Targo Kalamees

List of Publications by Year
in descending order

118	2,702	185998	205818
papers	citations	28 h-index	48 g-index

122	122	122	1859
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cost optimal and nearly zero (nZEB) energy performance calculations for residential buildings with REHVA definition for nZEB national implementation. Energy and Buildings, 2011, 43, 3279-3288.	3.1	215
2	The effect of combining a relative-humidity-sensitive ventilation system with the moisture-buffering capacity of materials on indoor climate and energy efficiency of buildings. Building and Environment, 2009, 44, 515-524.	3.0	166
3	Building leakage, infiltration, and energy performance analyses for Finnish detached houses. Building and Environment, 2009, 44, 377-387.	3.0	165
4	Air tightness and air leakages of new lightweight single-family detached houses in Estonia. Building and Environment, 2007, 42, 2369-2377.	3.0	142
5	Development of weighting factors for climate variables for selecting the energy reference year according to the EN ISO 15927-4 standard. Energy and Buildings, 2012, 47, 53-60.	3.1	134
6	Energy demand for the heating and cooling of residential houses in Finland in a changing climate. Energy and Buildings, 2015, 99, 104-116.	3.1	88
7	Analysis of energy economic renovation for historic wooden apartment buildings in cold climates. Applied Energy, 2014, 115, 540-548.	5.1	86
8	Cost effectiveness of energy performance improvements in Estonian brick apartment buildings. Energy and Buildings, 2014, 77, 313-322.	3.1	67
9	Hygrothermal calculations and laboratory tests on timber-framed wall structures. Building and Environment, 2003, 38, 689-697.	3.0	65
10	Renovation alternatives to improve energy performance of historic rural houses in the Baltic Sea region. Energy and Buildings, 2014, 77, 58-66.	3.1	60
11	The effects of ventilation systems and building fabric on the stability of indoor temperature and humidity in Finnish detached houses. Building and Environment, 2009, 44, 1643-1650.	3.0	53
12	Indoor Humidity Loads and Moisture Production in Lightweight Timber-frame Detached Houses. Journal of Building Physics, 2006, 29, 219-246.	1.2	52
13	Hygrothermal performance of internally insulated brick wall in cold climate: A case study in a historical school building. Journal of Building Physics, 2015, 38, 444-464.	1.2	52
14	Energy use and indoor climate of conservation heating, dehumidification and adaptive ventilation for the climate control of a mediaeval church in a cold climate. Energy and Buildings, 2015, 108, 61-71.	3.1	48
15	Air leakage levels in timber frame building envelope joints. Building and Environment, 2017, 116, 121-129.	3.0	48
16	Energy and investment intensity of integrated renovation and 2030 cost optimal savings. Energy and Buildings, 2014, 75, 51-59.	3.1	46
17	IMPACT OF LINEAR THERMAL BRIDGES ON THERMAL TRANSMITTANCE OF RENOVATED APARTMENT BUILDINGS. Journal of Civil Engineering and Management, 2016, 23, 96-104.	1.9	44
18	Realisation of energy performance targets of an old apartment building renovated to nZEB. Energy, 2020, 194, 116874.	4.5	42

#	ARTICLE	IF	CITATIONS
19	Cost optimal and nearly zero energy performance requirements for buildings in Estonia. Estonian Journal of Engineering, 2013, 19, 183.	0.3	39
20	Indoor hygrothermal loads for the deterministic and stochastic design of the building envelope for dwellings in cold climates. Journal of Building Physics, 2018, 41, 547-577.	1.2	38
21	Field survey of overheating problems in Estonian apartment buildings. Architectural Science Review, 2015, 58, 1-10.	1.1	36
22	The effect of thermal transmittance of building envelope and material selection of wind barrier on moisture safety of timber frame exterior wall. Journal of Building Engineering, 2016, 6, 29-38.	1.6	34
23	Financial viability of energy-efficiency measures in a new detached house design in Finland. Applied Energy, 2012, 92, 76-83.	5.1	33
24	The Influence of Indoor Climate Control on Risk for Damages in Naturally Ventilated Historic Churches in Cold Climate. International Journal of Architectural Heritage, 2016, 10, 486-498.	1.7	32
25	How well are energy performance objectives being achieved in renovated apartment buildings in Estonia?. Energy and Buildings, 2019, 199, 332-341.	3.1	32
26	A Comparison of Measured and Simulated Air Pressure Conditions of a Detached House in a Cold Climate. Journal of Building Physics, 2008, 32, 67-89.	1.2	31
27	nZEB Retrofit of a Concrete Large Panel Apartment Building. Energy Procedia, 2015, 78, 985-990.	1.8	30
28	Retrofit cost-effectiveness: Estonian apartment buildings. Building Research and Information, 2016, 44, 920-934.	2.0	30
29	Avoiding mould growth in an interiorly insulated log wall. Building and Environment, 2016, 105, 104-115.	3.0	28
30	Potential effects of permeable and hygroscopic lightweight structures on thermal comfort and perceived IAQ in a cold climate. Indoor Air, 2007, 17, 37-49.	2.0	27
31	Measured and simulated air pressure conditions in Finnish residential buildings. Building Services Engineering Research and Technology, 2010, 31, 177-190.	0.9	27
32	CASE-STUDY ANALYSIS OF CONCRETE LARGE-PANEL APARTMENT BUILDING AT PRE- AND POST LOW-BUDGET ENERGY-RENOVATION. Journal of Civil Engineering and Management, 2016, 23, 67-75.	1.9	27
33	Performance of ventilation in Estonian apartment buildings. Energy Procedia, 2017, 132, 963-968.	1.8	25
34	Estonian Grant Scheme for Renovating Apartment Buildings. Energy Procedia, 2016, 96, 628-637.	1.8	24
35	Moisture Convection Performance of External Walls and Roofs. Journal of Building Physics, 2010, 33, 225-247.	1.2	23
36	Hygrothermal Performance of Highly Insulated Timber-frame External Wall. Energy Procedia, 2016, 96, 685-695.	1.8	22

