

**ADAssure : debugging methodology for autonomous driving control algorithms**

**Roberts, Andrew James; Heidari Iman, Mohammad Reza; Bellone, Mauro; Ghasempouri, Tara; Raik, Jaan; Maennel, Olaf Manuel; Hamad, Mohammad; Steinhorst, Sebastian** 2024 Design, Automation & Test in Europe Conference & Exhibition (DATE) : proceedings 2024 / p. 1-6 <https://doi.org/10.23919/DATE58400.2024.10546519>

**Aggregated demand-side energy flexibility : a comprehensive review on characterization, forecasting and market prospects**

**Plaum, Freddy; Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako** Energy reports 2022 / p. 9344-9362  
<https://doi.org/10.1016/j.egy.2022.07.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Aggregation ready flexibility management methods for mechanical ventilation systems in buildings**

**Maask, Vahur; Rosin, Argo; Korõtko, Tarmo; Thalfeldt, Martin; Syri, Sanna; Ahmadihangar, Roya** Energy and buildings 2023 / art. 113369, 14 p. : ill <https://doi.org/10.1016/j.enbuild.2023.113369> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Airtightness of Estonian dwellings – median and base-values for heat loss estimation**

**Hallik, Jaanus; Kalamees, Targo; Pikas, Ergo** Journal of Physics: Conference Series 2023 / 9 p <https://doi.org/10.1088/1742-6596/2654/1/012063> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Algorithms for online CO2 baseline correction in intermittently occupied rooms**

**Vihman, Lauri; Parts, Tuule Mall; Aljas, Hans Kristjan; Thalfeldt, Martin; Raik, Jaan** Healthy Buildings 2023 Europe: Beyond Disciplinary Boundaries: proceedings ; 1 2023 / p. 302-309 : ill <https://www.proceedings.com/content/070/070278webtoc.pdf>

**Analysing adversarial threats to rule-based local-planning algorithms for autonomous driving**

**Roberts, Andrew James; Malayjerdi, Mohsen; Bellone, Mauro; Maennel, Olaf Manuel; Malayjerdi, Ehsan** The Inaugural Symposium on Vehicle Security and Privacy (VehicleSec) 2023, 27 February 2023, San Diego, CA, USA 2023 / 8 p. : ill <https://doi.org/10.14722/vehiclesec.2023.23086>

**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](#)

**Analyzing energy flexibility by demand response in a Finnish district heated apartment building**

**Ju, Yuchen; Jokisalo, Juha; Kosonen, Risto; Kauppi, Ville; Janßen, Philipp** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 09006, 7 p. : ill <https://doi.org/10.1051/e3sconf/202124609006> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

**Analyzing power and energy flexibilities by demand response in district heated buildings in Finland and Germany**

**Ju, Yuchen; Jokisalo, Juha; Kosonen, Risto; Kauppi, Ville; Janßen, Philipp** Science and technology for the built environment 2021 / p. 1440-1460 : ill <https://doi.org/10.1080/23744731.2021.1950434> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Analytical approach for maximizing self-consumption of nearly zero energy buildings- case study : Baltic region**

**Ahmadihangar, Roya; Karami, Hossein; Husev, Oleksandr; Blinov, Andrei; Rosin, Argo; Jonaitis, Audrius; Sanjari, Mohammad Javad** Energy 2022 / art. 121744, 11 p. : ill <https://doi.org/10.1016/j.energy.2021.121744> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**ANN-LSTM based tool for photovoltaic power forecasting**

**Zahraoui, Younes; Korõtko, Tarmo; Mekhilef, Saad; Rosin, Argo** 2024 4th International Conference on Smart Grid and Renewable Energy (SGRE) : proceedings 2024 / 6 p. : ill <https://doi.org/10.1109/SGRE59715.2024.10428969>

**Assessment of downward draught in high-glazing facades in cold climates – experimental and CFD study into draught control with a 21-type radiator**

**Võsa, Karl-Villem; Ferrantelli, Andrea; Kurnitski, Jarek** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 02002, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124602002> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [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](#)

**Assignment of a synthetic population for activity-based modeling employing publicly available data**

**Agriesti, Serio Angelo Maria; Roncoli, Claudio; Nahmias-Biran, Bat-Hen** ISPRS International Journal of Geo-Information 2022 / Art. 148 <https://doi.org/10.3390/ijgi11020148> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Autonomous driving in the real-world : the weather challenge in the Sohjoa Baltic Project**

Bellone, Mauro; Ismailogullari, Azat; **Müür, Jaanus**; Nissin, Oscar; **Sell, Raivo**; **Soe, Ralf-Martin** Towards connected and autonomous vehicle highways : technical, security and social challenges 2021 / p. 229–255 [https://doi.org/10.1007/978-3-030-66042-0\\_9](https://doi.org/10.1007/978-3-030-66042-0_9)  
[Article collection metrics at Scopus](#) [Article at Scopus](#)

#### **Autonomous driving validation and verification using digital twins**

**Pikner, Heiko; Malayjerdi, Mohsen; Bellone, Mauro; Baykara, Baris Cem; Sell, Raivo** Proceedings of the 10th International Conference on Vehicle Technology and Intelligent Transport Systems - VEHTS ; Vol. 1 2024 / p. 204-211  
<https://doi.org/10.5220/0012546400003702> [Conference Proceeding at Scopus](#) [Article at Scopus](#)

#### **Autonomous vehicle shuttle in Smart City testbed**

**Sell, Raivo; Soe, Ralf-Martin; Wang, Ruxin; Rassölkin, Anton** Intelligent System Solutions for Auto Mobility and Beyond : Advanced Microsystems for Automotive Applications 2020 2021 / p. 143–157 [https://doi.org/10.1007/978-3-030-65871-7\\_11](https://doi.org/10.1007/978-3-030-65871-7_11)

#### **A Bayesian optimization approach for calibrating large-scale activity-based transport models**

**Agriesti, Serio; Kuzmanovski, Vladimir; Hollmen, Jaakko; Roncoli, Claudio; Nahmias-Biran, Bat-Hen** IEEE Open Journal of Intelligent Transportation Systems 2023 / p. 740 - 754 <https://doi.org/10.1109/OJITS.2023.3321110> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Building performance indicators and IEQ assessment procedure for the next generation of EPC-s**

**Võsa, Karl-Villem; Ferrantelli, Andrea; Tzanev, Dragomir; Simeonov, Kamen; Camero, Pablo; Espigares, Carlos; Navarro Escudero, Miriam; Quiles, Pedro Vicente; Andrieu, Thibault; Battezzati, Florian; Kurnitski, Jarek** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 13003, 9 p <https://doi.org/10.1051/e3sconf/202124613003> [Conference Proceedings at Scopus](#)  
[Article at Scopus](#) [Article at WOS](#)

#### **Camera-LiDAR fusion based object segmentation in adverse weather conditions for autonomous driving**

**Gu, Junyi; Bellone, Mauro; Lind, Artjom** 2024 19th Biennial Baltic Electronics Conference (BEC) 2024  
<https://doi.org/10.1109/BEC61458.2024.10737955> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **Capillary condensation redistribution (CCR) test: measurement results of 5 materials and comparison to modelling**

**Klõšeiko, Paul; Valk, Thorny; Põldaru, Mattias; Kalamees, Targo** Journal of Physics: Conference Series 2023 / 8 p  
<https://doi.org/10.1088/1742-6596/2654/1/012047> [Conference proceedings at Scopus](#) [Article at Scopus](#)

#### **Challenging diffusion of digital receipts**

**Soe, Ralf-Martin** 2021 Eighth International Conference on eDemocracy and eGovernment (ICEDEG) : Quito, Ecuador, 28-30 July 2021 2021 / p. 110–117 <https://doi.org/10.1109/ICEDEG52154.2021.9530887>

#### **A chameleon algorithm for solving economic dispatch problem in microgrid system**

**Zahraoui, Younes; Alhamrouni, Ibrahim; Mekhilef, Saad; Korõtko, Tarmo; Jusoh, Awang; Sutikno, Tole** Bulletin of electrical engineering and informatics 2023 / p. 1982-1992 : ill <https://doi.org/10.11591/eei.v12i4.4700> [Journal metrics at Scopus](#) [Article at Scopus](#)

#### **Characterizing energy flexibility of buildings with electric vehicles and shiftable appliances on single building level and aggregated level**

**Azizi, Elnaz; Ahmadihangar, Roya; Rosin, Argo; Bolouki, Sadegh** Sustainable cities and society 2022 / art. 103999  
<https://doi.org/10.1016/j.scs.2022.103999> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Circular renovation of an apartment building with prefabricated additional insulation elements to nearly zero energy building**

**Nigumann, Eero; Kalamees, Targo; Kuusk, Kalle; Pihelo, Peep** Journal of sustainable architecture and civil engineering 2024 / p. 22-34 <https://doi.org/10.5755/j01.sace.34.1.35674>

