

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](#)

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>

Analyses of the extra cost of NZEB and low energy apartment buildings

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek World Sustainable Energy Days 2015 : Young Researchers' Conference : Energy Efficiency : 25-27 February 2015, Wels, Austria 2015

The analysis of indoor hygrothermal loads based on measurements in multi-storey wooden apartment buildings

Kalamees, Targo; Arumägi, Endrik; Thalfeldt, Martin; Ilomets, Simo; Klõšeiko, Paul; Alev, Üllar Proceedings of the 5th International Building Physics Conference (IBPC) : Kyoto, Japan, May 28-31, 2012 2012 / p. 225-232 : ill

Analyzing the fulfillment of daylight and overheating requirements in residential and office buildings in Estonia

Sepulveda Luque, Abel; De Luca, Francesco; Thalfeldt, Martin; Kurnitski, Jarek Building and environment 2020 / art. 107036, 12 p <https://doi.org/10.1016/j.buildenv.2020.107036> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Benchmarking the measured energy use of Nordic residential buildings and their Zero Energy-readiness

Ferrantelli, Andrea; 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.2022.171>

Characterization of the free plume created by stoves using laboratory measurements

Thalfeldt, Martin; Georges, Laurent; Skreiberg, Øyvind Roomvent&Ventilation 2018 : Excellent Indoor Climate and High Performing Ventilation : proceedings 2018 / p. 505–510 : ill <https://www.lyyti.fi/e/?p=s&k=76eA857eee2A33adcE00b0E>
https://www.lyyti.fi/reg_att/efA658E7F74904eE7C/191245506eEbEE37F1fb.pdf

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](#)

A comparative study on cooling period thermal comfort assessment in modern open office landscape in Estonia

Kiil, Martin; Simson, Raimo; Thalfeldt, Martin; Kurnitski, Jarek Atmosphere 2020 / art. 127, 21 p. : ill <https://doi.org/10.3390/atmos11020127> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparison of simplified and detailed window models in energy simulations

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik Proceedings of REHVA Annual Conference "Advanced HVAC and Natural Gas Technologies" : Riga, Latvia, May 6-9, 2015 2015 / p. 26-31 : ill

Comparison of simplified and detailed window models in office building energy simulations

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik Energy procedia 2015 / p. 2076-2081 : ill <https://doi.org/10.1016/j.egypro.2015.11.235> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Comparison of static and dynamic shading systems for office buildings energy consumption and cooling load assessment

De Luca, Francesco; Voll, Hendrik; Thalfeldt, Martin Management of environmental quality : an international journal 2018 / p. 978-998 : ill <https://doi.org/10.1108/MEQ-01-2018-0008> [Journal metrics at Scopus](#) [Article at Scopus](#)

Complexity in designing energy efficient buildings : towards understanding decision networks in design

Pikas, Ergo; Koskela, Lauri; Thalfeldt, Martin; Dave, Bhargav; Kurnitski, Jarek Global Knowledge - Global Solutions : 23rd Annual Conference of the International Group for Lean Construction : Perth, Australia, July 29-31, 2015 : proceedings of IGLC23 2015 / p. 213-222 : ill

Continuous automated ventilation heat recovery efficiency performance assessment using building monitoring system

Kull, Tuule Mall; Mikola, Alo; Tukia, Andres; Köse, Ahmet; Petlenkov, Eduard; Thalfeldt, Martin E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 10006, 10 p. : ill <https://doi.org/10.1051/e3sconf/202124610006> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Contributions to ventilation system demand response: a case study of an educational building

Maask, Vahur; Mikola, Alo; Korõtko, Tarmo; Rosin, Argo; Thalfeldt, Martin E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 11001, 6 p <https://doi.org/10.1051/e3sconf/202124611001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Control dynamics and parameters for low energy heating applications = Juhtimise dünaamika ja parameetrid madalenergia küttesüsteemides

Parts, Tuule Mall 2023 <https://doi.org/10.23658/taltech.50/2023> <https://digikogu.taltech.ee/et/Item/85469015-8f1c-450f-a609-73a70a255bc6>
https://www.ester.ee/record=b5638401*est