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37	Effects of Energy Retrofits on Indoor Air Quality in Three Northern European Countries. Energy Procedia, 2016, 96, 253-259.	1.8	22
38	nZEB Renovation with Prefabricated Modular Panels. Energy Procedia, 2017, 132, 1006-1011.	1.8	19
39	Internal moisture excess of residential buildings in Finland. Journal of Building Physics, 2018, 42, 239-258.	1.2	19
40	Calculation and compliance procedures of thermal bridges in energy calculations in various European countries. Energy Procedia, 2017, 132, 27-32.	1.8	17
41	Indoor Climate Conditions and Ventilation Performance in Estonian Lightweight Detached Houses. Indoor and Built Environment, 2006, 15, 555-569.	1.5	16
42	The Influence of Energy Renovation on the Change of Indoor Temperature and Energy Use. Energies, 2018, 11, 3179.	1.6	16
43	Evaluation of the criticality of thermal bridges. Journal of Building Pathology and Rehabilitation, 2016, 1, 1.	0.7	15
44	Reliability of Interior Thermal Insulation as a Retrofit Measure in Historic Wooden Apartment Buildings in Cold Climate. Energy Procedia, 2015, 78, 871-876.	1.8	14
45	Hourly test reference weather data in the changing climate of Finland for building energy simulations. Data in Brief, 2015, 4, 162-169.	0.5	14
46	Influence of Moisture Dry-out on Hygrothermal Performance of Prefabricated Modular Renovation Elements. Energy Procedia, 2016, 96, 745-755.	1.8	14
47	Integrated Design of Museum's Indoor Climate in Medieval Episcopal Castle of Haapsalu. Energy Procedia, 2016, 96, 592-600.	1.8	14
48	Impact of cracks to the hygrothermal properties of CLT water vapour resistance and air permeability. Energy Procedia, 2017, 132, 741-746.	1.8	14
49	Commissioning of moisture safety of nZEB renovation with prefabricated timber frame insulation wall elements. Wood Material Science and Engineering, 2021, 16, 110-117.	1.1	14
50	Designing highly insulated cross-laminated timber external walls in terms of hygrothermal performance: Field measurements and simulations. Building and Environment, 2022, 212, 108805.	3.0	13
51	Airtightness, Air Exchange and Energy Performance in Historic Residential Buildings with Different Structures. International Journal of Ventilation, 2015, 14, 11-26.	0.2	12
52	Ventilation System Design in Three European Geo Cluster. Energy Procedia, 2016, 96, 285-293.	1.8	12
53	Adaptive ventilation for climate control in a medieval church in cold climate. International Journal of Ventilation, 2016, 15, 1-14.	0.2	12
54	Design of the first net-zero energy buildings in Estonia. Science and Technology for the Built Environment, 2016, 22, 1039-1049.	0.8	12