#### **Circular renovation of an apartment building with prefabricated insulation elements**

**Nigumann, Eero; Kalamees, Targo; Kuusk, Kalle; Pihelo, Peep** 5th International Conference Forum Wood Building Baltic : 26-28 February 2024, Tallinn, Estonia : proceedings 2024 / p. 96-97 : ill <https://digikogu.taltech.ee/et/Item/22318c67-e0ef-42f1-88c7-34c9d9677b17> [https://www.ester.ee/record=b5668645\\*est](https://www.ester.ee/record=b5668645*est)

#### **Classification of the energy production potential of water lens solar concentrators using machine learning**

**Zarrinkafsh, Hamidreza; Eslamirad, Nasim; De Luca, Francesco** Journal of Physics: Conference Series 2021 / art. 012022, 6 p. : ill <https://doi.org/10.1088/1742-6596/2042/1/012022> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

#### **CLFT : camera-LiDAR fusion transformer for semantic segmentation in autonomous driving**

**Gu, Junyi; Bellone, Mauro; Pivonka, Tomas; Sell, Raivo** IEEE Transactions on Intelligent Vehicles 2024 / 12 p  
<https://doi.org/10.1109/TIV.2024.3454971> [Journal metrics at Scopus](#) [Article at Scopus](#)

#### **CLFT : camera-LiDAR fusion transformer for semantic segmentation in autonomous driving : preprint**

**Gu, Junyi; Bellone, Mauro; Pivonka, Tomas; Sell, Raivo** arXiv.org 2024 / 12 p. : ill <https://doi.org/10.48550/arXiv.2404.17793>

### **Coding the smart city : preface**

Vainio, Teija; Hodson, Elise; Sayún, Michel Nader; Soe, Ralf-Martin Interaction design and architecture(s) 2021 / p. 59-62

[https://ixdea.org/wp-content/uploads/ixDEA\\_art/50/50\\_P\\_fs2.pdf](https://ixdea.org/wp-content/uploads/ixDEA_art/50/50_P_fs2.pdf) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **The collaboration dilemma in smart city projects : time to ask the right questions**

Thabit Gonzalez, Sara; Mora, Luca Organization 2024 <https://doi.org/10.1177/13505084231183949> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comparative analysis of machine learning techniques for non-intrusive load monitoring**

Shabbir, Noman; Vassiljeva, Kristina; Hokmabad, Hossein Nouroollahi; Husev, Oleksandr; Petlenkov, Eduard; Belikov, Juri Electronics 2024 / art. 1420 <https://doi.org/10.3390/electronics13081420> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A comparative analysis of NZEB energy performance requirements for residential buildings in Denmark, Estonia and Finland**

Simson, Raimo; Thomsen, Kirsten Engelund; Wittchen, Kim Bjarne; Kurnitski, Jarek E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 14001, 12 p. : ill <https://doi.org/10.1051/e3sconf/202124614001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Comparative study of using periodic daily and long-term weather data for cooling system sizing and impact of thermal mass**

Seyed Salehi, Seyed Shahabaldin; Kurnitski, Jarek; Thalfeldt, Martin E3S Web Conference: BuildSim Nordic 2022 2022 / art. 06002 <https://doi.org/10.1051/e3sconf/202236206002> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Composite surrogate for likelihood-free bayesian optimisation in high-dimensional settings of activity-based transportation models**

Kuzmanovski, Vladimir; Hollmén, Jaakko Advances in Intelligent Data Analysis XIX : 19th International Symposium on Intelligent Data Analysis, IDA 2021, Porto, Portugal, April 26–28, 2021 : proceedings 2021 / p. 171-183 : ill [https://doi.org/10.1007/978-3-030-74251-5\\_14](https://doi.org/10.1007/978-3-030-74251-5_14) [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

### **Comprehensive comparison of isolated high step-up dc-dc converters for low power application**

Pourjafar, Saeed; Afshari, Hossein; Mohseni, Parham; Husev, Oleksandr; Matushkin, Oleksandr; Shabbir, Noman IEEE open journal of power electronics 2024 / p. 1149–1161 <https://doi.org/10.1109/OJPEL.2024.3433554>

### **Comprehensive workflow for documenting corporate commuting emissions : a university case study with two alternative approaches**

Jiang, Qidi; Kurnitski, Jarek Proceedings of the 2nd international conference on advanced civil engineering and smart structures 2024 / p. 68-77 [https://doi.org/10.1007/978-981-97-1514-5\\_8](https://doi.org/10.1007/978-981-97-1514-5_8) [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Computer aided corporate sense-making and prioritization for SDGs**

Liiv, Innar; Karo, Erkki; Soe, Ralf-Martin The Ethics of Artificial Intelligence for the Sustainable Development Goals 2023 / p. 365-378 [https://doi.org/10.1007/978-3-031-21147-8\\_20](https://doi.org/10.1007/978-3-031-21147-8_20) [https://link.springer.com/chapter/10.1007/978-3-031-21147-8\\_20](https://link.springer.com/chapter/10.1007/978-3-031-21147-8_20)

### **Congestion control strategies for increased renewable penetration of photovoltaic in LV distribution networks**

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Husev, Oleksandr; Ahmadiyahangar, Roya; Wen, Fushuan; Kull, Karl Energy reports 2022 / p. 217-223 <https://doi.org/10.1016/j.egyr.2022.10.184> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Construction period moisture load on CLT - example of 5 CLT buildings**

Kalbe, Kristo; Kuk, Villu; Kalamees, Targo Proceedings of the III Forum Wood Building Baltic, Riga Technical University, 09-10.05, 2022, Riga, Latvia 2022 / p. 42–43 <https://forumwoodbuilding.rtu.lv/wp-content/uploads/sites/37/2022/05/FWBB2022-2022.05.09-speakers-day-1-and-2.pdf>

### **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](#)

### **Cost savings and CO2 emissions reduction potential in the German district heating system with demand response**

Ju, Yuchen; Lindholm, Joakim; Verbeck, Moritz; Jokisalo, Juha; Kosonen, Risto; Janßen, Philipp; Li, Yantong; Schäfers, Hans; Nord, Natasa Science and Technology for the Built Environment 2022 / p. 255 - 274 <https://doi.org/10.1080/23744731.2021.2018875> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **A cyber attack taxonomy for microgrid systems**

Bahsi, Hayretidin; Dola, Henry Ochieng; Khalil, Shaymaa Mamdouh; Korötko, Tarmo 2022 17th Annual System of Systems

**Danish, Estonian and Finnish NZEB requirements comparison with European Commission recommendations for office buildings in Nordic and Oceanic climates**

**Simson, Raimo; Arumägi, Endrik;** Thomsen, Kirsten Engelund; Wittchen, Kim Bjarne; **Kurnitski, Jarek** E3S Web Conferences : The 16th ROOMVENT Conference (ROOMVENT 2022) 2022 / art. 01017 <https://doi.org/10.1051/e3sconf/202235601017> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Data generative machine learning model for the assessment of outdoor thermal and wind comfort in a northern urban environment**

**Eslamirad, Nasim; De Luca, Francesco; Lylykangas, Kimmo Sakari; Ben Yahia, Sadok** Frontiers of architectural research 2023 / p. 541-555 : ill <https://doi.org/10.1016/j.foar.2022.12.001> [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](#)

**Datanimeste suursündmus | Suurandmete konverentsil taas hulk nimekaid esinejaid**

Kald, Indrek ituudised.ee 2023 [Datanimeste suursündmus | Suurandmete konverentsil taas hulk nimekaid esinejaid](#)

**Decarbonization strategies of Helsinki metropolitan area district heat companies**

Su, Yijie; **Hiltunen, Pauli; Syri, Sanna;** Khawid, Dilip Renewable and Sustainable Energy Reviews 2022 / Art. 112274 <https://doi.org/10.1016/j.rser.2022.112274> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Decoding the smart city**

Vainio, Teija; Hodson, Elise; Sayún, Michel Nader; **Soe, Ralf-Martin** Interaction design and architecture(s) 2021 / p. 59-62 <https://doi.org/10.55612/s-5002-050-002pfs> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Demand response in the German district heating system**

**Ju, Yuchen;** Lindholm, Joakim; Verbeck, Moritz; **Jokisalo, Juha; Kosonen, Risto;** Janßenc, Philipp; Li, Yantong; Schafers, Hans; Nord, Natasa The 8th Conference of the Sustainable Solutions for Energy and Environment EENVIRO 2022 16/10/2022 - 21/10/2022 Bucharest, Romania 2023 / art. 012016 <https://doi.org/10.1088/1755-1315/1185/1/012016> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Demand response potential of district heating in a swimming hall in Finland**

Yuan, Xiaolei; Lindroos, Leo; **Jokisalo, Juha; Kosonen, Risto;** Pan, Yiqun; Jin, Hui Energy and buildings 2021 / art. 111149, 12 p. : ill <https://doi.org/10.1016/j.enbuild.2021.111149> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Development of mathematical skills : variable- and person-oriented approaches**

**Mädamürk, Kaja;** Kikas, Eve 2023 AERA Annual Meeting, Chicago, 13.04-16.04.2023 2023 / 14 p. : ill <https://doi.org/10.3102/2013036>