Cost optimal and nearly zero energy building solutions for office buildings

Pikas, Ergo; Thalfeldt, Martin; Kurnitski, Jarek Energy and buildings 2014 / p. 30-42 : ill <https://doi.org/10.1016/j.enbuild.2014.01.039>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cost-benefit analysis of nZEB energy efficiency strategies with on-site photovoltaic generation

Pikas, Ergo; Kurnitski, Jarek; Thalfeldt, Martin; Koskela, Lauri Energy 2017 / p. 291-301 : ill
<https://doi.org/10.1016/j.energy.2017.03.158> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Data-driven baseline generation for post-retrofit energy saving assessment, a comparison of statistical and machine learning methods

Kuivjõgi, Helena; Vasman, Sofia; Petlenkov, Eduard; Thalfeldt, Martin; Kurnitski, Jarek Journal of building engineering 2024 / art. 111016 <https://doi.org/10.1016/j.jobe.2024.111016> [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](#)

Detailed and simplified window model and opening effects on optimal window size and heating need

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik Energy and buildings 2016 / p. 242-251 : ill
<https://doi.org/10.1016/j.enbuild.2016.06.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of a reduced order model of solar heat gains prediction

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

Digiauditi platvorm jõudis teadlastelt turule

Kuusk, Kalle; Thalfeldt, Martin; Preden, Jürge-Sören; Peerna, Kristo Mente et Manu 2024 / lk. 46-47 : fot
https://www.ester.ee/record=b1242496*est

The effect of exhaust air heat pump on district heat energy use and return temperature

Thalfeldt, Martin; Kurnitski, Jarek; Latšov, Eduard CLIMA 2016 - proceedings of the 12th REHVA World Congress. Vol. 3 2016 / [10] p. : ill http://vbn.aau.dk/files/233716910/paper_343.pdf

The effect of hydronic balancing on room temperature and heat pump efficiency of a building with underfloor heating

Thalfeldt, Martin; Simson, Raimo; Kurnitski, Jarek Energy procedia 2016 / p. 467-477 : ill
<https://doi.org/10.1016/j.egypro.2016.09.178> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Energy consumption and indoor climate analysis of office buildings

Thalfeldt, Martin International journal of energy and environment 2010 / 4, p. 197-204 : ill

Energy consumption characteristics based on monitored data : a school case study

Vassiljeva, Kristina; Matson, Margarita; Petlenkov, Eduard; Belikov, Juri; Thalfeldt, Martin; Kurnitski, Jarek CLIMA 2022 : REHVA 14th HVAC World Congress 22nd-25th May in Rotterdam, The Netherlands 2022 / 5 p. : ill
<https://doi.org/10.34641/clima.2022.274>

Energy efficiency of hydronic space-heating distribution systems in super-insulated residential buildings

Georges, Laurent; Iwanek, Tomasz; Thalfeldt, Martin Building Simulation 2017 : proceedings of the 15th IBPSA Conference San Francisco, CA, USA, Aug. 7-9, 2017 2017 / p. 1576-1585 : ill http://www.ibpsa.org/proceedings/BS2017/BS2017_421.pdf

Energy performance and indoor climate analysis in buildings

2019 <https://www.mdpi.com/books/pdfview/book/1828> <https://doi.org/10.3390/books978-3-03921-380-1>

Energy saving potential with smart thermostats in low-energy homes in cold climate

Kull, Tuule Mall; Penu, Karl-Rihard; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 09009, 7 p. : ill
<https://doi.org/10.1051/e3sconf/202017209009> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Estimating time constants for underfloor heating control

Kull, Tuule Mall; Thalfeldt, Martin; Kurnitski, Jarek Journal of physics : conference series 2019 / art. 012121, 6 p. : ill
<https://doi.org/10.1088/1742-6596/1343/1/012121> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Estonian researchers build a platform to make perfect indoor air conditions

estonianworld.com 2023 [Estonian researchers build a platform to make perfect indoor air conditions](#)

