

**AC magnetic loss reduction of SLM processed Fe-Si for additive manufacturing of electrical machines**  
Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Tarraste, Marek; Vaimann, Toomas; Rassõlkin, Anton; Asad, Bilal; Shams Ghahfarokhi, Payam Energies 2021 / 13 p. : ill <https://doi.org/10.3390/en14051241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Accessible battery model with aging dependency**

Savard, Christophe; Iakovleva, Emilia; Ivanchenko, Daniil; Rassõlkin, Anton Energies 2021 / art. 3493, 16 p  
<https://doi.org/10.3390/en14123493> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Acoustic noise computation of electrical motors using the boundary element method**

Sathyan, Sabin; Aydin, Ugur; Belahcen, Anouar Energies 2020 / art. 0245 <https://doi.org/10.3390/en13010245> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Additive Manufacturing and Performance of E-Type Transformer Core**

Tiismus, Hans; Kallaste, Ants; Belahcen, Anouar; Rassõlkin, Anton; Vaimann, Toomas; Shams Ghahfarokhi, Payam Energies 2021 / art. 3278 <https://doi.org/10.3390/en14113278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Additive manufacturing of electrical machines - towards the industrial use of a novel technology**

Vaimann, Toomas; Kallaste, Ants Energies 2023 / art. 544 <https://doi.org/10.3390/en16010544> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Advances in climatic form finding in architecture and urban design**

De Luca, Francesco Energies 2023 / art. 3935 <https://doi.org/10.3390/en16093935> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Air distribution and air handling unit configuration effects on energy performance in an air-heated ice rink arena**

Taebnia, Mehdi; Toomla, Sander; Leppä, Lauri; Kurnitski, Jarek Energies 2019 / art. 693, 21 p. : ill <https://doi.org/10.3390/en12040693> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Ammonia production as alternative energy for the Baltic Sea Region**

Prause, Gunnar Klaus; Olaniyi, Eunice Omolola; Gerstlberger, Wolfgang Dieter Energies 2023 / art. 1831  
<https://doi.org/10.3390/en16041831> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Analysis of fault-tolerant operation capabilities of an isolated bidirectional current-source DC–DC converter**

Blinov, Andrei; Kosenko, Roman; Chub, Andrii; Ivakhno, Volodymyr Energies 2019 / art. 3203, p. 14 : ill  
<https://doi.org/10.3390/en12163203> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Analysis of the options of modernization of roller-bit drilling machines with a submersible steamer**

Yungmeister, Dmitry A.; Krupenski, Igor; Lavrenko, Sergey A. Journal of Mining Institute 2018 / p. 321 - 325  
<https://doi.org/10.25515/pmi.2018.3.321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Analysis of traditional and alternative methods for solving voltage problems in low voltage grids : an Estonian case study**

Rosin, Argo; Drovtar, Imre; Mölder, Heigo; Haabel, Kaija; Astapov, Victor; Vinnal, Toomas; Korõtko, Tarmo Energies 2022 / art. 1104 <https://doi.org/10.3390/en15031104> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Applications of game theory to design and operation of modern power systems: a comprehensive review**

Navon, Aviad; Yosef, Gefen Ben; Machlev, Ram; Shapira, Shmuel; Chowdhury, Nilanjan Roy; Belikov, Juri; Orda, Ariel; Levron, Yoash Energies 2020 / art. 3982, 34 p <https://doi.org/10.3390/en13153982> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Ash and flue gas from oil shale oxy-fuel circulating fluidized bed combustion**

Loo, Lauri; Konist, Alar; Nešumajev, Dmitri; Pihu, Tõnu; Maaten, Birgit; Siirde, Andres Energies 2018 / art. 1218, 12 p. : ill  
<https://doi.org/10.3390/en11051218> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Assessment of power system asset dispatch under different local energy community business models**

Korõtko, Tarmo; Plaum, Freddy; Häring, Tobias; Mutule, Anna; Lazdins, Roberts; Boršcevisks, Olegs; Rosin, Argo; Carroll, Paula Energies 2023 / art. 3476 <https://doi.org/10.3390/en16083476> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Autothermal Siberian pine nutshell pyrolysis maintained by exothermic reactions**

Astafev, Alexander; Shanenkov, Ivan; Ibraeva, Kanipa; Tabakaev, Roman; Preis, Sergei Energies 2022 / art. 7118  
<https://doi.org/10.3390/en15197118> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Balmorel open source energy system model**

Wiese, Frauke; Bramstoft, Rasmus; **Koduvere, Hardi**; Pizarro Alonso, Amalia Energy strategy reviews 2018 / p. 26–34 : ill <https://doi.org/10.1016/j.esr.2018.01.003> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Batch and fed-batch ethanol fermentation of cheese-whey powder with mixed cultures of different yeasts**

Farkas, Csilla; Rezessy-Szabo, Judit M.; **Gupta, Vijai Kumar**; Bujna, Erika; Pham, Tuan M.; Pásztor-Huszár, K.; Friedrich, László; Bhat, Rajeev; Thakur, Vijay Kumar; Nguyen, Quang D. Energies 2019 / Art. 4495 <https://doi.org/10.3390/en12234495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Battery storage technologies for electrical applications : impact in stand-alone photovoltaic systems**

Akinyele, Daniel; **Belikov, Juri**; Levron, Yoash Energies 2017 / art. 1760, 39 p. : ill <https://doi.org/10.3390/en10111760> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The bearing faults detection methods for electrical machines — the state of the art**

Khan, Muhammad Amir; **Asad, Bilal**; Kudelina, Karolina; Vaimann, Toomas; Kallaste, Ants Energies 2023 / art. 296 <https://doi.org/10.3390/en16010296> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Bidirectional twisted single-stage single-phase buck-boost DC-AC converter**

Husev, Oleksandr; Matiushkin, Oleksandr; Roncero-Clemente, Carlos; **Vinnikov, Dmitri**; Chopyk, Vasiliy Energies 2019 / art. 3505, 14 p. : ill <https://doi.org/10.3390/en12183505> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cascade sub-low temperature district heating networks in existing district heating systems**