**Devising an urban learning centre for municipalities in Eastern Partnership countries**

**Schuch de Azambuja, Luiza; Soe, Ralf-Martin** New Sustainable Horizons in Artificial Intelligence and Digital Solutions : 22nd IFIP WG 6.11 Conference on e-Business, e-Services and e-Society, I3E 2023, Curitiba, Brazil, November 9–11, 2023, Proceedings 2023 / p. 403-417 [https://doi.org/10.1007/978-3-031-50040-4\\_30](https://doi.org/10.1007/978-3-031-50040-4_30) [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Distributed average integral control based energy management model**

Shaukat, Neelofar; Khan, Bilal; Qureshi, Muhammad Bilal; Jawad, Muhammad; **Shabbir, Noman; Daniel, Kamran** 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 5 p <https://doi.org/10.1109/ETFG55873.2023.10407358>

**Eesti elektri tarbimiskaja ja tootva tarbimise simulatsioonialüüs : uuringuaruanne**

**Kisel, Einari; Kuhi-Thalfeldt, Reeli; Agabus, Hannes; Vesikioja, Kaija** 2024 [https://arenguseire.ee/wp-content/uploads/2024/06/2024\\_eesti-elektri-tarbimiskaja-ja-tootva-tarbimise-simulatsioonialuus\\_uuring.pdf](https://arenguseire.ee/wp-content/uploads/2024/06/2024_eesti-elektri-tarbimiskaja-ja-tootva-tarbimise-simulatsioonialuus_uuring.pdf)

**Eesti teadlased töötasid välja avatud platvormi energiavoogude juhtimiseks**

postimees.ee 2023 [Eesti teadlased töötasid välja avatud platvormi energiavoogude juhtimiseks](#)

**Eesti teadlased töötasid välja meetodi energiamärgise koheseks määramiseks**

director.ee 2023 [Eesti teadlased töötasid välja meetodi energiamärgise koheseks määramiseks](#) [Eestis töötati välja uudne energiamärgise määramise lahendus](#) [Eestis töötati välja uudne energiamärgise määramise lahendus](#)

**Effect of aggregation methods in fuzzy technique for prioritization of criteria of automated vehicle system**

**Mehrparvar, Marmar; Majak, Jüri; Karjust, Kristo** AIP conference proceedings 2024 / art. 020011 <https://doi.org/10.1063/5.0189323>



**The effect of temperature, humidity and mechanical properties on crack formation on external thin plasters of ETICS**  
**Volkova, Kristina; Põldaru, Mattias; Ilomets, Simo; Kalamees, Targo; Talvik, Martin;** Heim, Dariusz Journal of physics : conference series 2021 / art. 012025, 8 p. : ill <https://doi.org/10.1088/1742-6596/2069/1/012025> [Conference Proceedings at Scopus](#)  
[Article at Scopus](#)

**Effect of the urban microenvironment on the indoor air temperature of the residential building stock in the Helsinki region**  
Kravchenko, Iliia; Farahani, Azin Velashjerdi; **Kosonen, Risto;** Kilpeläinen, Simo; Saranko, Olli; Fortelius, Carl Building and Environment 2023 / art. 110971 <https://doi.org/10.1016/j.buildenv.2023.110971> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effects of a mobile disturbance pattern on dynamic patch networks and metapopulation persistence**  
**Fabritius, Eeva Henna Helena;** de Knegt, Henrik; Ovaskainen, Otso Ecological modelling 2021 / art. 109738  
<https://doi.org/10.1016/j.ecolmodel.2021.109738> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Effects of night ventilation on indoor air quality in educational buildings—a field study**  
Lestinen, Sami; Kilpeläinen, Simo; **Kosonen, Risto;** Valkonen, Maria; **Jokisalo, Juha;** Pasanen, Pertti Applied sciences 2021 / art. 4056, 20 p. : ill <https://doi.org/10.3390/app11094056> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Einari Kisel: meie naabriteks on odavenergia tšempionid**  
**Kisel, Einari** toostusuudised.ee 2024 [Einari Kisel: meie naabriteks on odavenergia tšempionid](#)

**Elanikud targa linna loomise juures**  
**Sarv, Lill** Sirp 2022 / lk. 28-29 : fot <https://www.sirp.ee/s1-artiklid/c21-teadus/elanikud-targa-linna-loomise-juures/>

**Electricity market impacts of low-carbon energy transition in the Nordic-Baltic region**  
**Farsaei, Anahita;** Olkkonen, Ville; Kan, Xiaoming; **Syri, Sanna** Journal of Sustainable Development of Energy, Water and Environment Systems 2022 / art. 1090407 <https://doi.org/10.13044/j.sdewes.d9.0407> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Electroencephalography as an objective indicator of stress**  
**Gavriljuk, Marietta; Uudeberg, Tuuli; Pilt, Kristjan; Karai, Deniss; Fridolin, Ivo; Bachmann, Maie** 19th Nordic-Baltic Conference on Biomedical Engineering and Medical Physics : Proceedings of NBC 2023, June 12–14, 2023, Liepaja, Latvia 2023 / p. 221–226  
[https://doi.org/10.1007/978-3-031-37132-5\\_28](https://doi.org/10.1007/978-3-031-37132-5_28) [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Emissions and power demand in optimal energy retrofit scenarios of the Finnish building stock by 2050**  
Hirvonen, Janne; Heljo, Juhani; **Jokisalo, Juha;** Kurvinen, Antti; Saari, Arto; Niemelä, Tuomo; Sankelo, Paula; **Kosonen, Risto** Sustainable cities and society 2021 / art. 102896, 22 p. : ill <https://doi.org/10.1016/j.scs.2021.102896> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**End-to-end multimodal sensor dataset collection framework for autonomous vehicles**  
**Gu, Junyi;** Lind, Artjom; Chhetri, Tek Raj; **Bellone, Mauro; Sell, Raivo** Sensors 2023 / art. 6783, 25 p. : ill  
<https://doi.org/10.3390/s23156783> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Energy and hygrothermal performance challenges in the renovation of a over 100-year-old wooden apartment building into a nearly zero-energy building**  
**Evard, Anni; Arumägi, Endrik; Lomp, Siim; Kalamees, Targo** 2nd International Conference on Moisture in Buildings 2023, 3-4 July 2023 2023 / 2 p <https://doi.org/10.14293/ICMB230053>

**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 storage facilities impact on flexibility of active distribution networks: stochastic approach**  
Alipour, Manijeh; Gharehpetian, Gevork B.; **Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako** Electric power systems research 2022 / art. 108645 <https://doi.org/10.1016/j.epsr.2022.108645> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Energy, cost and emission saving potential of demand response and peak power limiting in the German district heating system**  
Suhonen, Janne; Lindholm, Joakim; Verbeck, Moritz; **Ju, Yuchen; Jokisalo, Juha; Kosonen, Risto;** Janßen, Philipp; Schäfers, Hans International journal of sustainable energy 2023 / p. 1092-1127 : ill <https://doi.org/10.1080/14786451.2023.2251601> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Enhancing mobility as a service with autonomous last-mile shuttles and data exchange layer for public transport**  
**Kalda, Krister; Sell, Raivo;** Kivimäe, Martin Modern materials and manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 020006 <https://doi.org/10.1063/5.0189880> [Article at Scopus](#) [Conference Proceedings at Scopus](#)

**Enhancing PV hosting capacity and mitigating congestion in distribution networks with deep learning based PV forecasting and battery management**  
**Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Daniel, Kamran;** Jawad, Muhammad; Husev, Oleksandr; Rosin, Argo; Martins, Joao Applied energy 2024 / art. 123770 <https://doi.org/10.1016/j.apenergy.2024.123770>

**Enhancing transmission line reliability : an AI-driven approach to fault identification and classification**  
**Shabbir, Noman; Kamran, Daniel; Raja, Hadi Ashraf** Electronics 2024

**Error messages in relational database management systems : a comparison of effectiveness, usefulness, and user confidence**  
Taipalus, Toni; Grahn, Hilkka; **Ghanbari, Hadi** Journal of systems and software 2021 / art. 111034, 15 p.: ill <https://doi.org/10.1016/j.jss.2021.111034> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Estimation of peak voltage value and its occurrence timing upon non-sinusoidal supply voltage**  
**Daniel, Kamran; Kütt, Lauri;** Iqbal, Muhammad Naveed; **Shabbir, Noman; Jarkovoi, Marek** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / p. 1-6 <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604412>

**Estonian Human Development Report 2023 : mental health and well-being**  
2023 <https://doi.org/10.58009/aere-perennius0044>

**Estonian president: Solutions modeled by researchers will help rebuild Ukrainian cities**  
baltictimes.com 2023 [Estonian president: Solutions modeled by researchers will help rebuild Ukrainian cities](#)

**Euroopa Liit toetab Eesti elanike roheoskuste arendamist 15 miljoni euroga**  
rohe.geenius.ee 2024 [Euroopa Liit toetab Eesti elanike roheoskuste arendamist 15 miljoni euroga](#)