Evaluating the energy readiness of national building stocks through benchmarking

Ferrantelli, Andrea; Belikov, Juri; Petlenkov, Eduard; Thalfeldt, Martin; Kurnitski, Jarek IEEE Access 2022 / p. 45430-45443 : ill
<https://doi.org/10.1109/ACCESS.2022.3170716> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluating the Power Mismatch Dynamics of Deeply Renovated Apartment Buildings with On-site PV Panels in Estonia

Olayiwola, Tofopefun Nifise; Thalfeldt, Martin; Kuusk, Kalle; Blinov, Andrei Clima 2025 : 15th REHVA HVAC World Congress 2025

Evidence based residential ventilation: sizing procedure and system solutions addressed by REHVA Residential Ventilation Task Force

Kurnitski, Jarek; Thalfeldt, Martin; Weele, Harry van; Toksoy, Macit; Carlsson, Thomas; Vladykova Bednarova, Petra; Seppänen, Olli E3S Web of Conferences : CLIMA 2019 Congress, May 26-29, 2019 2019 / art. 01016, 7 p
<https://doi.org/10.1051/e3sconf/201911101016> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Exhaust air heat pump connection schemes and balanced heat recovery ventilation effect on district heat energy use and return temperature

Thalfeldt, Martin; Kurnitski, Jarek; Latõšov, Eduard Applied thermal engineering 2018 / p. 402-414 : ill
<https://doi.org/10.1016/j.applthermaleng.2017.09.033> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

External shading control principles for low energy office buildings

Thalfeldt, Martin; Kurnitski, Jarek NSB 2014 : 10th Nordic Symposium on Building Physics, 15-19 June 2014, Lund, Sweden : full papers 2014 / p. 806-813 : ill

External shading optimal control macros for 1- and 2-piece automated blinds in European climates

Thalfeldt, Martin; Kurnitski, Jarek Building simulation 2015 / p. 13-25 : ill <https://doi.org/10.1007/s12273-014-0194-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extra cost analyses of two apartment buildings for achieving nearly zero and low energy buildings

Pikas, Ergo; Thalfeldt, Martin; Kurnitski, Jarek; Liias, Roode Energy 2015 / p. 623-633 : ill
<https://doi.org/10.1016/j.energy.2015.03.026> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extra cost analyses of two apartment buildings for achieving nearly zero and low energy buildings

Pikas, Ergo; Thalfeldt, Martin; Kurnitski, Jarek; Liias, Roode Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 83-90 : ill

Facade design principles for nearly zero energy buildings in a cold climate

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek; Voll, Hendrik Energy and buildings 2013 / p. 309-321 : ill
<https://doi.org/10.1016/j.enbuild.2013.08.027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fenestration design for low and nearly zero energy buildings in a cold climate

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik Proceedings of CLIMA 2013 : 11th REHVA World Congress and the 8th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, Prague 16th-19th June, 2013 2013

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](#)

A guide for renovation solution types of ventilation and building envelopes of typical post WWII apartment buildings

Kalamees, Targo; Thalfeldt, Martin; Zelenski, Maksim; Meos, Heiki; Laas, Margus; Kurnitski, Jarek; Kuusk, Kalle 14th International Conference on Indoor Air Quality and Climate (Indoor Air 2016) : Ghent, Belgium, 3-8 July 2016. Vol. 3 2016 / p. 1618-1625 : ill

Handbook of buildings renovation in Central Baltic Region

Borodinecs, Anatolijs; **Voll, Hendrik; Thalfeldt, Martin; Petrova, Olga** 2013

Handbook on buildings renovation in Central Baltic region

Borodinecs, Anatolijs; **Voll, Hendrik; Thalfeldt, Martin; Petrova, Olga** 2013 http://www.ester.ee/record=b3036415*est

Hea ventilatsioon teeb õpilased targemaks

Thalfeldt, Martin Õhtuleht 2022 / Lk. 22 <https://dea.digar.ee/article/oh tuleht/2022/05/07/15.3>

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](#)