**Volkova, Anna**; Reuter, Stefan; Puschnigg, Stefan Smart Energy 2022 / art. 100064 <https://doi.org/10.1016/j.segy.2022.100064> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Challenges of microgrids in remote communities: a STEEP model application**

Akinyele, Daniel; **Belikov, Juri**; Levron, Yoash Energies 2018 / art. 432, 35 p. : ill <https://doi.org/10.3390/en11020432> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metric at WOS](#) [Article at WOS](#)

### **Characterization of the ensemble of lignin-remodeling DyP-type Peroxidases from Streptomyces coelicolor A3(2)**

**Pupart, Hegne**; Jõul, Piia; Bramanis, Melissa Ingela; Lukk, Tiit Energies 2023 / art. 1557, 15 p. : ill <https://doi.org/10.3390/en16031557> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cities4ZERO approach to foresight for fostering smart energy transition on municipal level**

Tatar, Merit; **Kalvet, Tarmo**; **Tiits, Marek** Energies 2020 / art. 3533 <https://doi.org/10.3390/en13143533> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cleaning of floating photovoltaic systems : a critical review on approaches from technical and economic perspectives**

Zahedi, Rafi; Ranjbaran, Parisa; Gharehpetian, Gevork B.; Mohammadi, Fazel; **Ahmadihangar, Roya** Energies 2021 / art. 2018, 25 p. : ill <https://doi.org/10.3390/en14072018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Closed-loop control system design for wireless charging of low-voltage EV batteries with time-delay constraints**

Shevchenko, Viktor; Pakhaliuk, Bohdan; Zakis, Janis; Veligorskyi, Oleksandr; Luszcz, Jaroslaw; **Husev, Oleksandr**; Lytvin, Oksana; **Matiushkin, Oleksandr** Energies 2021 / art. 3934, 21 p. : ill <https://doi.org/10.3390/en14133934> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **CO2 emission intensity of the Estonian DH sector**

**Latõšov, Eduard**; Umbleja, Siim; **Volkova, Anna** Smart Energy 2022 / art. 100070 <https://doi.org/10.1016/j.segy.2022.100070> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Comparative evaluation of common-ground converters for dual-purpose application**

Hemmati Shahsavari, Tala; Rahimpour, Saeed; Vosoughi Kurdkandi, Naser; Fesenko, Artem; **Matiushkin, Oleksandr**; Husev, Oleksandr; **Vinnikov, Dmitri** Energies 2023 / art. 2977 <https://doi.org/10.3390/en16072977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comparative simulation study of pump system efficiency driven by induction and synchronous reluctance motors**

Gevorkov, Levon; Dominguez-Garcia, Jose Luis; **Rassõlkin, Anton**; Vaimann, Toomas Energies 2022 / art. 4068 <https://doi.org/10.3390/en15114068> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A comparative study on physical properties of Al-doped zinc oxide thin films deposited from zinc acetate and zinc acetylacetonate by spray pyrolysis**

Eensalu, Jako Siim; Krunk, Malle; Gromõko, Inga; Katerski, Atanas; Mere, Arvo Energetika 2017 / p. 46-55 : ill <https://doi.org/10.6001/energetika.v63i2.3519> [Journal metrics at Scopus](#) [Article at Scopus](#)

### **Comparison of district heating supply options for different CHP configurations**

Rušeljuk, Pavel; Dedov, Andrei; Hlebnikov, Aleksandr; Lepiksaar, Kertu; Volkova, Anna Energies 2023 / art. 603, 14 p. : ill <https://doi.org/10.3390/en16020603> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A comprehensive review of carbon capture science and technologies**

Wu, Chunfei; Huang, Qi; Xu, Zhicheng; Tariq Sipra, Ayesha; Gao, Ningbo; Porto de Souza Vandenberghe, Luciana; Vieira, Sabrina; Soccol, Carlos Ricardo; Zhao, Ruikai; Deng, Shuai; **Konist, Alar; Baqain, Mais Hanna Suleiman** Carbon capture science & technology 2024 / art. 100178, 180 p. : ill <https://doi.org/10.1016/j.ccst.2023.100178> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Considerations on combining unfolding inverters with partial power regulators in battery–grid interface converters**

Galkin, Ilya A.; Saltanovs, Rodions; Bubovich, Alexander; **Blinov, Andrei**; Pefitsis, Dimosthenis Energies 2024 / art. 893 <https://doi.org/10.3390/en17040893> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cooling thermal comfort and efficiency parameters of ceiling panels, underfloor cooling, fan-assisted radiators, and fan coil**

**Võsa, Karl-Villem; Ferrantelli, Andrea; Kurnitski, Jarek** Energies 2022 / art. 4156 <https://doi.org/10.3390/en15114156> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Co-pyrolysis of woody biomass and oil shale — a kinetics and modelling study**

**Lyons Ceron, Alejandro; Ochieng, Richard; Sarker, Shiplu; Järvik, Oliver; Konist, Alar** Energies 2024 / art. 1055 <https://doi.org/10.3390/en17051055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Co-Pyrolysis of Woody Biomass and Oil Shale in a Batch Reactor in CO<sub>2</sub>, CO<sub>2</sub>-H<sub>2</sub>O, and Ar Atmospheres**

**Lyons Ceron, Alejandro; Konist, Alar** Energies 2023 / art. 3145 <https://doi.org/10.3390/en16073145> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Cost and energy reduction of a New nZEB wooden building**

**Arumägi, Endrik; Kalamees, Targo** Energies 2020 / art. 3570, 16 p. : ill <https://doi.org/10.3390/en13143570> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Current challenges in operation, performance, and maintenance of photovoltaic panels**

Orosz, Tamas; **Rassõlkin, Anton**; Arsenio, Pedro; Poor, Peter; **Valme, Daniil**; Sleisz, Adam Energies 2024 / art. 1306 <https://doi.org/10.3390/en17061306> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Current harmonic aggregation cases for contemporary loads**

**Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman** Energies 2022 / art. 437 <https://doi.org/10.3390/en15020437> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Data-driven occupancy profile identification and application to the ventilation schedule in a school building**

**Vassiljeva, Kristina; Matson, Margarita; Ferrantelli, Andrea; Petlenkov, Eduard; Thalfeldt, Martin; Belikov, Juri** Energies 2024 / art. 3080 <https://doi.org/10.3390/en17133080> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Day-ahead market modelling of large-scale highly-renewable multi-energy systems : analysis of the North Sea region towards 2050**

Gea-Bermudez, Juan; Das, Kaushik; **Koduvere, Hardi**; Koivisto, Matti J. Energies 2021 / art. 88, 17 p. : ill <https://doi.org/10.3390/en14010088> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

**Rahimpour, Saeed; Husev, Oleksandr; Vinnikov, Dmitri** Energies 2022 / art. 9434 <https://doi.org/10.3390/en15249434> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Design and experimental validation of a single-stage PV string inverter with optimal number of interleaved buck-boost cells**

Fesenko, Artem; **Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri**; Strzelecki, Ryszard; Kołodziejek, Piotr Energies 2021 / art. 2448, p., 17 p. : ill <https://doi.org/10.3390/en14092448> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A detailed testing procedure of numerical differential protection relay for EHV auto transformer**

Ehsan, Umer; Jawad, Muhammad; Javed, Umar; Zaidi, Khuram Shabih; Rehman, Ateeq Ur; **Rassõlkin, Anton**; Althobaiti, Maha M.; Hamam, Habib; **Shafiq, Muhammad** Energies 2021 / art. 8447 <https://doi.org/10.3390/en14248447> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Determining the optimal directions of investment in regional renewable energy development**

Sotnyk, Iryna; Kurbatova, Tetiana; Romaniuk, Yaroslavna; Prokopenko, Olha; Gonchar, Viktoriya; **Prause, Gunnar Klaus**; Sapiński, Aleksander Energies 2022 / art. 3646 <https://doi.org/10.3390/en15103646> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Development and performance assessment of prefabricated insulation elements for deep energy renovation of apartment buildings**

**Pihelo, Peep; Kuusk, Kalle; Kalamees, Targo** Energies 2020 / art. 1709, 20 p. : ill <https://doi.org/10.3390/en13071709> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Development of a reduced order model of solar heat gains prediction**

**Tamm, Meril; Cid, Jordi Macia; Paramio, Roser Capdevila; Baulenas, Joan Farnos; Thalfeldt, Martin; Kurnitski, Jarek** Energies 2020 / art. 6316, 17 p. : ill <https://doi.org/10.3390/en13236316> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Digital Twin as a virtual sensor for wind turbine applications**

**Mohamed, Mahmoud Ibrahim Hassanin; Rassölkin, Anton; Vaimann, Toomas; Kallaste, Ants; Zakis, Janis; Hyunh, Van Khang; Pomarnacki, Raimondas** Energies 2023 / art. 6246 <https://doi.org/10.3390/en16176246> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Economic dispatch of CHP units through District Heating Network's demand-side management**

**Rušeljuk, Pavel; Lepiksaar, Kertu; Siirde, Andres; Volkova, Anna** Energies 2021 / art. 4553, 20 p. : ill <https://doi.org/10.3390/en14154553> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Effects of coupling combined heat and power production with district cooling**

**Lepiksaar, Kertu; Mašatin, Vladislav; Krupenski, Igor; Volkova, Anna** Energies 2023 / art. 4552 <https://doi.org/10.3390/en16124552> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Effects of the COVID-19 pandemic on energy systems and electric power grids — a review of the challenges ahead**

**Navon, Aviad; Machlev, Ram; Carmon, David; Onile, Abiodun Emmanuel; Belikov, Juri; Levron, Yoash** Energies 2021 / art. 1056, 14 p. : ill <https://doi.org/10.3390/en14041056> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Efficient energy recovery from textile waste and biomass mixture**

**Kramens, Janis; Vigants, Edgars; Kanukuntla, Sai-Pavan; Goljandin, Dmitri** Engineering for Rural Development ; vol. 22 2023 / p. 817 - 825 <https://doi.org/10.22616/ERDev.2023.22.TF161> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

## **An efficient non-inverting buck-boost converter with improved step up/down ability**

**Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Pefitsis, Dimosthenis** Energies 2022 / art. 4550 <https://doi.org/10.3390/en15134550> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Electric vehicles charging infrastructure demand and deployment : challenges and solutions**

**Singh, Praveen Prakash; Wen, Fushuan; Palu, Ivo; Sachan, Sulabh; Deb, Sanchari** Energies 2023 / art. 7 <https://doi.org/10.3390/en16010007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **An embedded half-bridge $\Gamma$ -Z-source inverter with reduced voltage stress on capacitors**

**Mashinchi Maheri, Hamed; Vinnikov, Dmitri; Nozadian, Mohsen Hasan Babayi; Shokati Asl, Elias; Babaei, Ebrahim; Chub, Andrii** Energies 2021 / art. 6433, 21 p. : ill <https://doi.org/10.3390/en14196433> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Emerging renovation strategies and technical solutions for mass-construction of residential districts built after World War II in Europe**

**Lihtmaa, Lauri; Kalamees, Targo** Energy strategy reviews 2024 / art. 101282 <https://doi.org/10.1016/j.esr.2023.101282> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Energy performance certificate classes rating methods tested with data : how does the application of minimum energy performance standards to worst-performing buildings affect renovation rates, costs, emissions, energy consumption?**

**Ferrantelli, Andrea; Kurnitski, Jarek** Energies 2022 / art. 7552 <https://doi.org/10.3390/en15207552> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metric at WOS](#) [Article at WOS](#)

## **Energy pile field simulation in large buildings: validation of surface boundary assumptions**

**Ferrantelli, Andrea; Fadejev, Jevgeni; Kurnitski, Jarek** Energies 2019 / art. 770, 20 p. : ill <https://doi.org/10.3390/en12050770> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Energy storage for 1500 V photovoltaic systems : A comparative reliability analysis of DC-and AC-Coupling**