**Experimental evaluation of IDA ICE and COMSOL models for an asymmetric borehole thermal energy storage field in Nordic climate**  
Xue, Tianchen; **Jokisalo, Juha; Kosonen, Risto;** Vuolle, Mika; Marongiu, Federica; Vallin, Sami; Leppäharju, Nina; Arola, Teppo Applied thermal engineering 2022 / art. 119261, 15 p. : ill <https://doi.org/10.1016/j.applthermaleng.2022.119261> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Exploratory data analysis for demand-side flexibility quantification**  
**Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Maask, Vahur; Martins, João F.** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227408>

**Extending the “Smart City” concept to small-to-medium sized Estonian municipalities: initiatives and challenges faced**  
**Fröhlich, K. A.; Soe, Ralf-Martin;** Maoneke, P.B.; Jain, K.; Pinomaa, A.; Nieminen, M. Information Systems : 19th European, Mediterranean, and Middle Eastern Conference, EMCIS 2022, Virtual Event, December 21–22, 2022 : proceedings 2023 / p. 264–276 [https://doi.org/10.1007/978-3-031-30694-5\\_20](https://doi.org/10.1007/978-3-031-30694-5_20) [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Failure consequence evaluation of uncontrollable district heating network**  
Mao, Ding; Wang, Peng; **Ju, Yuchen;** Ni, Long Sustainable cities and society 2022 / art. 103593, 16 p. : ill <https://doi.org/10.1016/j.scs.2021.103593> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Feasibility study of a DC house connected to a conventional AC distribution network**  
**Hokmabad, Hossein Nouroollahi; Shabir, Noman; Astapov, Victor; Petlenkov, Eduard; Husev, Oleksandr; Belikov, Juri** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604419>

**Fractional order sliding mode controller based on supervised machine learning techniques for speed control of PMSM**  
**Zahraoui, Younes; Zaihidee, Fardila M.;** Kermadi, Mostefa; Mekhilef, Saad; Mubin, Marizan; Tang, Jing Rui; Zaihidee, Ezrinda M. Mathematics 2023 / art. 1457 <https://doi.org/10.3390/math11061457> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Framework for connecting the mobility challenges in low density areas to smart mobility solutions: the case study of Estonian municipalities**  
**Agriesti, Serio Angelo Maria; Soe, Ralf-Martin; Saif, Muhammad Atiullah** European transport research review 2022 / art. 32 <https://doi.org/10.1186/s12544-022-00557-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**From near real-time urban data to an explainable city-scale model to help reduce the Urban Heat Island (UHI) effect**  
**Eslamirad, Nasim; De Luca, Francesco; Ben Yahia, Sadok; Lylykangas, Kimmo Sakari** Journal of Physics: Conference Series 2023 / art. 092012, p. 1-6 : ill <https://doi.org/10.1088/1742-6596/2600/9/092012> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Geoprocess of geospatial urban data in Tallinn, Estonia**

**Eslamirad, Nasim; De Luca, Francesco; Lylykangas, Kimmo Sakari; Ben Yahia, Sadok** Data in brief 2023 / art. 109172, 13 p. : ill <https://doi.org/10.1016/j.dib.2023.109172> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A global survey of standardization and industry practices of automotive cybersecurity validation and verification testing processes and tools**

**Roberts, Andrew James;** Marksteiner, Stefan; Soyuturk, Mujdat; Yaman, Berkay; Yang, Yi SAE international journal of connected and automated vehicles 2023 / art. 12-07-02-0013 <https://doi.org/10.4271/12-07-02-0013> [Journal metrics at Scopus](#) [Article at Scopus](#)

**Gray box time variant clogging behaviour and pressure drop prediction of the air filter in the HVAC system**

**Alimohammadi, Hossein; Vassiljeva, Kristina; Petlenkov, Eduard; Thalfeldt, Martin; Mikola, Alo; Kull, Tuule Mall; Köse, Ahmet** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 10002 <https://doi.org/10.1051/e3sconf/202124610002> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Grid-connected solar PV power plants optimization: a review**

**Zidane, Tekai Eddine Khalil; Aziz, Ali Saleh; Zahraoui, Younes;** Kotb, Hossam; Aboras, Kareem M.; Kitmo; Jember, Yosef Berhan IEEE Access 2023 / p. 79588-79608 <https://doi.org/10.1109/ACCESS.2023.3299815> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Heat loss characteristics of typology-based apartment building external walls for a digital twin-based renovation strategy tool**

**Ilste, Elisa; Lomp, Siim; Pikas, Ergo; Arumägi, Endrik; Hallik, Jaanus; Öiger, Karl; Kisel, Einari; Liiv, Innar; Kalamees, Targo** Journal of Physics: Conference Series 2023 / 8 p <https://doi.org/10.1088/1742-6596/2654/1/012125> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**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](#)

**Heat recovery ventilation solutions for school building renovation**

**Kuivjõgi, Helena; Sarevet, Henri; Thalfeldt, Martin; Kurnitski, Jarek** CLIMA 2022: the 14th REHVA HVAC World Congress, 22nd – 25th May in Rotterdam, The Netherlands 2022 / p. 1-8 <https://doi.org/10.34641/clima.2022.208>

**Heat recovery ventilation system heating energy weather normalization – calculation method and case study**

**Kuivjõgi, Helena; Laaneste, Janar; Thalfeldt, Martin; Kurnitski, Jarek** E3S Web Conference: BuildSim Nordic 2022 2022 / art. 09003 <https://doi.org/10.1051/e3sconf/202236209003> [Conference proceedings at Scopus](#) [Article at Scopus](#)

**Heating energy-saving potentials in HVAC system of swimming halls : a review**

**Yuan, Xiaolei; Chen, Zhisen; Liang, Yumin; Pan, Yiqun; Jokisalo, Juha; Kosonen, Risto** Building and environment 2021 / art. 108189, 18 p. : ill <https://doi.org/10.1016/j.buildenv.2021.108189> [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](#)

**Helen Sooväli-Sepping: kliimaseadus sõnastab uued Eestis elamise ja tegutsemise põhimõtted**

**Sooväli-Sepping, Helen** delfi.ee 2024 [Helen Sooväli-Sepping: kliimaseadus sõnastab uued Eestis elamise ja tegutsemise põhimõtted](#)

**Helen Sooväli-Sepping: roheoskused on tuleviku töökeskkonnas uus normaalsus**

**Sooväli-Sepping, Helen** err.ee 2024 [Helen Sooväli-Sepping: roheoskused on tuleviku töökeskkonnas uus normaalsus](#)

**Hoonete energiatõhusust määrav digiaudit jõuab kinnisvaraomanikeni**

postimees.ee 2024 [Hoonete energiatõhusust määrav digiaudit jõuab kinnisvaraomanikeni Kuhu kulub hoones energia? Eesti teadlaste loodud lahendus teab täpselt](#)

**Hoonete rekonstrueerimise pikaajaline strateegia**

2020 <https://www.mkm.ee/media/155/download>

**Hygrothermal performance of AAC exterior wall after additional insulation with prefabricated elements in Estonia**

**Pihelo, Peep; Kalamees, Targo** 5th Central European Symposium On Building Physics (CESBP) 2023 / p. 020049-1-020049-8

<https://doi.org/10.1063/5.0170884> Conference proceedings at Scopus Article at Scopus

**Idavirulased on oodatud osa saama targa linna lahendustest**

Põhjarannik 2023 / Lk. 7 [Idavirulased on oodatud osa saama targa linna lahendustest](#)

**Identifying relationships between personal social networks and spatial mobility : A study using smartphone tracing and related surveys**

Puura, Anniki; Silm, Siiri; **Masso, Anu** Social networks 2022 / p. 306-317 <https://doi.org/10.1016/j.socnet.2021.08.008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Impact of built-in moisture on the design of hygrothermally safe cross-laminated timber external walls : a stochastic approach**

**Kukk, Villu; Kers, Jaan; Kalamees, Targo**; Wang, Lin; **Ge, Hua** Building and environment 2022 / art. 109736

<https://doi.org/10.1016/j.buildenv.2022.109736> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Impact of internal heat gain profiles on the design cooling capacity of landscaped offices**

**Seyed Salehi, Seyed Shahabaldin; Ferrantelli, Andrea; Aljas, Hans Kristjan; Kurnitski, Jarek; Thalfeldt, Martin** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 07003, 7 p. : ill <https://doi.org/10.1051/e3sconf/202124607003> Conference Proceedings at Scopus Article at Scopus Article at WOS

**Impact of office tenants' electricity use on the cost-optimal solutions in a cold climate**

**Kuivjõgi, Helena; Laas, Liina; Ferrantelli, Andrea; Thalfeldt, Martin** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 05001, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124605001> Conference Proceedings at Scopus Article at Scopus Article at WOS

**Implications of digitalization in facilitating socio-technical energy transitions in Europe**

**Veskioja, Kaija; Soe, Ralf-Martin** Energy research & social science 2022 / art. 102720 <https://doi.org/10.1016/j.erss.2022.102720> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

**Improving Residential Load Forecasting : A Probabilistic Tree-based Approach for Multi-Step Ahead Prediction**

**Shabbir, Noman; Daniel, Kamran; Jawad, M.; Rosin, Argo; Martins, J.** International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST) 2025