Hoonete energiatõhusust määrav digiaudit jõuab kinnisvaraomanikeni

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

Horizontal or vertical? Windows' layout selection for shading devices optimization

De Luca, Francesco; Voll, Hendrik; Thalfeldt, Martin Management of environmental quality : an international journal 2016 / p. 623-633 : ill <https://doi.org/10.1108/MEQ-05-2015-0102> [Journal metrics at Scopus](#) [Article at Scopus](#)

The impact of infiltration on heating systems dimensioning in Estonian climate

Simson, Raimo; Rebane, Taaniel; Kiil, Martin; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 05004, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017205004> [Conference proceedings at Scopus](#) [Article at Scopus](#) [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](#)

The impact of parallel energy consumption on the district heating networks

Latõšov, Eduard; Siirde, Andres; Volkova, Anna; Thalfeldt, Martin; Kurnitski, Jarek Environmental and Climate Technologies 2019 / 13 p. : ill <https://doi.org/10.2478/rtuct-2019-0001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indoor climate of an unheated apartment and its impact on the heat consumption of adjacent apartments

Kõiv, Teet-Andrus; Hamburg, Anti; Thalfeldt, Martin; Fadejev, Jevgeni Latest Trends in Sustainable and Green Development : Proceeding of the 3rd International Conference on Urban Sustainability, Cultural Sustainability, Green Development, Green Structures and Clean Cars (USCUDAR '12) : Barcelona, Spain, October 17-19, 2012 2012 / p. 52-57 : ill

Influence of time constants on low energy buildings' heating control

Kull, Tuule Mall; Simson, Raimo; Thalfeldt, Martin; Kurnitski, Jarek Energy procedia 2017 / p. 75-80 : ill <https://doi.org/10.1016/j.egypro.2017.09.640> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Investigation of heat transfer between neighbouring apartments

Hamburg, Anti; Thalfeldt, Martin; Kõiv, Teet-Andrus; Mikola, Alo The 9th International Conference "Environmental Engineering" : 22-23 May 2014, Vilnius, Lithuania : selected papers 2014 / p. 1-6 : ill

Investigations of different control strategies for heat pump systems in a residential ZEB in the nordic climate [Online resource]

Clauss, John; Sartori, Igor; Alonso, Maria Justo; Thalfeldt, Martin; Georges, Laurent 12th IEA Heat Pump Conference : presentations, Wednesday, May 17 2017 / 0.1.3.3, 11 p. : ill <https://hpc2017.org/wp-content/uploads/2017/06/o133.pdf>

Juhised radoonikaitse meetmete kasutamiseks uutes ja olemasolevates hoonetes = Guidance for radon-protective measures for new and existing buildings [Võrguteavik]

2017 http://www.ester.ee/record=b4671261*est

Kas liginullenergiahoone vajab suuremat investeeringut?

Pikas, Ergo; Thalfeldt, Martin Ehitaja 2015 / lk. 26-33 : ill https://artiklid.elnet.ee/record=b2740494*est

Korterelamute tervikliku renoveerimise juhendmaterjal

Kalamees, Targo; Thalfeldt, Martin; Meos, Heiki; Laas, Margus Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / lk.

Korterelamute välispiirete lisasoojustamise sõlmejoonised ja tüüpkorterite ventilatsioonilahendused

Kalamees, Targo; Thalfeldt, Martin; Meos, Heiki; Laas, Margus; **Zelenski, Maksim; Kurnitski, Jarek;** Diligentov, Eduard; Bõkova, Larissa 2015

Kuidas säästa?

