

#### **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] [https://www.ester.ee/record=b5183874\\*est](https://www.ester.ee/record=b5183874*est)

#### **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] [https://www.ester.ee/record=b5291755\\*est](https://www.ester.ee/record=b5291755*est)

#### **Asymmetrical PWM control of galvanically isolated impedance-source series resonant DC-DC converters**

**Vinnikov, Dmitri; Zakis, Janis; Chub, Andrii; Liivik, Elizaveta** 2016 10th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings : Opera Nova's Congress Center, Bydgoszcz, Poland, 29. June - 01. July, 2016 2016 / p. 341-346 : ill <https://doi.org/10.1109/CPE.2016.7544211>

#### **Boost half-bridge DC-DC converter with reconfigurable rectifier for ultra-wide input voltage range applications**

**Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Siwakoti, Yam P.** 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1528-1532 : ill <https://doi.org/10.1109/APEC.2018.8341219> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **Common-mode voltage analysis and reduction for the quasi-Z-source inverter with a split inductor**

Liu, Wenjie; Yang, Yongheng; Kerekes, Tamas; **Liivik, Elizaveta; Vinnikov, Dmitri; Blaabjerg, Frede** Applied sciences 2020 / art. 8713, 13 p. : ill <https://doi.org/10.3390/app10238713> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Comparative analysis of reliability for string and central inverter PV systems in accordance with the FMECA**

Dumnic, Boris; **Liivik, Elizaveta; Popadic, Bane; Blaabjerg, Frede; Milicevic, Dragan; Katic, Vladimir** 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 591-596 <https://doi.org/10.1109/PEDG48541.2020.9244404>

#### **Comparison of performance of phase-shift and asymmetrical pulse width modulation techniques for the novel galvanically isolated buck-boost dc-dc converter for photovoltaic applications**

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#### **Control features of multicell-type current regulator for resistance welding**

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#### **Design for accelerated testing of DC-link capacitors in photovoltaic inverters based on mission profiles**

Sangwongwanich, Ariya; Shen, Yanfeng; **Chub, Andrii; Liivik, Elizaveta; Vinnikov, Dmitri; Wang, Huai; Blaabjerg, Frede** IEEE transactions on industry applications 2021 / p. 741-753 <https://doi.org/10.1109/TIA.2020.3030568> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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#### **Fault analysis and field experiences of central inverter based 2 MW PV plant**

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#### **High-performance quasi-Z-source series resonant DC-DC converter for photovoltaic module-level power electronics applications**

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**Hybrid DC–DC converters with topology morphing control and post-fault operation capability**

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**Impact of transformer turns ratio on the power losses and efficiency of the wide range isolated buck–boost converter for photovoltaic applications**

**Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Chub, Andrii; Sidorov, Vadim; Liivik, Elizaveta** Energies 2020 / art. 5645, 21 p <https://doi.org/10.3390/en13215645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Impedance network impact on the controller design of the QZSI for PV applications**

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**Input-parallel output-series cascading possibilities of single-switch galvanically isolated quasi-Z-source DC-DC converters**

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**Low-cost photovoltaic microinverter with ultra-wide MPPT voltage range**

**Liivik, Elizaveta; Chub, Andrii; Kosenko, Roman; Vinnikov, Dmitri** 2017 6th International Conference on Clean Electrical Power : Renewable Energy Resources Impact : Santa Margherita Ligure, 27-29 June 2017 2017 / p. 46-52 : ill <https://doi.org/10.1109/ICCEP.2017.8004790>

**Magnetically integrated high step-up resonant DC-DC converter for distributed photovoltaic systems**

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**Maximizing energy harvest of the impedance source PV Microconverter under partial shading conditions**

**Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta**; Blaabjerg, Frede; Kouro, Samir CPE-POWERENG 2018 : Conference program : 12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering, 10-12 April, 2018, Doha, Qatar 2018 / 7 p.: ill <https://indd.adobe.com/view/bdbda104-4e24-4d7b-88b1-f84ccfd20748> <https://doi.org/10.1109/CPE.2018.8372556>

**Mission profile resolution impacts on the thermal stress and reliability of power devices in PV inverters**

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**Mission profile-based accelerated testing of DC-link capacitors in photovoltaic inverters**

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**Multiphase galvanically isolated impedance-source DC-DC converter for residential renewable energy applications**

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**Photovoltaic energy yield improvement in two-stage solar microinverters**

**Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta**; Blaabjerg, Frede Energies 2019 / art. 3774, 17 p. : ill <https://doi.org/10.3390/en12193774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Photovoltaic energy yield improvement in two-stage solar microinverters**

**Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta;** Blaabjerg, Frede Emerging converter topologies and control for grid connected photovoltaic systems 2021 / p. 197-213 : ill <https://doi.org/10.3390/books978-3-03943-910-2>

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### **Preface to "Wind Turbines"**

**Blaabjerg, Frede; Liivik, Elizaveta** Wind turbines 2019 / p. ix-xi <https://doi.org/10.3390/books978-3-03897-361-4>

### **Reliability analysis and energy yield of string-inverter considering monofacial and bifacial photovoltaic panels**

Bouguerra, Sara; Yaiche, Mohamed Redha; Sangwongwanich, Ariya; Blaabjerg, Frede; **Liivik, Elizaveta** 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), 28 Sept.-1 Oct. 2020, Dubrovnik, Croatia 2020 / p. 199-204 <https://doi.org/10.1109/PEDG48541.2020.9244425>

### **Reliability analysis of micro-inverters considering PV module variations and degradation rates**

**Liivik, Elizaveta;** Sangwongwanich, Ariya; Blaabjerg, Frede 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 1475-1482 : ill <https://ieeexplore.ieee.org/document/8515325>

### **Reliability evaluation of an impedance-source PV microconverter**

Shen, Yanfeng; **Liivik, Elizaveta;** Blaabjerg, Frede; **Vinnikov, Dmitri;** Wang, Huai; **Chub, Andrii** 2018 IEEE Applied Power Electronics Conference and Exposition (APEC 2018), San Antonio, Texas, USA, 4-8 March 2018 2018 / p. 1104–1108 : ill <https://doi.org/10.1109/APEC.2018.8341154> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Reliability evaluation of an impedance-source PV microconverter**

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### **Reliability of DC-link capacitors in two-stage micro-inverters under different PV module sizes**

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### **Reliability study of input side capacitors in impedance-source PV microconverters**

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### **Reverse power flow control possibilities of galvanically isolated impedance-source DC-DC converters**

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### **Shade-tolerant photovoltaic microinverter with time adaptive seamless P-V curve sweep MPPT [Electronic resource]**

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### **Single-switch galvanically isolated step-up DC-DC converter for residential photovoltaic applications [Online resource]**

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**Versatile power electronic building block for residential DC microgrids**

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**Wide input voltage range photovoltaic microconverter with reconfigurable buck-boost switching stage**

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**Wind turbines**

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**Voltage gain extension techniques for high step-up galvanically isolated DC-DC converters**

**Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Liivik, Elizaveta; Blinov, Andrei** 2020 IEEE International Conference on Industrial Technology, Buenos Aires Institute of Technology (ITBA) Buenos Aires, Argentina, 26-28 February, 2020 : proceedings 2020 / p. 1021-1027 : ill <https://doi.org/10.1109/ICIT45562.2020.9067115> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)