**He, Jinkui; Yang, Yongheng; Vinnikov, Dmitri** Energies 2020 / art. 3355, 16 p. : ill <https://doi.org/10.3390/en13133355> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

## **Enzymatic conversion of hydrolysis lignin - a potential biorefinery approach**

**Khan, Sharib; Puss, Kait Kaarel; Lukk, Tiit; Loog, Mart; Kikas, Timo; Salmar, Siim** Energies 2023 / art. 370, 13 p. : ill <https://doi.org/10.3390/en16010370> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Evaluating outdoor thermal comfort using a mixed-method to improve the environmental quality of a university campus**  
Eslamirad, Nasim; Sepulveda Luque, Abel; De Luca, Francesco; Lylykangas, Kimmo Sakari Energies 2022 / art. 1577, 26 p. : ill <https://doi.org/10.3390/en15041577> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Experimental comparison of two-level full-SiC and three-level Si-SiC quasi-Z-source inverters for PV applications**  
Stepenko, Serhii; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Pires Pimentel, Sergio; Santasheva, Elena Energies 2019 / 2509 ; 17 p. : ill <https://doi.org/10.3390/en12132509> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Exploratory data analysis based short-term electrical load forecasting : a comprehensive analysis**  
Javed, Umar; Ijaz, Khalid; Shabbir, Noman; Kütt, Lauri; Husev, Oleksandr Energies 2021 / art. 5510  
<https://doi.org/10.3390/en14175510> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**External shading optimal control macros for 1- and 2-piece automated blinds in European climates**  
Thalfeldt, Martin; Kurnitski, Jarek Building simulation 2015 / p. 13-25 : ill <https://doi.org/10.1007/s12273-014-0194-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Feasibility study GaN transistors application in the novel split-coils inductive power transfer system with T-Type inverter**  
Shevchenko, Viktor; Pakhaliuk, Bohdan; Husev, Oleksandr; Veligorskyi, Oleksandr; Stepins, Deniss; Strzelecki, Ryszard Energies 2020 / art. 4535, 16 p. : ill <https://doi.org/10.3390/en13174535> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Grid-forming operation of energy-router based on model predictive control with improved dynamic performance**  
Najafzadeh, Mahdiyyeh; Strzelecka, Natalia; Husev, Oleksandr; Roasto, Indrek; Nassereddine, Kawsar; Vinnikov, Dmitri; Strzelecki, Ryszard Energies 2022 / 14 p. : ill <https://doi.org/10.3390/en15114010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Grounding and isolation requirements in DC microgrids: overview and critical analysis**  
Azizi, Mohammadreza; Husev, Oleksandr; Veligorskyi, Oleksandr; Rahimpour, Saeed; Roncero-Clemente, Carlos Energies 2023 / art. 7747, 23 p. : ill <https://doi.org/10.3390/en16237747> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Heat loss due to domestic hot water pipes**  
Hamburg, Anti; Mikola, Alo; Parts, Tuule Mall; Kalamees, Targo Energies 2021 / art. 6446 <https://doi.org/10.3390/en14206446> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Heating sizing power reduction in buildings connected to district heating with dynamically controlled DHW setback and flow limiters**  
Hajian, Hatem; Simson, Raimo; Kurnitski, Jarek Energies 2022 / art. 5278 <https://doi.org/10.3390/en15145278> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Hybrid heat pump performance evaluation in different operation modes for single-family house**  
Tihana, Jelena; Ali, Hesham; Apse, Jekaterina; Jekabsons, Janis; Ivancovs, Dmitrijs; Gaujena, Baiba; Dedov, Andrei Energies 2023 / art. 7018 <https://doi.org/10.3390/en16207018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Hybrid inverter and control strategy for enabling the PV generation dispatch using extra-low-voltage batteries**  
Meneghetti, Luiz Henrique; Carvalho da Silva, Edivan Laercio; Carati, Emerson Giovani; Denardin, Gustavo Weber; da Costa, Jean Patric; de Oliveira Stein, Carlos Marcelo; Cardoso, Rafael Energies 2022 / art. 7539 <https://doi.org/10.3390/en15207539> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Hygrothermal analysis of masonry wall with reed boards as interior insulation system**  
Keskküla, Kadri; Aru, Tambet; Kiviste, Mihkel; Miljan, Martti-Jaan Energies 2020 / art. 5252, 10 p. : ill <https://doi.org/10.3390/en13205252> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The impact of air pressure conditions on the performance of single room ventilation units in multi-story buildings**  
Mikola, Alo; Simson, Raimo; Kurnitski, Jarek Energies 2019 / art. 2633, 18 p. : ill <https://doi.org/10.3390/en12132633> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Impact of investments and R&D costs in renewable energy technologies on companies' profitability indicators: assessment and forecast**  
Prokopenko, Olha; Kurbatova, Tetiana; Khalilova, Marina; Zerkal, Anastasiia; Prause, Gunnar Klaus; Binda, Jacek; Berdiyrov, Temur; Klappiv, Yuriy; Sanetra-Pólgrabi, Sabina; Komarnitskyi, Igor Energies 2023 / art. 1021, 17 p. : ill <https://doi.org/10.3390/en16031021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**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](#)

**Induction generator with direct control and a limited number of measurements on the side of the converter connected to the power grid**

Kasprovicz, Andrzej Bogdan; Husev, Oleksandr; Strzelecki, Ryszard Energies 2023 / art. 63, 23 p. : ill  
<https://doi.org/10.3390/en16010063> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Industrial CHP excess heat efficient usage for cooling**

Uuemaa, Priit; Vigants, Haralds; Blumberga, Dagnija; Drovtar, Imre Energetika 2014 / p. 136-148 : ill  
<https://www.imaleidykla.lt/ojs/index.php/energetika/article/view/2937> [Journal metrics at Scopus](#) [Article at Scopus](#)

**Integrating smart energy management system with internet of things and cloud computing for efficient demand side management in smart grids**