Thalfeldt, Martin Õhtuleht 2021 / Lk. 17 <https://dea.digar.ee/article/oh tuleht/2021/10/26/13.3>

Kuidas välisvarjestusega (energiat) kokku hoida

Kurnitski, Jarek; Thalfeldt, Martin Inseneeria 2014 / lk. 20-21 : ill https://artiklid.elnet.ee/record=b2672919*est

Kvaliteetne ventilatsioonisüsteem - hea tervise eeldus

Thalfeldt, Martin Eramaja rekonstrueerimine : väärt nõuanded, praktilised näpunäited ja kogu vajalik info kodu korrastamiseks 2019 / lk. 13-15 : fot https://issuu.com/sihtasutus_kredex/docs/kredex_eramaja_aprill2019 https://www.ester.ee/record=b5232716*est

Lihtsad nipid, kuidas hoida kodu küttekulud kontrolli all

postimees.ee 2023 [Lihtsad nipid, kuidas hoida kodu küttekulud kontrolli all](#)

Lugeja küsib: kuidas kütta nii, et küttearve hingetuks ei võtaks? [Võrguväljaanne]

Saar, Sandra; Juhkental, Robin novaator.err.ee 2022 [Lugeja küsib: kuidas kütta nii, et küttearve hingetuks ei võtaks?](#)

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>

Madal- ja liginullenergiahooned : büroohoonete põhilahendused eskiis- ja eelprojekti

Kurnitski, Jarek; Thalfeldt, Martin; Kalamees, Targo; Voll, Hendrik; Uutar, Aivar; Rosin, Argo 2013

Madalenergia büroohoone fassaadi majandusanalüüs

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek Ehitaja 2015 / lk. 22-25 : ill https://artiklid.elnet.ee/record=b2720865*est

Madalenergia büroohoone fassaadi majandusanalüüs

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / lk. 52-58 : ill

Market based renovation solutions in non-residential buildings - Why commercial buildings are not renovated to NZEB

Kuivjõgi, Helena; Uutar, Aivar; Kuusk, Kalle; Thalfeldt, Martin; Kurnitski, Jarek Energy and buildings 2021 / art. 111169, 13 p. : ill <https://doi.org/10.1016/j.enbuild.2021.111169> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Martin Thalfeldt: mida parem õhk, seda tõhusamad me oleme

Thalfeldt, Martin Mente et Manu 2024 / lk. 12-17 : fot https://www.ester.ee/record=b1242496*est

Methodological approach to determining the effect of parallel energy consumption on district heating system

Latšov, Eduard; Volkova, Anna; Siirde, Andres; Kurnitski, Jarek; Thalfeldt, Martin Environmental and Climate Technologies 2017 / p. 5-14 : ill <https://doi.org/10.1515/ruect-2017-0001> [Journal metrics at Scopus](#) [Article at Scopus](#)

Microgrid oriented modeling of space heating system based on neural networks

Häring, Tobias; Kull, Tuule Mall; Ahmadihangar, Roya; Rosin, Argo; Thalfeldt, Martin; Biechl, Helmut 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](#)

Minu kaks aastat Norras - järeldoktorantuur NTNUs

Thalfeldt, Martin Mente et Manu 2019 / lk. 35-37 : fot https://www.ttu.ee/public/m/mente-et-manu/MM_05_2019/mobile/index.html https://www.ester.ee/record=b1242496*est

Missugused varutoiteallikad valida, et elada üle elektrikatkestused

Thalfeldt, Martin; Rosin, Argo maakodu.delfi.ee 2023 [Missugused varutoiteallikad valida, et elada üle elektrikatkestused](#)

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](#)

Nearly zero energy office building without conventional heating

Thalfeldt, Martin; Kurnitski, Jarek; Mikola, Alo Estonian journal of engineering 2013 / p. 309-328 : ill
<https://doi.org/10.3176/eng.2013.4.06> [Article at Scopus](#)

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](#)

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](#)

Office building tenants' electricity use model for building performance simulations

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

Optimal PI control parameters for accurate underfloor heating temperature control

Kull, Tuule Mall; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 2019 / art. 01081, 8 p. : ill <https://doi.org/10.1051/e3sconf/201911101081> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Overheating and air velocities in modern office buildings during heating season

Kiil, Martin; Simson, Raimo; Thalfeldt, Martin; Kurnitski, Jarek Indoor air 2024 / art. 992937, 20 p.
<https://doi.org/10.1155/2024/9992937> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Overheating and daylighting evaluation for free-running classroom designs