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55	Effect of freezing and thawing on the performance of â€œcapillary activeâ€•insulation systems: a comparison of results from climate chamber study to HAM modelling. Energy Procedia, 2017, 132, 525-530.	1.8	12
56	Cost and Energy Reduction of a New nZEB Wooden Building. Energies, 2020, 13, 3570.	1.6	11
57	The impact of the technical requirements of the renovation grant on the ventilation and indoor air quality in apartment buildings. Building and Environment, 2022, 210, 108698.	3.0	11
58	Failure analysis of 10 year used wooden building. Engineering Failure Analysis, 2002, 9, 635-643.	1.8	10
59	Air Leakage of Joints Filled with Polyurethane Foam. Buildings, 2019, 9, 172.	1.4	10
60	Influence of interior layer properties to moisture dry-out of CLT walls. Canadian Journal of Civil Engineering, 2019, 46, 1001-1009.	0.7	10
61	Moisture control strategies of habitable basements in cold climates. Building and Environment, 2020, 169, 106572.	3.0	10
62	Development and Performance Assessment of Prefabricated Insulation Elements for Deep Energy Renovation of Apartment Buildings. Energies, 2020, 13, 1709.	1.6	10
63	Airtightness of cross-laminated timber envelopes: Influence of moisture content, indoor humidity, orientation, and assembly. Journal of Building Engineering, 2021, 44, 102610.	1.6	9
64	Simulated Influence of Indoor Climate and Ventilation on Schoolwork Performance in Estonian Manor Schools. International Journal of Ventilation, 2015, 14, 153-164.	0.2	8
65	Method for Assessment of Energy Retrofit Measures in Milieu Valuable Buildings. Energy Procedia, 2015, 78, 1027-1032.	1.8	8
66	Assessment of durability of environmentally friendly wood-based panels. Energy Procedia, 2017, 132, 207-212.	1.8	8
67	The effects of production technologies on the air permeability and crack development of cross-laminated timber. Journal of Building Physics, 2019, 43, 171-186.	1.2	8
68	Potential for Finance and Energy Savings of Detached Houses in Estonia. Energy Procedia, 2015, 78, 907-912.	1.8	7
69	Indoor climate loads for dwellings in different cold climates to assess hygrothermal performance of building envelopes. Canadian Journal of Civil Engineering, 2019, 46, 963-968.	0.7	7
70	Heat Loss Due to Domestic Hot Water Pipes. Energies, 2021, 14, 6446.	1.6	7
71	Wetting circumstances, expected moisture content, and drying performance of CLT end-grain edges based on field measurements and laboratory analysis. Building and Environment, 2022, 221, 109245.	3.0	7
72	Impact of ETICS on Corrosion Propagation of Concrete Facade. Energy Procedia, 2016, 96, 67-76.	1.8	6

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73	Renovation of apartment buildings with prefabricated modular panels. E3S Web of Conferences, 2019, 111, 03023.	0.2	6
74	Identification and improvement of critical joints in CLT construction without weather protection. E3S Web of Conferences, 2020, 172, 10002.	0.2	6
75	Towards Improving the Durability and Overall Performance of PV-ETICS by Application of a PCM Layer. Applied Sciences (Switzerland), 2021, 11, 4667.	1.3	6
76	The effect of flanking element length in thermal bridge calculation and possible simplifications to account for combined thermal bridges in well insulated building envelopes. Energy and Buildings, 2021, 252, 111397.	3.1	6
77	Development of Airtightness of Estonian Wooden Buildings. Journal of Sustainable Architecture and Civil Engineering, 2019, 24, 36-43.	0.3	6
78	A case study on the construction of a CLT building without a preliminary roof. Journal of Sustainable Architecture and Civil Engineering, 2019, 25, 53-62.	0.3	6
79	Economic viability of energy-efficiency measures in educational buildings in Finland. Advances in Building Energy Research, 2013, 7, 120-127.	1.1	5
80	Air Leakage of Concrete Floor and Foundation Junctions. Energy Procedia, 2015, 78, 2046-2051.	1.8	5
81	Hygrothermal Performance of a Massive Stone Wall with Interior Insulation: An In-situ Study for Developing a Retrofit Measure. Energy Procedia, 2015, 78, 195-200.	1.8	5
82	Influencing factors of moisture measurement when using microwave reflection method. Energy Procedia, 2017, 132, 159-164.	1.8	5
83	Growth rate of solar thermal systems in Baltic States: Slow but steady wins the race?. Energy Sources, Part B: Economics, Planning and Policy, 2020, 15, 423-435.	1.8	5
84	A new method to estimate point thermal transmittance based on combined two-dimensional heat flow calculation. E3S Web of Conferences, 2020, 172, 08005.	0.2	5
85	Field measurements and simulation of an massive wood panel envelope with ETICS. Wood Material Science and Engineering, 2021, 16, 27-34.	1.1	5
86	Energy Performance, Indoor Air Quality and Comfort in New Nearly Zero Energy Day-care Centres in Northern Climatic Conditions. Journal of Sustainable Architecture and Civil Engineering, 2019, 24, 7-16.	0.3	5
87	Hygrothermal performance of a brick wall with interior insulation in cold climate: Vapour open versus vapour tight approach. Journal of Building Physics, 2022, 46, 3-35.	1.2	5
88	A simple adaptive ventilation controller for mediaeval church. Energy Procedia, 2017, 132, 957-962.	1.8	4
89	A method to develop energy activated ETICS. E3S Web of Conferences, 2020, 172, 21006.	0.2	4
90	Moisture dry-out from steel faced insulated sandwich panels. E3S Web of Conferences, 2020, 172, 17007.	0.2	4

