

### **Additive manufacturing of electrical machines**

**Kallaste, Ants** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 61-62 : ill  
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### **Address from main organizers**

**Vinnikov, Dmitri; Liivik, Elizaveta** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. [3]  
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### **Advanced sensors and on-line measurements for power lines in smart grids**

**Shabbir, Noman** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 205-206 : ill  
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### **An indirect model predictive current control (CCS-MPC) for grid-connected single-phase three-level NPC quasi-Z-source PV inverter**

**Pires Pimentel, Sergio** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 29-30 : ill  
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### **Analysis of building sensor data to explain the experienced indoor room temperature**

**Crasta, Cletus J.** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 211-212 : ill  
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### **Bidirectional DC-DC converter with extended ZVS/ZCS range for storage applications**

**Blinov, Andrei** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 31-32 : ill  
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### **Binary logic vs. fuzzy logic techniques for tuning robust controllers**

**Vodovozov, Valery** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 49-50  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Can electrical phenomena be explained with the concept of an "electric family tree"?**

**Järvik, Jaan** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 45-46 : ill  
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### **Comparison of the porous structure of oil shale fly ashes from two different CFB boilers**

**Pikkor, Heliis** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 99-100 : ill  
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### **Condition monitoring of electrical machines and its relation to IoT**

**Vaimann, Toomas** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 55-56 : ill  
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### **Control of DC/AC full bridge inverter**

**Najafzadeh, Mahdiyyeh** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 159-160 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Crowd evacuation using agent-based model in VR simulation**

**Wang, Ruxin** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 85-86 : ill  
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### **Design and implementation of intelligent ground vehicle safety systems of high robustness to varying environmental and human factors**

**Aksjonov, Andrei** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 107-108  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

### **Development of new requirements for outdoor advertisement screens**

**Varjas, Toivo** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 231-232 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **Development of performance evaluation model for a robot-based manufacturing cell**

**Kangru, Tavo** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 101-102  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **Digital twin based synchronized control and simulation of the industrial robotic cell using virtual reality**

**Kuts, Vladimir** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 87-88 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **Discordance between amyloid- $\beta$ PET and CSF biomarkers : clinical and pathophysiological consequences = Amüloid- $\beta$ staatus vastuolu PET-uuringul ning liikvorianalüüsil : kliiniline ja patofüsioloogiline tähendus**

**Reimand, Juhan** 2021 <https://doi.org/10.23658/taltech.15/2021> [https://www.ester.ee/record=b5431268\\*est](https://www.ester.ee/record=b5431268*est)  
<https://digikogu.taltech.ee/et/Item/d14a365f-fbfc-4595-923e-473262485fe2>

#### **[Eessõna]**

**Land, Tiit** Tallinna Tehnikaülikooli majandusaasta aruanne 2022 2023 / lk. 5 : portr [https://www.ester.ee/record=b5263625\\*est](https://www.ester.ee/record=b5263625*est)

#### **[Eessõna]**

**Aaviksoo, Jaak** Majandusaasta aruanne 2018 / TalTech 2019 / lk. 5 : fot [https://www.ester.ee/record=b5263625\\*est](https://www.ester.ee/record=b5263625*est)

**18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings]**  
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#### **First year PhD studies : modifying price based set point calculation algorithms for use in off-grid mode**

**Häring, Tobias** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 181-182 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **Guidelines for selection of tertiary wastewater treatment technology : report**

**Lember, Erki; Kuusik, Argo** 2020 [https://bestbalticproject.eu/wp-content/uploads/2020/11/BEST\\_report\\_TUT\\_27\\_11.pdf](https://bestbalticproject.eu/wp-content/uploads/2020/11/BEST_report_TUT_27_11.pdf)

#### **Haptic glove for augmented and virtual reality**

**Vu, Trieu Minh** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 19-20 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **Implementing interdisciplinarity in career guidance : guidebook for career counselors : Rezekne, Tallinn, Kaunas 2019**

2019 [https://www.rta.lv/uploads/source/projects/citi%20projekti/2019/Handbook\\_%20EE.pdf](https://www.rta.lv/uploads/source/projects/citi%20projekti/2019/Handbook_%20EE.pdf)  
[https://www.researchgate.net/publication/336944607\\_Disaini\\_tehnoloogia\\_ja\\_majanduse\\_erialadevaheliste\\_pohimotete\\_rakendamise\\_karjaarino\\_ustamise\\_kasiraamat](https://www.researchgate.net/publication/336944607_Disaini_tehnoloogia_ja_majanduse_erialadevaheliste_pohimotete_rakendamise_karjaarino_ustamise_kasiraamat)  
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#### **Interleaved quasi-Z-source inverter with activ power decoupling for kW-scale PV applications**

**Stepenko, Serhii** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 71-72 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **ISEAUTO - First Estonian Self-Driving Vehicle**