Kiil, Martin; Simson, Raimo; De Luca, Francesco; Thalfeldt, Martin; Kurnitski, Jarek IOP conference series : earth and environmental science 2019 / art. 012059, 7 p. : ill <https://doi.org/10.1088/1755-1315/352/1/012059> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Parametric energy simulations of a Nordic detached house heated by a wood stove

Thalfeldt, Martin; Skare, Anders; Georges, Laurent; Skreiberg, Øyvind E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 25007, 7 p. : ill
<https://doi.org/10.1051/e3sconf/202017225007> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

PCSP's diagonal tie connectors thermal bridges impact on energy performance and operational cost : case study of a high-rise residential building in Estonia

Kiil, Martin; Käärid, Martin-Sven; Klõšeiko, Paul; Võsa, Karl-Villem; Simson, Raimo; Sarevet, Henri; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 80060, 8 p. : ill <https://doi.org/10.1051/e3sconf/202017208006> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Performance of a building integrated semitransparent photovoltaic facade on a residential house in Northern Europe

Jagomägi, Andri; Wimmer, Andreas; Thalfeldt, Martin EU PVSEC 2017 : 33rd European Photovoltaic Solar Energy Conference and Exhibition : 25-29 September 2017, Amsterdam, The Netherlands 2017 / p. 2537-2547
<http://dx.doi.org/10.4229/EUPVSEC20172017-6BV.3.46>

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

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

Predict the remaining useful life in HVAC filters using a hybrid strategy

Alimohammadi, Hossein; Vassiljeva, Kristina; Petlenkov, Eduard; Kull, Tuule Mall; Thalfeldt, Martin 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.2022.273>

Primary energy balance driven integrated energy design process of positive energy building

Tamm, Meril; Ortiz, Joana; Pascual, Jordi; Kurnitski, Jarek; Thalfeldt, Martin; Salom, Jaume E3S Web Conference: Cold Climate HVAC and Energy 2021 2021 / art. 13001, 8 p. : ill <https://doi.org/10.1051/e3sconf/202124613001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Primary energy factor for district heating networks in European Union member states

Latõšov, Eduard; Volkova, Anna; Siirde, Andres; Kurnitski, Jarek; Thalfeldt, Martin Energy procedia 2017 / p. 69-77 : ill
<https://doi.org/10.1016/j.egypro.2017.05.056> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Primary energy factors for different district heating networks: an Estonian example

Latšov, Eduard; Kurnitski, Jarek; Thalfeldt, Martin; Volkova, Anna Energy procedia 2016 / p. 674-684 : ill
<https://doi.org/10.1016/j.egypro.2016.09.126> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Quantification of economic benefits of renovation of apartment buildings as a basis for cost optimal 2030 energy efficiency strategies

Pikas, Ergo; Kurnitski, Jarek; Liias, Roode; Thalfeldt, Martin Energy and buildings 2015 / p. 151-160 : ill
<https://doi.org/10.1016/j.enbuild.2014.10.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Quantification of the economic benefits of renovation of apartment buildings as a basis for cost optimal 2030

Pikas, Ergo; Thalfeldt, Martin Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 74-82 : ill

Radoniohu vähendamise lahendused olemasolevatele ja uutele hoonetele = Guidance for radon-protective measures for new and existing buildings [Võrguväljaanne]

Kalamees, Targo; Alev, Üllar; Thalfeldt, Martin; Varda, Kadi; Kurnitski, Jarek 2015

Rakvere Smart House Competence Centre nZEB office building without conventional heating

Thalfeldt, Martin; Mikola, Alo Liginullenergiahooned täna ja homme : artiklite kogumik 2015 / p. 97-103 : ill

Relevance of renewable energy ratio indicator in describing nZEB performance

Thalfeldt, Martin; Kurnitski, Jarek; Gräslund, Jonas; Kempe, Per; Verwer, Jeroen CLIMA 2016 - proceedings of the 12th REHVA World Congress. Vol. 6 2016 / [10] p. : ill

Residential buildings with heat pumps peak power reduction with high performance insulation

