

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](#)

Aggregated conducted electromagnetic interference generated by DC/DC converters with deterministic and random modulation
Loschi, Hermes; Smolenski, Robert; Lezynski, Piotr; Nascimento, Douglas; Demidova, Galina Energies 2020 / art. 3698 <https://doi.org/10.3390/en13143698>

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 Kazakhstan oil shale deposits in accordance with resource estimation practices for consideration of potential shale oil reserves
Sabanov, Sergei; Konist, Alar; Korshunova, Ruslana Energies 2025 / art. 621 <https://doi.org/10.3390/en18030621>

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](#)

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](#)

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 metrics 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](#)

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; **Rassölkin, 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](#)

Comparison of district heating supply options for different CHP configurations

Rušelj, 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](#)

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 CO₂, CO₂-H₂O, 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; Rassölkin, 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](#)

Delightful daylighting : a framework for describing the experience of daylighting in Nordic homes and 'coupling it with quantitative assessments

Viikberg, Hanna; Sepulveda Luque, Abel; De Luca, Francesco Energies 2022 / art. 1815 <https://doi.org/10.3390/en15051815>
[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, Khurram Shahih; Rehman, Ateeq Ur; Rassölkin, 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, Yaroslava; 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](#)

[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](#)

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

Abdelrahim Abdelghafour, Omar Mohamed; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Peftitsis, 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 Γ -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](#)

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 security assessment of emerging economies under global and local challenges

Sotnyk, Iryna; Kurbatova, Tetiana; Kubatko, Oleksandr; Prokopenko, Olha; Prause, Gunnar Klaus; Kovalenko, Yevhen; Trypolska, Galyna; Pysmenna, Uliana Energies 2021 / art. 5860, 20 p. : ill

<https://doi.org/10.3390/en14185860>

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](#)

Fault detection and protection strategy for multi-terminal HVDC grids using wavelet analysis

Kaur, Jashandeep; Jayasooriya, Manilka; Iqbal, Muhammad Naveed; Daniel, Kamran; Shabbir, Noman; Peterson, Kristjan Energies 2025 / art. 1147

<https://doi.org/10.3390/en18051147>

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, Hatef; **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](#)

How can sustainable public transport be improved? A traffic sign recognition approach using convolutional neural network
Liu, Jingjing; Ge, Hongwei; Li, Jiajie; He, Pengcheng; Hao, Zhangang; **Hitch, Michael William** Energies 2022 / art. 7386, 14 p. : ill <https://doi.org/10.3390/en15197386>

How vacancy of dwellings influences energy renovations of multifamily buildings
Lihtmaa, Lauri; **Kalamees, Targo** Energies 2025 / art. 603 <https://doi.org/10.3390/en18030603>

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
Keskikula, 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; Klaviv, 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
Kasprawicz, 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](#)

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, Ilja; **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](#)

Market stakeholder analysis of the practical implementation of carbonation curing on steel slag for urban sustainable governance

Li, Jiajie; Wang, Chenyu; Song, Xiaoqian; Jin, Xin; Zhao, Shaowei; Qi, Zihan; Zeng, Hui; Zhu, Sitao; Jiang, Fuxing; Ni, Wen; **Hitch, Michael William** Energies 2022 / art. 2399, 19 p. : ill <https://doi.org/10.3390/en15072399>

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, levgen; **Zinchenko, Denys; Vinnikov, Dmitri**; Galkin, Ilja 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, Ilja; **Blinov, Andrei**; Verbytskyi, levgen; **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 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](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

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](#)

Pre-evaluation of wave energy converter deployment in the Baltic Sea through site limitations using CMEMS hindcast, Sentinel-1, and wave Buoy data

Vidjajev, Nikon; Rikka, Sander; Alari, Victor Energies 2025 / art. 3843 <https://doi.org/10.3390/en18143843>

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](#)

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; Dobbelsteen, 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; Rassõlkin, 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](#)

Review of the present state, development trends, and advancements of power electronic converters used in robotics

Vodovozov, Valery; Raud, Zoja Energies 2025 / art. 2638 <https://doi.org/10.3390/en18102638>

A review on additive manufacturing possibilities for electrical machines

Naseer, Muhammad Usman; Kallaste, Ants; Asad, Bilal; Vaimann, Toomas; Rassõlkin, 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](#)

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 mean value subtraction-based DC drift correction of B-H curve for 3D-printed magnetic materials

Asad, Bilal; Tiismus, Hans; Vaimann, Toomas; Belahcen, Anouar; Kallaste, Ants; Rassõlkin, Anton; Shams Ghahfarokhi, Payam Energies 2021 / art. 284, 10 p <https://doi.org/10.3390/en14020284> [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](#)

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](#)

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/en1113179> [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](#)

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; Zime, 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](#)

Ventilation Strategies for Deep Energy Renovations of High-Rise Apartment Buildings : Energy Efficiency and Implementation Challenges

Hamburg, Anti; Palmiste, Ülar; Mikola, Aho; Kalamees, Targo Energies 2025 / art. 2785 <https://doi.org/10.3390/en18112785> <https://www.mdpi.com/1996-1073/18/11/2785>

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, Vjatsjeslav; 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](#)