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91	Driving decarbonisation of the EU building stock by enhancing a consumer centred and locally based circular renovation process. E3S Web of Conferences, 2020, 172, 18006.	0.2	4
92	Method to divide heating energy in energy efficient building without direct measuring. Energy Procedia, 2017, 132, 45-50.	1.8	3
93	Airtightness improvement solutions for log wall joints. Energy Procedia, 2017, 132, 861-866.	1.8	3
94	Preliminary assessment of preconditions to deliver carbon neutrality in apartment buildings by 2050. E3S Web of Conferences, 2020, 172, 18004.	0.2	3
95	The Effect of Prestressing and Temperature on Tensile Strength of Basalt Fiber-Reinforced Plywood. Materials, 2021, 14, 4701.	1.3	3
96	Overview of Damage to Medieval Rural Churches in Estonia. Building Pathology and Rehabilitation, 2016, , 47-68.	0.1	2
97	Indoor hygrothermal condition and user satisfaction in naturally ventilated historic houses in temperate humid continental climate around the Baltic Sea. Architectural Science Review, 2016, 59, 53-67.	1.1	2
98	Diagnosis of Moisture Movements in Massive Dolostone Walls of Medieval Churches. Building Pathology and Rehabilitation, 2016, , 69-90.	0.1	2
99	Indoor climate and energy performance in nearly zero energy day care centers and school buildings. E3S Web of Conferences, 2019, 111, 02003.	0.2	2
100	Failure analysis of a spray polyurethane foam roofing system. Journal of Building Engineering, 2020, 32, 101752.	1.6	2
101	Thermal bridge effect of vertical diagonal tie connectors in precast concrete sandwich panels: an experimental and computational study. E3S Web of Conferences, 2020, 172, 08001.	0.2	2
102	The integration of selected technology to energy activated ETICS - theoretical approach. E3S Web of Conferences, 2020, 172, 21004.	0.2	2
103	Moisture Dry-Out Capability of Steel-Faced Mineral Wool Insulated Sandwich Panels. Sustainability, 2020, 12, 9020.	1.6	2
104	Influence of Window Details on the Energy Performance of an nZEB. Journal of Sustainable Architecture and Civil Engineering, 2019, 24, 61-70.	0.3	2
105	Development of prefabricated insulation elements for buildings with aerated autoclaved concrete walls. E3S Web of Conferences, 2020, 172, 18001.	0.2	1
106	The influence of heat loss from pipes in an unheated basement on the heating energy consumption of an entire typical apartment building. E3S Web of Conferences, 2020, 172, 12005.	0.2	1
107	Laboratory tests and modelling of mineral wool insulated steel sandwich panels. E3S Web of Conferences, 2020, 172, 17006.	0.2	1
108	Analysis of causes of the end of service life of a spray polyurethane foam and polyurea roof. E3S Web of Conferences, 2020, 172, 15002.	0.2	1

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109	The effects of production technologies on the air permeability properties of cross laminated timber. , 2018, , .		1
110	Long term measurements and HAM modelling of an interior insulation solution for an office building in cold climate. , 2018, , .		1
111	Circularity concepts for offsite prefabricated energy renovation of apartment buildings. Journal of Physics: Conference Series, 2021, 2069, 012074.	0.3	1
112	Airflow performance of ventilated sub flooring system. Building and Environment, 2007, 42, 3708-3716.	3.0	0
113	Commissioning of thermal performance of prefabricated timber frame insulation elements for nZEB renovation. MATEC Web of Conferences, 2019, 282, 02004.	0.1	0
114	Cost reduction of the new NZEB Wooden building â€“ case study of the kindergarten in Estonia. E3S Web of Conferences, 2020, 172, 13002.	0.2	0
115	Performance of Heat Recovery Ventilation System with Ground Source Brine Heat Exchanger Pre-Heating System in the Context of nZEB. , 0, , .		0
116	Compliance with Summer Thermal Comfort Requirements in Apartment Buildings. , 0, , .		0
117	Guest Editor Preface. Journal of Sustainable Architecture and Civil Engineering, 2019, 24, 5-6.	0.3	0
118	Hygrothermal performance of a massive natural stone masonry wall insulated from the internal side with hemp concrete â€“ field measurements in cold climate. Journal of Physics: Conference Series, 2021, 2069, 012068.	0.3	0