Sarevet, Henri; Fadejev, Jevgeni; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : 12th Nordic Symposium on Building Physics (NSB 2020) : Tallinn, Estonia, September 6-9, 2020 2020 / art. 12008, 5 p. : ill
<https://doi.org/10.1051/e3sconf/202017212008> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Residential heat recovery ventilation

Thalfeldt, Martin; Weele, Harry van; Toksoy, Macit; Carlsson, Thomas; Vladykova Bednarova, Petra; Seppänen, Olli 2018
<https://www.rehva.eu/eshop/detail/residential-heat-recovery-ventilation>

Respiratory infection risk based ventilation and room conditioning design method with year-round thermal comfort control in modern office buildings

Kiil, Martin; Simson, Raimo; Vösa, Karl-Villem; Mikola, Alo; Thalfeldt, Martin; Kurnitski, Jarek E3S Web Conference: The 16th ROOMVENT Conference 2022 / art. 05008 <https://doi.org/10.1051/e3sconf/202235605008> [Conference proceedings at Scopus](#) [Article at Scopus](#)

A simplified power sizing method for the correct building integration of wood stoves

Thalfeldt, Martin; Skare, Anders; Georges, Laurent; Skreiberg, Øyvind E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 2019 / art. 02066, 7 p. : ill <https://doi.org/10.1051/e3sconf/201911102066> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Sisekliima ja energiatõhusus korterelamus

Thalfeldt, Martin Pööning : ajalooga majad, aiad ja disainiklassika 2021 / lk. 54-60 : fot https://www.ester.ee/record=b4516546*est

Sisekliima ja veetehnika õppekavad on uuenenud

Thalfeldt, Martin EhitusEST 2023 / lk. 25 : fot https://www.ester.ee/record=b4442657*est

Soe hoone ja tõhus küttesüsteem vajavad terviklikku lähenemist

Thalfeldt, Martin Eramaja rekonstrueerimine : väärt nõuanded, praktilised näpunäited ja kogu vajalik info kodu korrastamiseks 2019 / lk. 19-21 : fot https://issuu.com/sihtasutus_kredex/docs/kredex_eramaja_aprill2019 https://www.ester.ee/record=b5232716*est

Solar radiation-based method for early design stages to balance daylight and thermal comfort in office buildings

Sepulveda Luque, Abel; Seyed Salehi, Seyed Shahabaldin; De Luca, Francesco; Thalfeldt, Martin Frontiers of architectural research 2023 / p. 1030 - 1046 <https://doi.org/10.1016/j.foar.2023.07.001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Suure kuumaga tasub aknad kinni hoida

novaator.err.ee 2024 [Suure kuumaga tasub aknad kinni hoida](#)

Temperature calibration and annual performance of cooling for ceiling panels

Seyed Salehi, Seyed Shahabaldin; Vösa, Karl-Villem; Kurnitski, Jarek; Thalfeldt, Martin 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.2022.344>

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](#)

Thermal comfort and draught assessment in a modern open office building in Tallinn

Kiil, Martin; Mikola, Alo; Thalfeldt, Martin; Kurnitski, Jarek E3S Web of Conferences : CLIMA 2019 Congress, Bucharest, Romania, May 26-29, 2019 2019 / art. 02013, 7 p. : ill <https://doi.org/10.1051/e3sconf/201911102013> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Total economy of energy-efficient office building facades in a cold climate = Külmas kliimas asuvate energiatõhusate büroohoonete fassaadi energia- ja majandusanalüüs

Thalfeldt, Martin 2016 <https://digi.lib.ttu.ee/ii/?4068> https://www.ester.ee/record=b4552059*est

Total economy of windows and facades in low energy office buildings

Thalfeldt, Martin; Kurnitski, Jarek; Voll, Hendrik; Pikas, Ergo The REHVA European HVAC journal 2014 / p. 19-24 : ill

Töötajad on tihti haiged? Teadlane: "Hea sisekliima aitab tervena püsida ja paremini tööle keskenduda."

