11 p <https://doi.org/10.1109/TIA.2025.3544985>

### **Novel concept of universal AC/DC-DC onboard battery charger for electric vehicles**

**Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri; Kasper, Matthias; Deboy, Gerald** 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144698>

### **Novel isolated high step-up DC-DC converter with wide input voltage regulation range**

**Pourjafar, Saeed; Mohseni, Parham; Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri** 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 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10413102>

### **Thermal management experience in GaN-based DC-DC converter**

**Mohseni, Parham; Husev, Oleksandr; Vinnikov, Dmitri** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604322>

### **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>