**Indoor temperature conditions and energy demand of a Finnish detached house in a changing climate**

Farahani, Azin Velashjerdi; **Jokisalo, Juha**; Korhonen, Natalia; **Kosonen, Risto** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 15001, 7 p. : ill <https://doi.org/10.1051/e3sconf/202124615001> Conference proceedings at Scopus Article at Scopus Article at WOS

**Influence of CLT wetting during the construction phase on the crack formation and air leakages in the CLT**

**Kalbe, Kristo; Kukk, Villu; Kalamees, Targo** AIP conference proceedings 2023 / p. 020028-1-020028-8 <https://doi.org/10.1063/5.0171342> Conference proceedings at Scopus Article at Scopus

**Influence of mental stress on the arterial stiffness parameters detected from photoplethysmographic signal waveform**

**Pilt, Kristjan; Karai, Deniss; Bachmann, Maie; Gavriljuk, Marietta; Allik, Ardo; Uudeberg, Tuuli** 2022 18th Biennial Baltic Electronics Conference (BEC) 2022 / 4 p <https://doi.org/10.1109/BEC56180.2022.9935609>

**Info-gap-based optimization of microgrids integrated with power, cooling and hydrogen generation units**

**Mahmoudnezhad, Fayeze; Mirzaei, Mohammad Amin; Plaum, Freddy; Ahmadiyahangar, Roya; Kilter, Jako; Rosin, Argo** 2022 IEEE 16th International Conference on Compatibility, Power Electronics, and Power Engineering (CPE-POWERENG) 2022 / 7 p <https://doi.org/10.1109/CPE-POWERENG54966.2022.9880860>

**Institutionalising smart city research and innovation : from fuzzy definitions to real-life experiments**

**Soe, Ralf-Martin; Schuch de Azambuja, Luiza; Toiskallio, Kalle; Nieminen, Marko; Batty, Michael** Urban Research & Practice 2021 / p. 112-154 <https://doi.org/10.1080/17535069.2021.1998592> 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

**Kuidas viia Eestis sujuvalt läbi renoveerimislaine?**

**Kisel, Einari; Kalamees, Targo; Pikas, Ergo; Liiv, Innar; Arumägi, Endrik** Mente et Manu 2023 / lk. 40-41 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)



### Language of driving for autonomous vehicles

**Kalda, Krister; Pizzagalli, Simone Luca; Soe, Ralf-Martin; Sell, Raivo; Bellone, Mauro** Applied sciences 2022 / art. 5406  
<https://doi.org/10.3390/app12115406> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Leveraging the machine learning techniques for demand-side flexibility - a comprehensive review

**Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Blinov, Andrei; Korõtko, Tarmo; Vinnikov, Dmitri** Electric power systems research 2025 / art. 111185 <https://doi.org/10.1016/j.epr.2024.111185>

### LiDAR-camera fusion based object segmentation in adverse weather conditions for autonomous driving

**Gu, Junyi; Lind, Artjom; Bellone, Mauro** AIP Conference Proceedings 2023

### Lidar-camera semi-supervised learning for semantic segmentation

**Caltagirone, Luka; Bellone, Mauro; Svensson, Lennart; Wahde, Mattias; Sell, Raivo** Sensors 2021 / art. 4813  
<https://doi.org/10.3390/s21144813> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Lifetime-oriented control strategies for hybrid energy storage systems in an islanded microgrid

**Cinay, Nazli; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Ahmadiyahangar, Roya; Biechl, Helmuth** 2021 22nd IEEE International Conference on Industrial Technology (ICIT) : proceedings 2021 / p. 1-6 <https://doi.org/10.1109/ICIT46573.2021.9453617>  
[Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### Linnaplaneerimise heaolu skoor mõõdab, mida linnaelanikud tegelikult tunnevad

**Fridolin, Ivo; Pilt, Kristjan; Bachmann, Maie; Grišakov, Kristi; Tärnov, Külle; Sternfeldt, Silver** Mente et Manu 2022 / lk. 24-26 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

### Load current harmonic model complexity reduction through empirical pattern analysis

**Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek; Parker, Martin** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / p. 1-6  
<https://doi.org/10.1109/CPE-POWERENG58103.2023.10227474>

### Low-temperature waste heat enabling abandoning coal in Espoo district heating system

**Hiltunen, Pauli; Syri, Sanna** Energy 2021 / art. 120916, 11 p. : ill <https://doi.org/10.1016/j.energy.2021.120916> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Machine learning approach versus prediction formulas to design healthy dwellings in a cold climate

**Sepulveda Luque, Abel; Eslamirad, Nasim; De Luca, Francesco** eCAADe 2023 : Digital Design Reconsidered : Proceedings of the 41st Conference on Education and Research in Computer Aided Architectural Design in Europe ; vol. 2 Proceedings of the International Conference on Education and Research in Computer Aided Architectural Design in Europe 2023 / p. 359-368  
<https://doi.org/10.52842/conf.ecaade.2023.2.359> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### Machine learning-based optimization design workflow based on obstruction angles for building facades

**Sepulveda Luque, Abel; Eslamirad, Nasim; Seyed Salehi, Seyed Shahabaldin; Thalfeldt, Martin; De Luca, Francesco** Regenerating the City Performance-driven and Simulation-based Computational Design for Sustainable Cities and Communities : proceedings of the 9th Regional International Symposium on Education and Research in Computer Aided Architectural Design in Europe, Tallinn University of Technology, 15-16 June 2023 2023 / p. 15-24 <https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d>

### 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](#)

### Methodology for improving wind comfort in a cold region through modular urban elements

**Eslamirad, Nasim; De Luca, Francesco; Sepulveda Luque, Abel; Lylykangas, Kimmo Sakari** Regenerating the city : performance-driven and simulation-based computational design for sustainable cities and communities 2023 / p. 5-14  
<https://digikogu.taltech.ee/et/Item/c29fc911-ec34-45da-afe6-bc1e8515e15d>

### Microgrid oriented modeling of space heating system based on neural networks

**Häring, Tobias; Kull, Tuule Mall; Ahmadiyahangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmuth** Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.job.2021.103150> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Mini-pilots public value framework for cities

**Soe, Ralf-Martin** Transport economics and management 2023 / p. 86-93 <https://doi.org/10.1016/j.team.2023.07.001>

### A model-based LQR control of an obstacle avoidance maneuver of a self-driving car

**Astrov, Igor; Udal, Andres; Pikner, Heiko; Malayjerdi, Ehsan** 2022 IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics (SAMI) : Poprad, Slovakia, 2-5 March 2022 2022 / p. 473-478 : ill  
<https://doi.org/10.1109/SAMI54271.2022.9780755>

### **Modelling of odour dispersion from multiple point sources**

**Palmiste, Ülar; Kurnitski, Jarek; Laanearu, Janek** IX International Symposium on Stratified Flows : abstracts 2022 / p. 77  
[https://www.dropbox.com/s/em57tmg3ivcv5a/Abstract\\_book\\_Opt.pdf?dl=0](https://www.dropbox.com/s/em57tmg3ivcv5a/Abstract_book_Opt.pdf?dl=0)

### **Modelling of wax actuators in underfloor heating manifolds**

**Kull, Tuule Mall; Thalfeldt, Martin; Kurnitski, Jarek** E3S Web Conference : Cold Climate HVAC and Energy 2021 2021 / art. 11009, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124611009> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **Multi-algorithm-based urban tree information extraction and its applications in urban planning : research note**

**Yao, Chaowen; Fabritius, Eeva Henna Helena; Fricker, Pia; Dembski, Fabian** Landscape and urban planning 2025 / art. 105226  
<https://doi.org/10.1016/j.landurbplan.2024.105226>

### **Multi-objective optimization of a plate heat exchanger thermal energy storage with phase change material**

**Taghavi, Mehrdad; Ferrantelli, Andrea;** Joronen, Tero Journal of energy storage 2024 / art. 111645  
<https://doi.org/10.1016/j.est.2024.111645>

### **Narrowing the implementation gap : user-centered design of new e-planning tools**

**Nummi, Pilvi; Prilenska, Viktorija; Grišakov, Kristi; Fabritius, Eeva Henna Helena; Ilves, Laugren; Kangassalo, Petri;** Staffans, Aija; Tan, Xunran International journal of e-planning research (JEPR) 2022 / p. 1-22 <https://doi.org/10.4018/JEPR.315804>

### **Neural network control of vehicles : modeling and simulation**

**Astrov, Igor** 2022 <https://doi.org/10.52305/GXGD6357> [https://www.ester.ee/record=b5642329\\*est](https://www.ester.ee/record=b5642329*est)

### **A new method to estimate point thermal transmittance based on combined two-dimensional heat flow calculation**

**Hallik, Jaanus; Kalamees, Targo** E3S Web Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) 2020 / art. 08005, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017208005> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **New typical meteorological year generation method based on long-term building energy simulations**

**Seyed Salehi, Seyed Shahabaldin; Kalamees, Targo; Kurnitski, Jarek; Thalfeldt, Martin** Building and environment 2024 / art. 111504 <https://doi.org/10.1016/j.buildenv.2024.111504>

