

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

Plaum, Freddy; Ahmadiyahangar, 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; Ahmadiyahangar, 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

Ahmadiyahangar, 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; Boršcevis, 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
[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**; **Rassõlkin, 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

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> [Journal metrics at Scopus](#) [Article at Scopus](#)

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

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 [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 [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; Matiushkin, Oleksandr; Shabbir, Noman IEEE open journal of power electronics 2024 / p. 1149–1161 <https://doi.org/10.1109/OJPEL.2024.3433554> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 [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://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; Ahmadihangar, Roya; Wen, Fushuan; Kull, Karl Energy reports 2022 / p. 217-223 <https://doi.org/10.1016/j.egy.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

Vösa, 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](#)

Correction to: Assignment of a synthetic population for activity-based modeling employing publicly available data (ISPRS International Journal of Geo-Information, (2022), 11, 2, (148), 10.3390/ijgi11020148)

Agriesti, Serio Angelo Maria; Roncoli, Claudio; Nahmias-Biran, Bat-Hen ISPRS International Journal of Geo-Information 2024 / art. 284 <https://doi.org/10.3390/ijgi13080284> [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, Hayretudin; Dola, Henry Ochieng; Khalil, Shaymaa Mamdouh; Korötko, Tarmo 2022 17th Annual System of Systems Engineering Conference (SOSE) 2022 / p. 324-331 <https://doi.org/10.1109/SOSE55472.2022.9812642>

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 it uudised.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;** Khatiwada, 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;** Janßen, Philipp; Li, Yantong; Schäfers, 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 [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 simulatsioonianalüüs : uuringuaruanne

Kisel, Einari; Kuhi-Thalfeldt, Reeli; Agabus, Hannes; Vesioja, Kaija 2024 https://arenguseire.ee/wp-content/uploads/2024/06/2024_eeesti-elektri-tarbimiskaja-ja-tootva-tarbimise-simulatsioonianaluus_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>
[Journal metrics at Scopus](#) [Article at Scopus](#)

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 [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; Ghahreghpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo; Kilter, Jako Electric power systems research 2022 / art. 108645 <https://doi.org/10.1016/j.eprsr.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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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, Hilikka; **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; **Ahmadihangar, 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 [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, Yuri** 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, Hatf; 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 I <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

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; Ahmadihangar, Roya; Rosin, Argo; Blinov, Andrei; Korõtko, Tarmo; Vinnikov, Dmitri Electric power systems research 2025 / art. 111185 <https://doi.org/10.1016/j.epsr.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; Ahmadihangar, 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

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; Ahmadihangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmuth Journal of building engineering 2021 / art. 103150, 12 p. : ill <https://doi.org/10.1016/j.jobe.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/em57tmgs3ivcv5a/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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 (IJEPR) 2022 / p. 1–22 <https://doi.org/10.4018/IJEPR.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

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Jawad, Muhammad; Shabbir, Noman; Ahmadiahangar, 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 Englund; 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

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](#)

Optimization-based power management for battery/supercapacitor hybrid energy storage system with load estimation capability in a DC microgrid

Farrokhi, Ehsan; Ghoreishy, Hoda; Ahmadihangar, Roya International journal of electrical power and energy systems 2024 / art. 109665, 10 p. : ill <https://doi.org/10.1016/j.ijepes.2023.109665> [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 assessment for apartments during average and hot summers in the Nordic climate

Farahani, Azin Velashjerdi; Kravchenko, Iliia; Jokisalo, Juha; Korhonen, Natalia; Jylhä, Kirsti; Kosonen, Risto Building research and information 2024 / p. 273-291 : ill <https://doi.org/10.1080/09613218.2023.2253338> [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

Farahani, Azin Velashjerdi; 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.jobbe.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

PICSOU 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; Korõtko, 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](#)

Power quality improvement in DG based distribution systems : A review

Nabian Dehaghani, Mitra; Korõtko, Tarmo; Rosin, Argo Renewable and Sustainable Energy Reviews 2026 / art. 116184 <https://doi.org/10.1016/j.rser.2025.116184> <https://www.sciencedirect.com/science/article/pii/S1364032125008573>

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](#)

Predicting context-sensitive urban green space quality to support urban green infrastructure planning

Kajosaari, Anna; Hasanazadeh, Kamyar; Fagerholm, Nora; **Nummi, Pilvi**; Kuusisto-Hjort, Paula; Kyttä, Marketta Landscape and urban planning 2024 / art. 104952, 12 p. : ill <https://doi.org/10.1016/j.landurbplan.2023.104952> [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; Ahmadihangar, 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; Ahmadihangar, 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

Malayjerdi, 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 [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; Ahmadihangar, 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 analysis of Finnish residential buildings' resilience to hot summers under a changing climate

Farahani, Azin Velashjerdi; **Jokisalo, Juha; Korhonen, Natalia; Jylhä, Kirsti; Kosonen, Risto** Journal of building engineering 2024 / art. 108348, 20 p. : ill <https://doi.org/10.1016/j.jobe.2023.108348> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Simulation of demand response on buildings and district heating production

Ju, Yuchen; Lindholm, Joakim; Verbeck, Moritz; Jokisalo, Juha; Kosonen, Risto; Janáček, 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

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

Zahraoui, Younes; Korötko, Tarmo; **Rosin, Argo; Ahmadihangar, 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://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 benefits of integrating industrial hydrogen production with district heating in cold climates with different building renovation levels

Moradpoor, Iraj; **Koivunen, Tero; Syri, Sanna**; Hirvonen, Janne Energy 2024 / art. 131953, 13 p.: ill <https://doi.org/10.1016/j.energy.2024.131953> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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, Hayretidin; 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

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](#)

Urban planning as ‘great dialogue’? Developing polyphonic planning practices in a process of hybrid participation, case Viiskorpi, Espoo, Finland

Harsia, Eveliina; Nummi, Pilvi Planning practice and research 2024 / p. 855-875 : ill <https://doi.org/10.1080/02697459.2024.2377232> [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 / 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 ; 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.; Dager, 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

World Energy Scenarios - 2019 : European Regional Perspective

Frei, C.; Davis, G.; Wilkinson, A.; Belostotskaya, A.; Flowers, B. S.; Dager, 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; Ahmadiyahangar, 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](#)