# Aggregator coordinated transactive energy trading for microgrids

Crasta, Cletus J. 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. 105-106: ill https://www.ester.ee/record=b5504019\*est

#### Analysis of series partial power converter in transient and steady-state operation modes

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#### Comparative evaluation of a new flying capacitor-based buck-boost converters for universal application

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

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#### Condition monitoring and diagnostic of electrical machines using IoT and machine learning

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## **Current harmonics sensitivity analysis**

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# DC grid interface converter based on three-phase isolated matrix topology with phase-shift modulation

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#### Design and analysis of a DC solid-state circuit breaker for energy router application

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### Design of a unified framework for creating XR experiences for research and academia

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#### Development of the reconfigurable continuous track robot

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#### Digital twin development of an EV-permanent magnet synchronous motor as a virtual torque sensor

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# The effect of build direction on the thermal conductivity of additively manufactured AIS10Mg and silicon-steel samples : [conference paper]

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# The evaluation of substations asset management methods cost-efficiency by using numerical simulations

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# Fault diagnosis of additional vibration in Cartesian robot

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# High-efficiency quad-mode parallel PV power optimizer for DC microgrids

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# Impact of faults and different operating conditions on current parameters in case of broken rotor bars

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#### Increasing PV hosting capacity in LV distribution networks using congestion control techniques

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## Industrial robot training in the simulation using the machine learning agents

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#### Influence of weather parameters on the corona losses of 330kV Estonia overhead transmission line

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#### Insulation aging and framework for the development of aging model based on partial discharge analysis

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# Li-lon battery equivalent circuit modelling

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#### Optimal condition monitoring of high voltage circuit breakers

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Optimal operation of multi-energy microgrids in presence of hydrogen fueling stations and electric vehicle lots Mahmoudnezhad, Fayezeh 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. 109-110: ill <a href="https://www.ester.ee/record=b5504019\*est">https://www.ester.ee/record=b5504019\*est</a>

#### 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. Ill": Pärnu, Estonia, June 15-18, 2022 2022 / p. 103-104 <a href="https://www.ester.ee/record=b5504019\*est">https://www.ester.ee/record=b5504019\*est</a>

# Propulsion drive system data measurement for digital twin test bench validation

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#### Prototype induction motor core preparation with laser additive manufacturing

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#### Reliability evaluation of isolated buck-boost DC-DC series resonant converter: [conference paper]

**Bakeer, Abualkasim Ahmed Ali** 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. 55-56: ill <a href="https://www.ester.ee/record=b5504019\*est">https://www.ester.ee/record=b5504019\*est</a>

# Rogowski coil: an efficient current measurement sensor for power system applications

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# The design process of electrical machines from the standpoint of additive manufacturing

Naseer, Muhammad Usman 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. 33-34: ill https://www.ester.ee/record=b5504019\*est

#### Thermal network simulation of heat pump aggregated energy flexibility

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# A tool for model-order reduction of power systems with high penetration of power electronic devices

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VTOL drone with tandem EDF motor and development of an algorithm for automatic stabilization in hover flight

Pütsep, Kristjan 21st International Symposium "Topenergy and geotechnology. III": Pärnu, Estonia, June	oical problems in the field of electrical a 15-18, 2022 2022 / p. 19-20 : ill https:/	and power engineering. Doctoral school of /www.ester.ee/record=b5504019*est