**Rassõlkin, Anton** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 11-12  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Kohalike omavalitsuste ringmajanduslike tegevuste hetkeseisu analüüs ja teekaartide koostamine : analüüsi aruanne**  
**Hurt, Ulrika; Piirimäe, Kristjan; Tuisk, Tarmo; Voronova, Viktoria; Dulova, Niina; Merisaar, Jaana; Kull, Margit; Niidu, Allan; Klõga, Marija; Pachel, Karin; Küttim, Merle** 2023 <https://doi.org/10.11590/taltech.municipalities.circular.economy.roadmaps.report.2023>

#### **Material properties for 3D printing electrical machines**

**Tiismus, Hans** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 139-140  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Model predictive control of novel buck-boost inverter with unfolding circuit**

**Matiushkin, Oleksandr** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 155-156 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Modeling of lighting load for the residential building**

**Iqbal, Muhammad Naveed** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 183-184 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Novel family of single-stage buck-boost inverters based on unfolding circuit**

**Husev, Oleksandr** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 39-40 : ill  
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**A novel vector control strategy for six-phase induction motor with low torque ripples and harmonic currents**

**Heidari, Hamidreza** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 121-122

**1200 V RB-IGBTs under different switching conditions**

**Korkh, Oleksandr** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 149-150 : ill

**Operation and principles of bearingless synchronous reluctance machines**

**Belahcen, Anouar** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 53-54 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Possible uses of blockchain technology in the power markets**

**Agabus, Hannes** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 65-66  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Preliminary analysis of PMU measurements for power quality assessment**

**Löper, Mari** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 189-190 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**PV module level DC-DC converters with wide input voltage regulation range - implementation challenges and application benefits**

**Chub, Andrii** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 25-26 : ill  
[https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

**Quazi-Z-source based string inverter for residential photovoltaic application**

**Santasheva, Elena** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 105-106 : ill  
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**Rapid prototyping - speed up your power electronic design**

**Roasto, Indrek** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 47-48 : ill  
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**[Rektori eessõna]**

**Land, Tiit** Tallinna Tehnikaülikooli majandusaasta aruanne 2021 2022 / lk. 5 : portr [https://www.ester.ee/record=b5263625\\*est](https://www.ester.ee/record=b5263625*est)

**Second year PhD studies : study of ventilation control**

**Maask, Vahur** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 191-192 : ill  
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**State of the art in research on microgrids realtime studies**

**Ahmadihangar, Roya** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 67-68  
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**Suunised ruumilise kahanemise analüüsimiseks ja kohandamise strateegia koostamiseks**

2020 ["Suunised ruumilise kahanemise analüüsimiseks ja kohandamise strateegia koostamiseks"](#)

#### **Tallinna Tehnikaülikooli majandusaasta aruanne 2021**

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#### **Tallinna Tehnikaülikooli majandusaasta aruanne 2022**

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#### **Teaching power electronics using object-oriented approach**

**Raud, Zoja** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 51-52

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#### **Test method for determining radiation absorptivity and emissivity coefficients of ACSR conductors**

**Kiitam, Ivar** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 185-186 : ill

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#### **Testing different power system out-of-step detection algorithms**

**Tealane, Marko** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 199-200 : ill

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#### **Testing the characteristics of phasor measurement units using real-time digital simulator**

**Trummal, Tarmo** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 229-230 : ill

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#### **The improvement of power factor and torque for synchronous reluctance machine**

**Majumder, Abhisek** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 133-134

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#### **Thermal management of a SynRM for traction application**

**Ghahfarokhi, Payam Shams** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 109-110 : ill

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#### **Thoughts on conversion of static load models**

**Leinakse, Madis** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 187-188 : ill

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#### **Uued inimesed TalTechis**

**Treial, Inkeri; Liibek, Tõnis** Mente et Manu 2019 / lk. 32-33 : portr [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

[https://www.ttu.ee/public/m/mente-et-manu/MM\\_02\\_2019/mobile/index.html](https://www.ttu.ee/public/m/mente-et-manu/MM_02_2019/mobile/index.html)

#### **Winding function based analytical model of squirrel cage induction motor for fault diagnostics**

**Asad, Bilal** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 113-114 : ill

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#### **Wireless charging solutions for autonomous industrial systems**

**Zinchenko, Denys** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 167-168 : ill

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#### **Vision based sensor analysis for mobile robots**

**Malayjerdi, Ehsan** 18th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Toila, Estonia, January 14-19, 2019 : [proceedings] 2019 / p. 97-98 : ill

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#### **Visioon. Ruum. Vorm : 10 aastat arhitektuuriõpet Tallinna Tehnikaülikoolis**

2021 [https://www.ester.ee/record=b5476581\\*est](https://www.ester.ee/record=b5476581*est)

#### **Üleriigiline uuring elamute kasutusest väljalangevusest ja tühjenemise mustritest : lõppraport [Võrguteavik]**

Cerrone, Damiano; Hadaway, John; Männigo, Kristjan; Lehtovuori, Panu; **Grišakov, Kristi; Lihtmaa, Lauri; Kalamees, Targo** 2022

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