### **Non-intrusive load monitoring based smart energy management system for smart buildings**

**Jawad, Muhammad; Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo;** Khaleel, T.; Tahir, W. 2024 7th International Conference on Information and Computer Technologies (ICICT) : proceedings 2024 / p. 46-50  
<https://doi.org/10.1109/ICICT62343.2024.00014>

### **A Novel Vision Transformer for Camera-LiDAR Fusion based Traffic Object Segmentation**

**Tahves, Toomas; Gu, Junyi; Bellone, Mauro; Sell, Raivo** Proceedings of the 17th International Conference on Agents and Artificial Intelligence : Volume 2 2025 / p. 566-573 <https://doi.org/10.5220/0013239000003890>

### **NZEB and market-based renovation case study of an existing office building**

**Kuivjõgi, Helena; Kurnitski, Jarek; Uutar, Aivar; Thalfeldt, Martin** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 05002, 7 p. : ill <https://doi.org/10.1051/e3sconf/202124605002> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### **NZEB Requirements vs European Benchmarks in Residential Buildings**

**Simson, Raimo;** Thomsen, Kirsten Engelund; Wittchen, Kim Bjarne; **Kurnitski, Jarek** REHVA European HVAC Journal 2021 / p. 40-44 : ill <https://www.rehva.eu/rehva-journal/chapter/nzeb-requirements-vs-european-benchmarks-in-residential-buildings>

### **Numerical analysis of additional heat loss induced by air cavities between insulation boards due to non-ideality**

**Hallik, Jaanus; Klõšeiko, Paul; Piir, Reimo; Kalamees, Targo** Journal of building engineering 2022 / art. 05221  
<https://doi.org/10.1016/j.jobe.2022.105221> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Numerical modeling and validation of a large-scale borehole thermal energy storage system in Finland**

**Xue, Tianchen; Jokisalo, Juha; Kosonen, Risto;** Vuolle, Mika; Marongiu, Federica; Vallin, Sami; Leppäharju, Nina; Arola, Teppo E3S Web of Conferences : BuildSim Nordic 2022 2022 / art. 06003 <https://doi.org/10.1051/e3sconf/202236206003> [Conference proceeding at Scopus](#) [Article at Scopus](#)

### **Object segmentation for autonomous driving using iseAuto data**

**Gu, Junyi; Bellone, Mauro; Sell, Raivo;** Lind, Artjom Electronics (Switzerland) 2022 / Art. 1119  
<https://doi.org/10.3390/electronics11071119> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Ole kaasas : linnad lähevad jälle mitme projekti võrra targemaks**

**Tärnov, Külle; Lehis, Reili; Ilu, Anne** Mente et Manu 2023 / lk. 38-39 [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

### **Operation of district heat network in electricity and balancing markets with the power-to-heat sector coupling**

Javanshir, Nima; Syri, Sanna; Tervo, Seela; **Rosin, Argo** Energy 2023 / art. 126423 <https://doi.org/10.1016/j.energy.2022.126423>  
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **An optimal control method for an autonomous surface vessel for environment monitoring and cargo transportation applications**

**Astrov, Igor; Udal, Andres; Mölder, Heigo** 2021 25th International Conference Electronics : Proceedings of the 25th International Conference : ELECTRONICS 2021, Kaunas University of Technology, 14th–16th June, 2021, Palanga, Lithuania 2021 / 6 p  
<https://doi.org/10.1109/IEEECONF52705.2021.9467483>

### **Optimal operation of district heat network in electricity and balancing markets**

Javanshir, Nima; Syri, Sanna; **Tervo, Seela; Rosin, Argo** SSRN 2022 / 38 | <https://doi.org/10.2139/ssrn.4074474>

### **Optimal strategy for comfort-based home energy management system considering impact of battery degradation cost model**

Han, Binghui; **Zahraoui, Younes**; Mubin, Marizan; Mekhilef, Saad; Seyedmahmoudian, Mehdi; Stojcevski, Alex Mathematics 2023 / art. 1333 <https://doi.org/10.3390/math11061333> [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](#)

### **Organizational performance evaluation and performance paradox in CCI organizations**

**Sassi, Marge**; Pihlak, Ülle; Birnkraut, Gesa International Journal of Productivity and Performance Management 2022 / p. 2009 - 2030  
<https://doi.org/10.1108/JPPM-08-2019-0399> [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](#)

### **Overheating risk and energy demand of nordic old and new apartment buildings during average and extreme weather conditions under a changing climate**

Farahani, Azin Velashjerdi; **Jokisalo, Juha**; Korhonen, Natalia; Jylhä, Kirsti; Ruosteenoja, Kimmo; **Kosonen, Risto** Applied sciences 2021 / art. 3972, 25 p. : ill <https://doi.org/10.3390/app11093972> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Performance assessment of ventilative and radiant cooling systems in office buildings during extreme weather conditions under a changing climate**

Velashjerdi Farahani, Azin; **Jokisalo, Juha**; Korhonen, Natalia; Jylhä, Kirsti; **Kosonen, Risto**; Lestinen, Sami Journal of building engineering 2022 / art. 104951, 22 p. : ill <https://doi.org/10.1016/j.jobe.2022.104951> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Performance based core sustainability metrics for university campuses developing towards climate neutrality : a robust PICSO framework**

Jiang, Qidi; **Kurnitski, Jarek** Sustainable cities and society 2023 / art. 104723 <https://doi.org/10.1016/j.scs.2023.104723> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Performance of modern passive stack ventilation in a retrofitted Nordic apartment building**

Kravchenko, Iliia; **Kosonen, Risto; Jokisalo, Juha**; Kilpeläinen, Simo Buildings 2022 / art. 96, 27 p. : ill <https://doi.org/10.3390/buildings12020096> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Piloting smart city solutions in very small, small and medium-sized municipalities. The Estonian case study**

**Sarv, Lill; Soe, Ralf-Martin** ICEGOV '22 : Proceedings of the 15th International Conference on Theory and Practice of Electronic Governance 2022 / p. 475-482 <https://doi.org/10.1145/3560107.3560179> [Conference proceedings at Scopus](#) [Article at Scopus](#)

### **Pitfalls of machine learning methods in smart grids : a legal perspective**

**Antonov, Alexander; Häring, Tobias; Korötko, Tarmo; Rosin, Argo; Kerikmäe, Tanel; Biechl, Helmuth** 2021 International Symposium on Computer Science and Intelligent Controls : (ISCSIC 2021), 12-14 November 2021, Rome, Italy : proceedings 2021 / p. 248-256 <https://doi.org/10.1109/ISCSIC54682.2021.00053>

### **Polyverif : an open-source environment for autonomous vehicle validation and verification research acceleration**

Razdan, Rahul; Akbas, Mustafa Ilhan; **Sell, Raivo; Bellone, Mauro**; Menase, Mahesh; **Malayjerdi, Mohsen** IEEE Access 2023 / p. 28343-28354 <https://doi.org/10.1109/ACCESS.2023.3258681> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#)

[Article at WOS](#)

**Practical path planning techniques in overtaking for autonomous shuttles**

**Malayjerdi, Ehsan; Sell, Raivo; Malayjerdi, Mohsen; Udal, Andres; Bellone, Mauro** Journal of field robotics 2022 / p. 410-425  
<https://doi.org/10.1002/rob.22057> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A predictive compact model of effective travel time considering the implementation of first-mile autonomous mini-buses in smart suburbs**

**Udal, Andres; Sell, Raivo; Kalda, Krister; Antov, Dago** Smart Cities 2024 / p. 3914-3935 <https://doi.org/10.3390/smartcities7060151>  
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**President Alar Karis külastas FinEst Targa Linna Tippkeskust**

goodnews.ee 2023 [President Alar Karis külastas FinEst Targa Linna Tippkeskust](#)

**Prügikastid ajavad üle? Suplusvee kvaliteet kõigub? Teadlased tulevad appi**

Erala, Siiri Pärnu Postimees 2024 / Lk. 4 <https://dea.digar.ee/article/parnupostimees/2024/03/28/14>

**Real-time multi-modal active vision for object detection on UAVs equipped with limited field of view LiDAR and camera**

Shi, Chuanbeibei; Lai, Ganghua; Yu, Yushu; **Bellone, Mauro**; Lippiello, Vincezo IEEE Robotics and Automation Letters 2023 / p. 6571 - 6578 <https://doi.org/10.1109/LRA.2023.3309575> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**A real-time simulation for P2P energy trading using a distributed algorithm**

**Zahraoui, Younes; Korõtko, Tarmo; Rosin, Argo**; Khalil Zidane, T. E.; Mekhilef, Saad IEEE Access 2024 / p. 44135-44146  
<https://doi.org/10.1109/ACCESS.2024.3369899> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Rebuilding green infrastructure in boreal production forest given future global wood demand**