Saleem, M. Usman; Shakir, Mustafa; Usman, M. Rehan; Bajwa, M. Hamza Tahir; Shabbir, Noman; Shams Ghahfarokhi, Payam; Daniel, Kamran Energies 2023 / art. 4835 : ill <https://doi.org/10.3390/en16124835> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Intelligent control of robots with minimal power consumption in pick-and-place operations**

Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard Energies 2023 / art. 7418 <https://doi.org/10.3390/en16217418> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Interface converters for residential battery energy storage systems : practices, difficulties and prospects**

Galkin, Ilya; Blinov, Andrei; Vorobyov, Maxim; Bubovich, Alexander; Saltanovs, Rodions; Pefitsis, Dimosthenis Energies 2021 / art. 3365 <https://doi.org/10.3390/en14123365> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Inventory routing for ammonia supply in German ports**

Prause, Felix; Prause, Gunnar; Philipp, Robert Energies 2022 / art. 6485, 22 p. : ill. <https://doi.org/10.3390/en15176485> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Inverter-fed motor drive system : a systematic analysis of condition monitoring and practical diagnostic techniques**

Energies 2023 / art. 5628 <https://doi.org/10.3390/en16155628> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Investigation and field measurements for demand side management control technique of smart air conditioners located at residential, commercial, and industrial sites**

Masood, Bilal; Guobing, Song; Nebhen, Jamel; Rehman, Ateeq Ur; Iqbal, Muhammad Naveed; Rasheed, Iftikhar; Bajaj, Mohit; Shafiq, Muhammad; Hamam, Habib Energies 2022 / art. 2482, 23 p. : ill <https://doi.org/10.3390/en15072482> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Laser additively manufactured magnetic core design and process for electrical machine applications**

Tiismus, Hans; Kallaste, Ants; Vaimann, Toomas; Lind, Liina; Virro, Indrek; Rassõlkin, Anton; Dedova, Tatjana Energies 2022 / art. 3665 <https://doi.org/10.3390/en15103665> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Managing energy consumption of linear delta robots using neural network models**

Vodovozov, Valery; Lehtla, Madis; Raud, Zoja; Semjonova, Natalia; Petlenkov, Eduard Energies 2024 / art. 4081  
<https://doi.org/10.3390/en17164081> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Market mechanisms and trading in microgrid local electricity markets : a comprehensive review**

Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo; Agabus, Hannes Energies 2023 / art. 2145, 52 p. : ill  
<https://doi.org/10.3390/en16052145> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Method for assessing heat loss in a district heating network with a focus on the state of insulation and actual demand for useful energy**

Chicherin, Stanislav; Mašatin, Vladislav; Siirde, Andres; Volkova, Anna Energies 2020 / art. 4505, 15 p. : ill  
<https://doi.org/10.3390/en13174505> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Methods of condition monitoring and fault detection for electrical machines**

Kudelina, Karolina; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton; Kallaste, Ants; Khang, Huynh Van Energies 2021 / art. 7459, 20 p. : ill <https://doi.org/10.3390/en14227459> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Modeling an alternate operational ground source heat pump for combined space heating and domestic hot water power sizing**

Ahmed, Kaiser; **Fadejev, Jevgeni; Kurnitski, Jarek** Energies 2019 / art. 2120, 26 p. : ill <https://doi.org/10.3390/en12112120> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Modular battery charger for light electric vehicles**

**Blinov, Andrei;** Verbytskyi, Ievgen; **Zinchenko, Denys; Vinnikov, Dmitri;** Galkin, Ilya Energies 2020 / art. 774, 21 p. : ill <https://doi.org/10.3390/en13040774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Modular self-balancing battery charger concept for cost-effective power-assist wheelchairs**

Galkin, Ilya; **Blinov, Andrei;** Verbytskyi, Ievgen; **Zinchenko, Denys** Energies Special Issue Power Electronic Systems for Efficient and Sustainable Energy Supply 2019 / art. en12081526, 21 p. : ill <https://doi.org/10.3390/en12081526> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **A multisensory, green, and energy efficient housing neuromarketing method**

Kaklauskas, Arturas; Ubarte, Ieva; Kalibatas, Darius; **Lill, Irene** Energies 2019 / art. 3836, 30 p. : ill <https://doi.org/10.3390/en12203836> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Neural network-based model reference control of braking electric vehicles**

**Vodovozov, Valery;** Aksjonov, Andrei; **Petlenkov, Eduard; Raud, Zoja** Energies 2021 / art. 2373 <https://doi.org/10.3390/en14092373> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Neuro-fuzzy framework for fault prediction in electrical machines via vibration analysis**

**Kudelina, Karolina; Raja, Hadi Ashraf** Energies 2024 / art. 2818 <https://doi.org/10.3390/en17122818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **New equation for optimal insulation dependency on the climate for office buildings**

Ahmed, Kaiser; **Kurnitski, Jarek** Energies 2021 / art. 321 <https://doi.org/10.3390/en14020321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **A new method for contrasting energy performance and near-zero energy building requirements in different climates and countries**

**Kurnitski, Jarek** Energies 2018 / art. 1334, 22 p. : ill <https://doi.org/10.3390/en11061334> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **New opportunities in real-time diagnostics of induction machines**

**Baraškova, Tatjana; Kudelina, Karolina; Shirokova, Veroonika** Energies 2024 / art. 3265 <https://doi.org/10.3390/en17133265> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **A new virtual synchronous generator design based on the SMES system for frequency stability of low-inertia power grids**

Magdy, Gaber; Bakeer, Abualkasim Ahmed Ali; Nour, Morsy; **Petlenkov, Eduard** Energies 2020 / art. 5641, 17 p. : ill <https://doi.org/10.3390/en13215641> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Novel approaches to electrical machine fault diagnosis**

**Vaimann, Toomas;** Antonino-Daviu, Jose Alfonso; **Rassõlkin, Anton** Energies 2023 / art. 5641 <https://doi.org/10.3390/en16155641> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **A novel solar envelope method based on solar ordinances for urban planning**

