

Address from main organizers

Vinnikov, Dmitri; Liivik, Elizaveta 19th International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Tartu, Estonia, January 14-17, 2020 2020 / p. [3]
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Analysis and optimization of the provision of reactive power by nanogrids in a low voltage network

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Applied machine learning methods in microgrid simulations

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Comparison of isolated boost full-bridge converters for power factor correction application

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Configurable PCB to teach DC-DC converters in power electronics

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Constructing aggregated time series data for energy system model analyses

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Development and validation of reactive power regulator for synchronous generator using industrial controller and real-time digital simulator

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Development of TalTech flexible virtual power plant to aggregate demand-side flexibility

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Digital twin as human-robot interaction validation tool

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Electrical machine research in TalTech

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Fault-tolerant high step-up DC-DC converters

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Field-oriented control of synchronous reluctance motors

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Flywheel model for microgrid simulation

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Future trends in design of electrical machines

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IoT based tools and methods for electrical machine diagnostics

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Iron losses evaluation of additively manufactured 6.5 % silicon steel

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Lighting the Baltuc [i.e. Baltic] Sea region - cities accelerate the deployment of sustainable and smart urban solutions
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Machine learning and deep learning techniques for wind energy forecasting
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Modified winding function-based model of squirrel cage induction motor for fault diagnostic
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Negative and positive lightning impulse flashover voltages of service-aged medium voltage porcelain support insulator
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Novel family of universal DC-DC/AC converters
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Optimised residential battery energy storage systems
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Overview of cyber-physical control systems for self-driving vehicles
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Positioning accuracy of reconfigurable robot workcells in manufacturing
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Research development of bidirectional DC-DC/AC converter
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A review of optimization methods for electrical machines design
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Review on the control strategies of hybrid nanogrid
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Safety verification and validation of self-driving cars
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Self-driving car and pedestrian interaction for road safety
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Soft-switching modulation method for full-bridge DC-AC HF-link inverter
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Study of demand side management of variable air volume ventilation system
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Suitability analysis of using industrial robots in manufacturing

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The main challenges and opportunities in mechatronics

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The main classification of light aerial vehicles

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Thermal stability of LED lamps

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Thoughts on impact of distributed generation on estimation of exponential load models

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3D visualization and simulation of intra-logistics for manufacturing

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Virtual learning factory toolkit development

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Voltage step-down methods for series resonant DC-DC converters

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Voltage step-up PWM methods for series resonant DC-DC converter

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