## Background for development methodology for creating the digital twin for propulsion drive of an electric vehicle

**Rjabtšikov, Viktor** 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III": Tallinn, Estonia, September 8-10, 2021 2022 / p. 27-28: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>

#### Comparison of voltage buck control methods for series resonant converter

Sidorov, Vadim 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III": Tallinn, Estonia, September 8-10, 2021 2021 / p. 55-56: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>

#### Design optimization of 3D-printed permanent magnet clutch

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## Development of digital twin-based learning from demonstration system for industrial robots

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### Fuzzy logic control application in DC-link voltage control of the energy router

Najafzadeh, Mahdiyyeh 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III": Tallinn, Estonia, September 8-10, 2021 2022 / p. 59-60: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>

### Hybrid PWM for step-up series resonant DC-DC converter integrated with bridgeless rectifier

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### Implementation of novel vector control with low torque ripples for synchronous relutance motor

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### Insulation fault diagnosis for MV cables under smart grid operation

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### Intelligent condition monitoring methods for electrical machines and drive systems

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## IoT based tools for data acquisition and monitoring of electrical machines

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## Main gear-faults in industrial hitara

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## Methods for dividing reactive power between generators to minimize onsite power losses

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### Modified winding function analysis of synchronous reluctance motot for design iteration purposes

Naseer, Muhammad Usman 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III": Tallinn, Estonia, September 8-10, 2021 2021 / p. 37-38: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>

# Oil spray cooling system in electrical machine

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## An overview of reliability enhancing methods for energy router for residental application

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### Performance of additively manufactured prototype transformer core

**Tiismus**, **Hans** 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. Ill": Tallinn, Estonia, September 8-10, 2021 2021 / p. 41-42: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>

## Phase angle sensitivity characterisation of current harmonics in practical loads

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#### Residential load forecasting using machine learning techniques: a comparative analysis

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# A Series partial power converter based on dual active bridge converter for residentila battery energy system

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## Split bobbin transformer design with adjustable leakage inductance

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### Study of TalTech SOC building ventilation system load flexibility

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#### **UAV** test benches

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### Verification of machine learning modelling strategy in microgrid simulations

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# Work in progress : digital twin for propulsion drive of autonomous electric vehicle

Rassõlkin, Anton 20th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. Ill": Tallinn, Estonia, September 8-10, 2021 2021 / p. 9-10: ill <a href="https://www.ester.ee/record=b5457278\*est">https://www.ester.ee/record=b5457278\*est</a>