**De Luca, Francesco;** Dogan, Timur Building Simulation 2019 / p. 817 - 834 <https://doi.org/10.1007/s12273-019-0561-1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **A Novel vector control strategy for a six-phase induction motor with low torque ripples and harmonic currents**

**Heidari, Hamidreza; Rassõlkin, Anton; Vaimann, Toomas; Kallaste, Ants;** Taheri, Asghar; Holakooie, Mohammad Hosein; **Belahcen, Anouar** Energies 2019 / art. 1102, 14 p. : ill <https://doi.org/10.3390/en12061102> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Office building tenants' electricity use model for building performance simulations**

**Ferrantelli, Andrea;** Kuivjõgi, Helena; **Kurnitski, Jarek; Thalfeldt, Martin** Energies 2020 / art. 5541 <https://doi.org/10.3390/en13215541> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Operation optimization of an integrated energy service provider with ancillary service provision**

Lai, Xinyi; Xie, Zhihan; Xu, Danlu; Ying, Shuyang; Zeng, Yiming; Jiang, Chenwei; Wang, Fei; **Wen, Fushuan; Palu, Ivo** Energies 2022 / art. 4376, 15 p. : ill <https://doi.org/10.3390/en15124376> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Optimal rotating receiver angles estimation for multicoil dynamic wireless power transfer**

Pakhaliuk, Bohdan; Shevchenko, Viktor; Mućko, Jan; **Husev, Oleksandr;** Lukianov, Mykola; Kołodziejek, Piotr; Strzelecka, Natalia; **Strzelecki, Ryszard** Energies 2021 / art. 6144, 15 p. : ill <https://doi.org/10.3390/en14196144> [Journal metrics at Scopus](#) [Article at Scopus](#)

**Optimal tuning of fractional order sliding mode controller for PMSM speed using neural network with reinforcement learning**

**Zahraoui, Younes**; Zaihidee, Fardila M.; Kermadi, Mostefa; Mekhilef, Saad; Alhamrouni, Ibrahim; Seyedmahmoudian, Mehdi; Stojcevski, Alex *Energies* 2023 / art. 4353 <https://doi.org/10.3390/en16114353> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Optimal ultra-local model control integrated with load frequency control of renewable energy sources based microgrids**

**Bakeer, Abualkasim Ahmed Ali**; Magdy, Gaber; **Chub, Andrii**; Jurado, Francisco; Rihan, Mahmoud *Energies* 2022 / art. 9177 <https://doi.org/10.3390/en15239177> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Outdoor thermal comfort optimization in a cold climate to mitigate the level of urban heat island in an urban area**

**Eslamirad, Nasim**; Sepulveda Luque, Abel; De Luca, Francesco; Lylykangas, Kimmo Sakari; Ben Yahia, Sadok *Energies* 2023 / art. 4546, 28 p. : ill <https://doi.org/10.3390/en16124546> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A parallel estimation system of stator resistance and rotor speed for active disturbance rejection control of six-phase induction motor**

**Heidari, Hamidreza**; **Rassölkin, Anton**; Holakooie, Mohammad Hosein; **Vaimann, Toomas**; **Kallaste, Ants**; **Belahcen, Anouar**; Lukichev, Dmitry *Energies* 2020 / 17 p <https://doi.org/10.3390/en13051121> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Pathway analysis of a zero-emission transition in the Nordic-Baltic region**

Lund, Peter D.; Skytte, Klaus; Bolwig, Simon; Bolkesjö, Torjus Folsland; **Koduvere, Hardi** *Energies* 2019 / art. 3337, 20 p. : ill <https://doi.org/10.3390/en12173337> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Performance comparison of PD data acquisition techniques for condition monitoring of medium voltage cables**

Shafiq, Muhammad; **Kiitam, Ivar**; Kauhaniemi, Kimmo; Taklaja, Paul; **Kütt, Lauri**; **Palu, Ivo** *Energies* 2020 / art. 4272, 14 p. : ill <https://doi.org/10.3390/en13164272> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Performance improvement of PWM control methods for voltage step-down in series resonant DC–DC converters**

**Sidorov, Vadim**; **Chub, Andrii**; **Vinnikov, Dmitri** *Energies* 2020 / art. en13174569 ; 18 p <https://doi.org/10.3390/en13174569> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Permanent magnets in sustainable energy: comparative life cycle analysis**

Orlova, Svetlana; **Rassölkin, Anton** *Energies* 2024 / art. 6384 <https://doi.org/10.3390/en17246384> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Permittivity and breakdown voltage study of the epoxy-based nanocomposites**

Siddique, Abubakar; Arshad, Amna; Aslam, Waseem; Fatima, Maham; **Sardar, Muhammad Usman**; Noon, Muhammad Asim *International review of electrical engineering* 2023 / p. 373-382 <https://doi.org/10.15866/iree.v18i5.22518> [Journal metrics at Scopus](#) [Article at Scopus](#)

**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](#)

**PI parameter influence on underfloor heating energy consumption and setpoint tracking in nZEBs**

**Kull, Tuule Mall**; **Thalfeldt, Martin**; **Kurnitski, Jarek** *Energies* 2020 / art. 2068, 20 p. : ill <https://doi.org/10.3390/en13082068> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Porous cores in small thermoacoustic devices for building applications**

**Auriemma, Fabio**; Di Giulio, Elio; Napolitano, Marialuisa; Dragonetti, Raffaele *Energies* 2020 / art. 2941, 19 p. : ill <https://doi.org/10.3390/en13112941> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Power converter solutions for industrial PV applications — a review**

Verbytskyi, Ievgen; Lukianov, Mykola; Nassereddine, Kawsar; Pakhaliuk, Bohdan; **Husev, Oleksandr**; Strzelecki, Ryszard *Energies* 2022 / art. 3295 <https://doi.org/10.3390/en15093295> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Precision and accuracy of pulse propagation velocity measurement in power cables**

**Kiitam, Ivar**; **Shafiq, Muhammad**; **Choudhary, Maninder**; **Parker, Martin**; **Palu, Ivo**; **Taklaja, Paul** *Energies* 2023 / art. 2702 <https://doi.org/10.3390/en16062702> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Profit analytics in disruption risk for electrical energy supply network considering cost-oriented big data**