Moor, Helen; Eggers, Jeannette; **Fabritius, Eeva Henna Helena**; Forsell, Nicklas; Henckel, Laura; Bradter, Ute; Mazziotta, Adriano; Nordén, Jenni; Snäll, Tord Journal of applied ecology 2022 / p. 1659-1669 <https://doi.org/10.1111/1365-2664.14175> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The relationship between ethno-linguistic composition of social networks and activity space : a study using mobile phone data**

Silm, Siiri; Mooses, Veronika; Puura, Anniki; **Masso, Anu**; Tominga, Ago; Saluveer, Erki Social Inclusion 2021 / p. 192-207 : ill  
<https://doi.org/10.17645/si.v9i2.3839> [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](#)

**Replication and upscaling of Smart Cities in Academia and practice: concepts, barriers and enablers**

**Soe, Ralf-Martin** 24th Annual International Conference on Digital Government Research: dg.o 2023 : Together in the unstable world: Digital government and solidarity, Gdańsk, Poland, 11-14 July, 2023 : proceedings 2023 / p. 115-121  
<https://doi.org/10.1145/3598469.3598481>

**Residential DC load forecasting using long short-term memory network (LSTM)**

**Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr; Jalakas, Tanel; Martins, Joao** 2023 IEEE 11th International Conference on Smart Energy Grid Engineering (SEGE) 2023 / p. 131-136  
<https://doi.org/10.1109/SEGE59172.2023.10274596>

**Residential energy flexibility characterization using non-intrusive load monitoring**

**Azizi, Elnaz; Ahmadiyahangar, Roya; Rosin, Argo**; Martins, Joao; Lopes, Rui Amaral; Beheshti, M. TH.; Bolouki, Sadegh Sustainable cities and society 2021 / art. 103321, 12 p. : ill <https://doi.org/10.1016/j.scs.2021.103321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Responsible AI for cities : a case study of GeoAI in African informal settlements**

**Tonnarelli, Francesco; Mora, Luca** Journal of urban technology 2025 / 27 p <https://doi.org/10.1080/10630732.2025.2450755>

**A review of harmonic detection, suppression, aggregation and estimation techniques**

**Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Raja, Hadi Ashraf; Sardar, Muhammad Usman** Applied sciences 2024 / art. 10966 <https://doi.org/10.3390/app142310966> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Robot bus low-level control system transformation to an open-source solution**

**Pikner, Heiko; Sell, Raivo; Gu, Junyi** Modern Materials and Manufacturing 2023 : Tallinn, Estonia, 2-4 May 2023 2024 / art. 020004 <https://doi.org/10.1063/5.0189277> [Conference proceedings at Scopus](#) [Article at Scopus](#)



### Scenario-based Validation for Autonomous Vehicles with Different Fidelity Levels

**Malayerdi, Mohsen;** Kaljavesi, Gemb; Diermeyer, Frank; **Sell, Raivo** 2023 IEEE Conference on Intelligent Transportation Systems (ITSC 2023) 2023 / 6 p <https://doi.org/10.1109/ITSC57777.2023.10422403>

### Seasonal storage of residential exhaust air and sewage waste heat

Hirvonen, Janne; **Jokisalo, Juha; Kosonen, Risto** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 06009, 7 p <https://doi.org/10.1051/e3sconf/202124606009> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

### Self-driving shuttle bus use case in city of Tallinn

**Kalda, Krister; Sell, Raivo; Soe, Ralf-Martin** IOP conference series : materials science and engineering 2021 / art. 012047, 6 p. : ill <https://doi.org/10.1088/1757-899X/1140/1/012047>

### Semi-parametric approach to random forests for high-dimensional bayesian optimisation

**Kuzmanovski, Vladimir;** Hollmén, Jaakko Discovery Science : 25th International Conference, DS 2022, Montpellier, France, October 10–12, 2022, Proceedings 2022 / p. 418 - 428 [https://doi.org/10.1007/978-3-031-18840-4\\_30](https://doi.org/10.1007/978-3-031-18840-4_30) [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

### Short-term PV energy generation forecasting using deep learning

**Shabbir, Noman; Ahmadiyahangar, Roya; Rosin, Argo; Astapov, Victor; Kilter, Jako** Telematique 2022 <https://www.provinciajournal.com/index.php/telematique/article/view/813>

### Short-term residential DC load forecasting using extreme gradient boost (XgBoost) algorithm

**Shabbir, Noman; Husev, Oleksandr; Daniel, Kamran; Jawad, Muhammad; Rosin, Argo; Martins, Joao** 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604392>

### Simulation of demand response on buildings and district heating production

**Ju, Yuchen;** Lindholm, Joakim; Verbeck, Moritz; **Jokisalo, Juha; Kosonen, Risto;** JanäÃ Â Enc, Philipp; Li, Yantong; Schäfers, Hans; Nord, Natasa E3S Web of Conferences : BuildSim Nordic 2022 2022 / art. 13002 <https://doi.org/10.1051/e3sconf/202236213002> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### Simulation of modern passive stack ventilation in a retrofitted Nordic apartment building

Kravchenko, Iliia; **Kosonen, Risto; Jokisalo, Juha;** Kilpeläinen, Simo E3S Web of Conferences : BuildSim Nordic 2022 2022 / art. 14003 <https://doi.org/10.1051/e3sconf/202236214003> [Conference proceeding at Scopus](#) [Article at Scopus](#)

### Socially and culturally sustainable public participation in urban development : map questionnaire as a bridge-building tool in Kontula shopping mall

**Nummi, Pilvi;** Harsia, Eveliina SBEfin2022 Emerging Concepts for Sustainable Built Environment (SBEfin2022) 23/11/2022 - 25/11/2022 Online 2022 / art. 012011 <https://doi.org/10.1088/1755-1315/1122/1/012011> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

### Socio-economic impacts of large-scale deep energy retrofits in Finnish apartment buildings

Hirvonen, Janne; Saari, Arto; **Jokisalo, Juha;** Kosonen, Risto Journal of cleaner production 2022 / art. 133187, 19 p. : ill <https://doi.org/10.1016/j.jclepro.2022.133187> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Sotsiaalsete võrgustike koosseisu ja ruumikasutuse seos mobiiltelefonandmete põhjal

Mooses, Veronika; Silm, Siiri; **Puura, Anniki; Masso, Anu;** Tominga, Ago; Saluveer, Erki Uurimusi eestikeelse geograafia 105. aastapäeval 2025 / lk. 98–116 [https://www.ester.ee/record=b5713662\\*est](https://www.ester.ee/record=b5713662*est)

### Stochastic energy management for Battery Storage System-based microgrid considering different forecasting models

**Zahraoui, Younes;** Korötko, Tarmo; **Rosin, Argo; Ahmadiyahangar, Roya** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227451>

### Suurandmeteta Londoni-sarnaseid suurlinnu enam ei juhi

aripaev.ee 2024 [Suurandmeteta Londoni-sarnaseid suurlinnu enam ei juhi](#)

### Systematic mapping of long-term urban challenges

**Soe, Ralf-Martin; Sarv, Lill;** Gasco-Hernandez, Mila Sustainability 2022 / art. 817 <https://doi.org/10.3390/su14020817> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Systematic review of fault tolerant techniques in underwater sensor networks

**Vihman, Lauri; Kruusmaa, Maarja; Raik, Jaan** Sensors 2021 / art. 3264 <https://doi.org/10.3390/s21093264> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Targa linna visioonist teostuseni : nutikad lahendused meie ümber

**Soe, Ralf-Martin** Riigikogu Toimetised 2023 / lk. 113-122 : ill [https://www.ester.ee/record=b1361123\\*est](https://www.ester.ee/record=b1361123*est)  
<https://rito.riigikogu.ee/wordpress/wp-content/uploads/2023/12/RiTo-48-1.pdf>

**Tava- ja eriklassis õppivate hariduslike erivajadustega õpilaste lugemis- ja matemaatikaoskused**

Sigus, Hardi; Soodla, Piret; **Mädamürk, Kaja** Eesti Haridusteaduste Ajakiri = Estonian Journal of Education 2023 / Lk. 159–186  
<https://doi.org/10.12697/eha.2023.11.1.07>

**Tenant-based measured electricity use in 4 large office buildings in Tallinn, Estonia**

**Ferrantelli, Andrea; Aljas, Hans Kristjan; Maask, Vahur; Thalfeldt, Martin** E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 04001, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124604001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**The challenge of the digital public sphere : Finnish experiences of the role of social media in participatory planning**

Mattila, Hanna; **Nummi, Pilvi** Planning theory and practice 2022 / 16 p <https://doi.org/10.1080/14649357.2022.2074527> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The effect of cracks and voids on heat loss of insulated CLT walls and roofs**

**Hallik, Jaanus; Kalamees, Targo** Proceedings of the III Forum Wood Building Baltic, Riga Technical University, 09-10.05, 2022, Riga, Latvia 2022 / p. 44-45 <https://forumwoodbuilding.rtu.lv/wp-content/uploads/sites/37/2022/05/FWBB2022-2022.05.09-speakers-day-1-and-2.pdf>

**The effect of flanking element length in thermal bridge calculation and possible simplifications to account for combined thermal bridges in well insulated building envelopes**

