

### **An overview of wide-voltage range isolated DC-DC converters**

**Khan, Salman; Chub, Andrii; 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/RTUCON60080.2023.10413144>

### **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 common mode and rapidly varying voltage profile on stator current harmonics of an inverter-fed induction motor**

**Sardar, Muhammad Usman; Vaimann, Toomas; Kütt, Lauri; Kallaste, Andres; Asad, Bilal; Kudelina, Karolina; Akbar, Siddique** 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/RTUCON60080.2023.10413067>

### **Control of pick-and-place robots with reduced power consumption**

**Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard** 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 / 4 p <https://doi.org/10.1109/RTUCON60080.2023.10413180>

### **DC droop control strategies and tuning principles**

**Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri; Mackay, Laurens; Jalakas, Tanel** 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 <https://doi.org/10.1109/RTUCON60080.2023.10412947>

### **Development of mutual recognition of education approach in advanced computer-oriented engineering technologies in the Baltic region**

**Kunicina, Nadezhda; Rassõlkin, Anton; Bruzgiene, Rasa; Plonis, Darius; Caiko, J.** 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/RTUCON60080.2023.10413098>

### **Droop control implementation in bidirectional step-up/down Partial power converter for battery energy storage applications**

**Hassanpour, Naser; Chub, Andrii; Blinov, Andrei; 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/RTUCON60080.2023.10413064>

### **EV battery charging converters with wide output DC voltage range**

**Nadeem, Mohammad Mahad; Blinov, Andrei; 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/RTUCON60080.2023.10412960>

### **Gen Z oriented engineering education in the “Industry 4.0” age**

**Raud, Zoja; Vodovozov, Valery; Petlenkov, Eduard** 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 <https://doi.org/10.1109/RTUCON60080.2023.10413087>

### **Impedance network-based diode-clamped multilevel inverter voltage balancing with cascaded voltage multiplier**

**Ebrahimi, Ali; Babaei, Ebrahim; Mousavi, S. M. J.; Mashinchi Maheri, Hamed; Jalakas, Tanel** 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/RTUCON60080.2023.10413166>

### **A new high step-up NPC-based switched-capacitor seven-level grid-tied inverter for PV applications**

**Marangalu, M.; Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Jalakas, Tanel** 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/RTUCON60080.2023.10413150>

### **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>

### **Preliminary design analysis of an axial flux yokeless stator switched reluctance machine**

**Hussain, Shahid; Kallaste, Ants; Naseer, Muhammad Usman; Sarap, Martin; Tiismus, Hans; Vaimann, Toomas** 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/RTUCON60080.2023.10413130>

**A single-phase high-frequency isolated quasi-Z-source AC-AC converter without commutation problem and step-change frequency operation**

Zargariafshar, D.; Mousavi, S. M. J.; Babaei, Ebrahim; Mashinchi Maheri, Hamed; **Hassanpour, Naser** 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/RTUCON60080.2023.10413096>

**Step-up/down partial power converter with enhanced MPPT efficiency around zero partiality**

**Yadav, Neelesh; Chub, Andrii; Hassanpour, Naser; Blinov, Andrei; 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/RTUCON60080.2023.10412980>

**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 9-10, 2023 : conference proceedings 2023 / 6 p <https://doi.org/10.1109/RTUCON60080.2023.10413182>