Fazlollahtabar, Hamed; **Ahmadihangar, Roya** Energy and Environment 2024 <https://doi.org/10.1177/0958305X231225599> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A qualitative control approach to reduce energy costs of hybrid energy systems : utilizing energy price and weather data**  
Taebnia, Mehdi; Heikkilä, Marko; **Kurnitski, Jarek** Energies 2020 / art. 1401, 17 p. : ill <https://doi.org/10.3390/en13061401> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Radiant panel and air heating performance in large industrial buildings**  
Ahmed, Kaiser; Sistonen, Esko; **Simson, Raimo; Kurnitski, Jarek**; Kesti, Jyrki; Lautso, Petteri Building simulation 2018 / p. 293-303 : ill <https://doi.org/10.1007/s12273-017-0414-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Recent trends in additive manufacturing and topology optimization of reluctance machines**  
**Hussain, Shahid; Kallaste, Ants; Vaimann, Toomas** Energies 2023 / art. 3840 <https://doi.org/10.3390/en16093840> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Reinforcement learning model-based and model-free paradigms for optimal control problems in power systems: comprehensive review and future directions**  
Ginzburg-Ganz, Elinor; Segev, Itay; Balabanov, Alexander; Segev, Elior; Kaully Naveh, Sivan; Machlev, Ram; **Belikov, Juri**; Katzir, Liran; Keren, Sarah; Levron, Yoash Energies 2024 / art. 5307, 54 p. : ill <https://doi.org/10.3390/en17215307> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Relationship analysis and optimisation of space layout to improve the energy performance of office buildings**  
Du, Tiantian; Turrin, Michela; Jansen, Sabine; Dobbelseen, Andy van den; **De Luca, Francesco** Energies 2022 / art. 1268 <https://doi.org/10.3390/en15041268> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Renovation results of Finnish single-family renovation subsidies : oil boiler replacement with heat pumps**  
Sankelo, Paula; Ahmed, Kaiser; **Mikola, Alo; Kurnitski, Jarek** Energies 2022 / art. 7620 <https://doi.org/10.3390/en15207620> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A review of aging models for electrical insulation in power cables**  
**Choudhary, Maninder; Shafiq, Muhammad; Kiitam, Ivar; Hussain, Amjad; Palu, Ivo; Taklaja, Paul** Energies 2022 / Art. nr. 3408 <https://doi.org/10.3390/en15093408> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Review of electric vehicle testing procedures for digital twin development : a comprehensive analysis**  
**Rjabtšikov, Viktor; Rassölkin, Anton; Kudelina, Karolina; Kallaste, Ants; Vaimann, Toomas** Energies 2023 / art. 6952 <https://doi.org/10.3390/en16196952> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Review of energy challenges and horizons of hydrogen city buses**  
**Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard** Energies 2022 / art. 6945 <https://doi.org/10.3390/en15196945> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A review of hybrid converter topologies**  
**Afshari, Hossein; Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri** Energies 2022 / art. 9341 <https://doi.org/10.3390/en15249341> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Review of isolated matrix inverters : topologies, modulation methods and applications**  
**Korkh, Oleksandr; Blinov, Andrei; Vinnikov, Dmitri; Chub, Andrii** Energies 2020 / art. 2394, 30 p. : ill <https://doi.org/10.3390/en13092394> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A review of non-residential building renovation and improvement of energy efficiency: office buildings in Finland, Sweden, Norway, Denmark, and Germany**  
**Kiviste, Mihkel; Musakka, Sami; Ruus, Aime; Vinha, Juha** Energies 2023 / art. 4220, 26 p <https://doi.org/10.3390/en16104220> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A review on additive manufacturing possibilities for electrical machines**  
**Naseer, Muhammad Usman; Kallaste, Ants; Asad, Bilal; Vaimann, Toomas; Rassölkin, Anton** Energies 2021 / art. 1940 <https://doi.org/10.3390/en14071940> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Review on Braking Energy Management in Electric Vehicles**  
**Vodovozov, Valery; Raud, Zoja; Petlenkov, Eduard** Energies 2021 / art. 4477 <https://doi.org/10.3390/en14154477> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Risk management of magnetic field from industrial induction heater - a case study**  
**Koppel, Tarmo; Vilcane, Inese; Tint, Piia** Engineering for rural development 2017 / p. 1024-1037 : ill <https://doi.org/10.22616/ERDev2017.16.N218> <http://tf.llu.lv/conference/proceedings2017/> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Signal spectrum-based machine learning approach for fault prediction and maintenance of electrical machines**

**Raja, Hadi Ashraf; Kudelina, Karolina; Asad, Bilal; Vaimann, Toomas; Kallaste, Ants; Rassõlkin, Anton;** Khang, Huynh Van  
Energies 2022 / art. 9507 <https://doi.org/10.3390/en15249507> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Single-stage buck–boost inverters: a state-of-the-art survey**

**Azizi, Mohammadreza; Husev, Oleksandr; Vinnikov, Dmitri** Energies 2022 / art. 1622 <https://doi.org/10.3390/en15051622> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Sliding mode based control of dual boost inverter for grid connection**

**Lopez-Caiza, Diana; Flores-Bahamonde, Freddy; Kouro, Samir; Santana, Victor; Müller, Nicolas; Chub, Andrii** Energies 2019 / art. 4241, 15 p.: ill <https://doi.org/10.3390/en12224241> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **SO2 emissions from oil shale oxyfuel combustion in a 60 kWth circulating fluidized bed**

**Baqain, Mais Hanna Suleiman; Nešumajev, Dmitri; Konist, Alar** Energies 2024 / art. 4567 <https://doi.org/10.3390/en17184567> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Solutions for reducing (minimizing) firefighting truck repairs in EU countries and in Latvia in particular**

**Politika, V.; Pundure, J.; Järvis, Marina** Engineering for rural development 2024 / vol. 23 p. 870-880  
<https://doi.org/10.22616/ERDev.2024.23.TF172> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Spectrum analysis for condition monitoring and fault diagnosis of ventilation motor : a case study**