**Hallik, Jaanus; Kalamees, Targo** Energy and buildings 2021 / art. 111397 <https://doi.org/10.1016/j.enbuild.2021.111397> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The impact of energy renovation on continuously and intermittently heated residential buildings in Southern Europe**

Wang, Yangmin; Hirvonen, Janne; Qu, Ke; **Jokisalo, Juha; Kosonen, Risto** Buildings 2022 / art. 1316, 33 p. : ill <https://doi.org/10.3390/buildings12091316> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The influence of heat loss from pipes in an unheated basement on the heating energy consumption of an entire typical apartment building**

**Hamburg, Anti; Kalamees, Targo** E3S Web Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) ; 172 2020 / art. 12005 <https://doi.org/10.1051/e3sconf/202017212005> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

**Thermal performance of ETICS, energy activated with PCM and PV**

**Talvik, Martin; Ilomets, Simo; Kalamees, Targo; Klõšeiko, Paul**; Heim, Dariusz; Wieprzkowicz, Anna; Knera, Dominika Journal of physics : conference series 2021 / art. 012116, p. 1-8 : ill <https://doi.org/10.1088/1742-6596/2069/1/012116> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

**Threat modeling of cyber-physical systems - a case study of a microgrid system**

**Khalil, Shaymaa Mamdouh; Bahsi, Hayretudin; Dola, Henry Ochieng; Korõtko, Tarmo**; McLaughlin, Kieran; **Kotkas, Vahur** Computers & Security 2023 / art. 102950, 16 p. : ill <https://doi.org/10.1016/j.cose.2022.102950> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**3D visualisations for communicative urban and landscape planning : What systematic mapping of academic literature can tell us of their potential?**

Salla, Eilola; Jaalama, Kaisa; **Kangassalo, Petri; Nummi, Pilvi; Staffans, Aija**; Fagerholm, Nora Landscape and urban planning 2023 / art. 104716 <https://doi.org/10.1016/j.landurbplan.2023.104716> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Transition towards Smart City : the case of Tallinn**

**Sarv, Lill; Soe, Ralf-Martin** Sustainability 2021 / art. 4143, 18 p <https://doi.org/10.3390/su13084143> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Tudengiorganisatsiooni loomine**

**Suzdalev, Anna** Studioosus 2022 / lk. 26-27 : fot [https://www.ester.ee/record=b1242496\\*est](https://www.ester.ee/record=b1242496*est)

**Tuleviku targad linnad on piiriülesed ja keskenduvad inimeste heaolule**

digi.geenius.ee 2023 [Tuleviku targad linnad on piiriülesed ja keskenduvad inimeste heaolule](#)

**A Two-layered approach for the validation of an operational autonomous shuttle**

**Malayjerdi, Mohsen**; Goss, Quentin A.; Akbas, Mustafa Ilhan; **Sell, Raivo; Bellone, Mauro** IEEE Access 2023 / p. 89124–89137  
<https://doi.org/10.1109/ACCESS.2023.3306602> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Upgrading fit-for-purpose land administration systems : challenges and opportunities in Bosaso, Somalia**

**Tonnarelli, Francesco**; Sophianos, Sophos Survey review 2025 <https://doi.org/10.1080/00396265.2025.2455369>

#### **Urban open platform for borderless smart cities**

**Soe, Ralf-Martin**; Ruohomäki, Timo; **Patzig, Henry** Applied sciences 2022 / art. 700 <https://doi.org/10.3390/app12020700> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Varying data on urban trees complicates meeting user needs for digital twins of urban green infrastructure**

**Fabritius, Eeva Henna Helena**; Tuulik, Tiina; **Kupper, Kristiina**; Mrosla, Laura; Nummi, Pilvi; **Prilenska, Viktorija**; Yao, Chaowen The 18th International Conference on Computational Urban Planning and Urban Management 2023 / 14 p <https://doi.org/10.17605/OSF.IO/6YR5V> <https://osf.io/ahzds>

#### **Waveform variation defined model for harmonic current emissions including cross-order supply voltage harmonics influence**

**Daniel, Kamran**; Kütt, Lauri; **Iqbal, Muhammad Naveed**; **Shabbir, Noman**; Jarkovoi, Marek; **Parker, Martin** IEEE Access 2023 / p. 42276-42289 : ill <https://doi.org/10.1109/ACCESS.2023.3270805> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Wax actuator's empirical model development and application to underfloor heating control with varying complexity of controller modelling detail**

**Parts, Tuule Mall**; **Ferrantelli, Andrea**; **Naar, Hendrik**; **Thalfeldt, Martin**; **Kurnitski, Jarek** Journal of building performance simulation 2023 / p. 772-796 <https://doi.org/10.1080/19401493.2023.2201818> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Weather exposed CLT construction – observations and improvement concept**

**Kalbe, Kristo**; **Kukk, Villu**; **Kalamees, Targo** Forum Wood Building Baltic : proceedings of the II Forum Wood Building Baltic, Riga Technical University Digital Conference, 14-16 April 2021 2021 / p. 84-85 : ill <https://issuu.com/matijsbabris/docs/fwbb2021>

#### **Whole building algorithm for indoor air quality classification based on measured CO2 data**

**Aljas, Hans Kristjan**; **Parts, Tuule Mall**; **Thalfeldt, Martin** Healthy Buildings 2023 Europe: Beyond Disciplinary Boundaries: proceedings ; 2 2023 / p. 852-859 : ill <https://www.proceedings.com/content/070/070278webtoc.pdf>

#### **Virtual energy storage model of ventilation system for flexibility service**

**Maask, Vahur**; **Rosin, Argo**; **Korõtko, Tarmo** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227482>

#### **Voltage main harmonic level influence on harmonic current emission modeling**

**Daniel, Kamran**; Kütt, Lauri; **Iqbal, Muhammad Naveed**; **Shabbir, Noman**; Jarkovoi, Marek; **Parker, Martin** 2023 International Conference on Future Energy Solutions (FES) 2023 / p. 1-6 <https://doi.org/10.1109/FES57669.2023.10183302>

#### **Women's (im)mobility strategies and digital platform adoption: the case study of employees doing desk work in Pune, India**

**Baudens, Pauline**; **Masso, Anu**; **Soe, Ralf-Martin** Gender, technology and development 2023 / p. 423-443 <https://doi.org/10.1080/09718524.2023.2260651> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **World Energy Issue Monitor 2021 : Humanising Energy**

Wilkinson, A.; Young, M.; Dauger, J-M.; Barbknecht, K-D.; Birnbaum, L.; Budargin, O.; Cronenbold, C.; Howard, M.; Mahmoud I.; **Kisel, Einari** 2021 [https://www.worldenergy.org/assets/downloads/Issues\\_Monitor\\_2021-final.pdf?v=1615977568](https://www.worldenergy.org/assets/downloads/Issues_Monitor_2021-final.pdf?v=1615977568)

#### **World Energy Scenarios - 2019 : European Regional Perspective**

Frei, C.; Davis, G.; Wilkinson, A.; Belostotskaya, A.; Flowers, B. S.; Dauger, J-M.; Klima, H.; D'haeseleer, W.; Valdir de Souza, L.; Campbell, G.; Yanbing, K.; **Kisel, Einari** 2019 <https://www.worldenergy.org/publications/entry/world-energy-scenarios-2019-european-regional-perspectives>

#### **World Energy Trilemma Index 2020**

Lowe, P.; Abdelhak Chibani, M.; Barseghyan, H.; Kolodziejczyk, B.; Oyewole, O.; Diendorfer, C.; Cami, A.; Enongene, K.; Nzotcha, U.; Baig, U.; **Kisel, Einari** 2020 <https://www.worldenergy.org/publications/entry/world-energy-trilemma-index-2020>

#### **Väike kodu kujundab nüüdisaegse linnainimese mõttelaadi**

Zeigo, Henri postimees.ee 2024 [Väike kodu kujundab nüüdisaegse linnainimese mõttelaadi](#)

#### **Väikekodu kujundab nüüdisaegse linnainimese mõttelaadi**

Zeigo, Henri Postimees 2024 [Väikekodu kujundab nüüdisaegse linnainimese mõttelaadi](#)

#### **XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data**

**Shabbir, Noman**; **Ahmadihangar, Roya**; **Rosin, Argo**; Jawad, Muhammad; **Kilter, Jako**; Martins, Joao 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 6 p <https://doi.org/10.1109/ETFG55873.2023.10407926>

**Кисел: самое слабое место в плане развития энергетики– прогноз потребления**

Koppel, Karin rus.err.ee 2025 <https://rus.err.ee/1609706409/kisel-samoe-slaboe-mesto-v-plane-razvitija-jenergetiki-prognoz-potreblenija>

**A background of bias : subtle changes in lineup backgrounds increase the own race bias**

Havard, Catriona; Breese, Emily; Thirkettle, Martin; Kask, Kristjan; Leol, Kris-Loreen; **Mädamürk, Kaja** Journal of Police and Criminal Psychology 2023 / 12 p <https://doi.org/10.1007/s11896-023-09578-2> [journal metrics at Scopus](#) [article at Scopus](#) [journal metrics at WOS](#) [article at WOS](#)