Hallik, Liina ohtuleht.ee 2023 [TÖÖTAJAD ON TIHTI HAIGED? Teadlane: "Hea sisekliima aitab tervena püsida ja paremini tööle keskenduda."](#)

Urban planning principles of nearly zero-energy residential buildings in Estonia

Voll, Hendrik; Thalfeldt, Martin; De Luca, Francesco; Kurnitski, Jarek; Olesk, Timo Management of environmental quality - an international journal 2016 / p. 634-648 : ill <https://doi.org/10.1108/meq-05-2015-0101> [Journal metrics at Scopus](#) [Article at Scopus](#)

Validation of a zonal model to capture the thermal stratification in a room heated by a stove

Georges, Laurent; **Thalfeldt, Martin; Skreiberg, Øyvind** Roomvent&Ventilation 2018 : Excellent Indoor Climate and High Performing Ventilation : proceedings 2018 / p. 511–516 : ill <https://www.lyyti.fi/e/?p=s&k=76eA857eee2A33adcE00b0E>
https://www.lyyti.fi/reg_att/efA658E7F74904eE7C/2665E4C9CB0B05edC44D.pdf

Validation of a transient zonal model to predict the detailed indoor thermal environment : Case of electric radiators and wood stoves

Georges, Laurent; **Thalfeldt, Martin; Skreiberg, Øyvind; Fornaric, W.** Building and environment 2019 / p. 169–181 : ill
<http://dx.doi.org/10.1016/j.buildenv.2018.12.020>

Validation of methods for developing typical meteorological years based on future climate models

Seyed Salehi, Seyed Shahabaldin; Männik, Aarne; Kalamees, Targo; Thalfeldt, Martin E3S Web of Conferences : BuildSim Nordic 2024 2024 / art. 07002 ; 12 p <https://doi.org/10.1051/e3sconf/202456207002> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Varutoiteallikad aitavad elektrikatkestustest üle

Thalfeldt, Martin; Rosin, Argo Maakodu 2023 / lk. 50-52 : fot https://www.ester.ee/record=b1072539*est

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](#)

Ventilatsioon

Thalfeldt, Martin Pööning : ajalooga majad, aiad ja disainiklassika 2021 / lk. 87-91 : fot https://www.ester.ee/record=b4516546*est

Ventilatsioonisüsteemi valimine (puit)korterelamu rekonstrueerimisel

Thalfeldt, Martin Keskkonnatehnika 2011 / lk. 21-23 : ill https://keskkonnatehnika.ee/wp-content/uploads/2017/09/KKT_2011_08.pdf

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>

Window model and 5 year price data sensitivity to cost-effective facade solutions for office buildings in Estonia

Thalfeldt, Martin; Pikas, Ergo; Kurnitski, Jarek; Voll, Hendrik Energy 2017 / p. 685-697 : ill
<https://doi.org/10.1016/j.energy.2017.06.160> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Wood burning habits and its effect on the electrical energy demand of a retrofitted Norwegian detached house

Felius, L.C.; **Thalfeldt, Martin; Georges, Laurent; Hrynyszyn, B.D.; Dessen, F.; Hamdy, M.** IOP conference series : earth and environmental science 2019 / art. 012022, 9 p. : ill <https://doi.org/10.1088/1755-1315/352/1/012022>

Õhksoojuspump tuleks raha säästmise huvides infrapunapaneelide vastu välja vahetada – müüt või tõsilugu?
geenius.ee 2023 [Õhksoojuspump tuleks raha säästmise huvides infrapunapaneelide vastu välja vahetada – müüt või tõsilugu?](#)

Üks küsimus : milline on teie jaoks ideaalne ülikool?

Mente et Manu 2020 / lk. 24-25 , 34-35, 44-45 : portr https://www.ester.ee/record=b1242496*est

В очень жаркую погоду окна стоит держать закрытыми

Thalfeldt, Martin nauka.err.ee 2024 [В очень жаркую погоду окна стоит держать закрытыми](#)

Простые советы, которые помогут снизить расходы на отопление дома

Thalfeldt, Martin rus.postimees.ee 2023 [Простые советы, которые помогут снизить расходы на отопление дома](#)