**Shabbir, Noman; Kütt, Lauri; Asad, Bilal; Jawad, Muhammad; Iqbal, Muhammad Naveed; Daniel, Kamran** Energies 2021 / art. 2001 <https://doi.org/10.3390/en14072001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **State-of-the-Art techniques for fault diagnosis in electrical machines: Advancements and future directions**

**Akbar, Siddique; Vaimann, Toomas; Asad, Bilal; Kallaste, Ants; Sardar, Muhammad Usman; Kudelina, Karolina** Energies 2023 / Art. 6345 <https://doi.org/10.3390/en16176345> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Steady-state thermal modeling of salient pole synchronous generator**

**Shams Ghahfarokhi, Payam; Podgornovs, Andrejs; Kallaste, Ants; Cardoso, Antonio J. Marques; Belahcen, Anouar; Vaimann, Toomas; Kudrjavtsev, Oleg; Asad, Bilal; Iqbal, Muhammad Naveed** Energies 2022 / art. 9460 <https://doi.org/10.3390/en15249460> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Step-Up series resonant DC-DC converter with bidirectional-switch-based boost rectifier for wide input voltage range photovoltaic applications**

**Bakeer, Abualkasim Ahmed Ali; Chub, Andrii; Vinnikov, Dmitri** Energies 2020 / Art. 3747 <https://doi.org/10.3390/en13143747> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Sustainable rural electrification : harnessing a cosmological wind**

**Troullaki, Katerina; Rozakis, Stelios; Latoufis, Kostas; Giotitsas, Christos; Priavolou, Christina; Freire, Fausto** Energies 2022 / art. 4659 <https://doi.org/10.3390/en15134659> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Textile-integrated conductive layers for flexible semiconductor-based photovoltaic structures**

**Czarnecki, Przemyslaw; Szudziel, Bartosz; Janczak, Daniel; Ruta, Lukasz; Sibinski, Maciej; Znajdek, Katarzyna** Energies 2024 / art. 3839 <https://doi.org/10.3390/en17153839> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **TG-MS analysis and kinetic study of co-combustion of ca-rich oil shale with biomass in air and oxy-like conditions**

**Baqain, Mais Hanna Suleiman; Nešumajev, Dmitri; Konist, Alar** Carbon capture science & technology 2024 / art. 100162 <https://doi.org/10.1016/j.ccst.2023.100162> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The influence of energy renovation on the change of indoor temperature and energy use**

**Hamburg, Anti; Kalamees, Targo** Energies 2018 / art. 3179, p. 1-15 : ill <https://doi.org/10.3390/en11113179> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The nexus of world electricity and global sustainable development**

**Wittmann, Veronika; Arici, Elif; Meissner, Dieter** Energies 2021 / art. 5843, 21 p. : ill <https://doi.org/10.3390/en14185843> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The transition to a circular economy : different paths for international and non-international micro-manufacturing firms**

**Ahmadov, Tarlan; Foli, Samuel; Durst, Susanne; Gerstlberger, Wolfgang Dieter** Discover sustainability 2024 / art. 178, 18 p. : ill <https://doi.org/10.1007/s43621-024-00367-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Understanding computational methods for solar envelopes based on design parameters, tools, and case studies : a review**

Alkadri, Miktha Farid; **De Luca, Francesco**; Turrin, Michel; Sariyildiz, Sevil Energies 2020 / art. 3302, 25 p. : ill  
<https://doi.org/10.3390/en13133302> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Valorisation of waste heat in existing and future district heating systems**

Pakere, Ieva; Blumberga, Dagnija; **Volkova, Anna**; Lepiksaar, Kertu; Zirne, Agate Energies 2023 / art. 6796  
<https://doi.org/10.3390/en16196796> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Verification of utility-scale solar photovoltaic plant models for dynamic studies of transmission networks**

Machlev, Ram; Batushansky, Zohar; Soni, Sachin; Chadliev, Vladimir; **Belikov, Juri**; Levron, Yoash Energies 2020 / art. 3191, 20 p. : ill  
<https://doi.org/10.3390/en13123191> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Wide input voltage range operation of the series resonant DC-DC converter with bridgeless boost rectifier**

**Bakeer, Abualkasim Ahmed Ali**; Chub, Andrii; Vinnikov, Dmitri; Rosin, Argo Energies 2020 / p. 4220–4237  
<https://doi.org/10.3390/en13164220> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Wide range series resonant DC-DC converter with a reduced component count and capacitor voltage stress for distributed generation**

**Bakeer, Abualkasim Ahmed Ali**; Chub, Andrii; Blinov, Andrei; Lai, Jih-Sheng Energies 2021 / art. 2051  
<https://doi.org/10.3390/en14082051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Wireless charging station design for electric scooters : case study analysis**

**Shevchenko, Viktor**; Pakhaliuk, Bohdan; Husev, Oleksandr; Vinnikov, Dmitri; Strzelecki, Ryszard Energies 2024 / art. 2472  
<https://doi.org/10.3390/en17112472> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Virtual inertia control methods in islanded microgrids**

**Škiparev, Vjatseslav**; Machlev, Ram; Chowdhury, Nilanjan Roy; Levron, Yoash; **Petlenkov, Eduard**; Belikov, Juri Energies 2021 / art. 1562, 20 p. : ill  
<https://doi.org/10.3390/en14061562> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Voltage source operation of the energy-router based on model predictive control**

**Roasto, Indrek**; Husev, Oleksandr; Najafzadeh, Mahdiyyeh; Jalakas, Tanel; Rodriguez, Jose Energies 2019 / art. 1892, 15 p. : ill  
<https://doi.org/10.3390/en12101892> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Working environment specialist's role in the improvement of safety level in Estonian enterprises**

**Hrenov, Georgi**; Reinhold, Karin; Tint, Piia Engineering for rural development 2017 / p. 832–840  
<https://doi.org/10.22616/ERDev2017.16.N170> <http://tf.ifu.lv/conference/proceedings2017/> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)