Steffen Petersen

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5855985/publications.pdf

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42 papers 1,396 citations

331259 21 h-index 36 g-index

42 all docs

42 docs citations 42 times ranked 1335 citing authors

#	Article	IF	CITATIONS
1	Window View Quality: Why It Matters and What We Should Do. LEUKOS - Journal of Illuminating Engineering Society of North America, 2022, 18, 259-267.	1.5	14
2	District heating energy efficiency of Danish building typologies. Energy and Buildings, 2021, 231, 110602.	3.1	29
3	Characteristic traits of visualizations for decision-making in the early stages of building design. Journal of Building Performance Simulation, 2021, 14, 403-419.	1.0	O
4	Experimental test of a black-box economic model predictive control for residential space heating. Applied Energy, 2021, 298, 117227.	5.1	34
5	Research framework for development of building performance simulationÂtools for early design stages. Automation in Construction, 2020, 109, 102966.	4.8	23
6	Economic model predictive control of space heating and dynamic solar shading. Energy and Buildings, 2020, 209, 109661.	3.1	22
7	The influence of unmeasured occupancy disturbances on the performance of black-box thermal building models. E3S Web of Conferences, 2020, 172, 02010.	0.2	0
8	Experimental validation of a model-based method for separating the space heating and domestic hot water components from smart-meter consumption data. E3S Web of Conferences, 2020, 172, 12001.	0.2	6
9	The effect of seasonal weather changes on the performance of databased models of the thermodynamic behaviour of buildings. E3S Web of Conferences, 2020, 172, 02005.	0.2	1
10	Long-term forecasting of hourly district heating loads in urban areas using hierarchical archetype modeling. Energy, 2020, 201, 117687.	4.5	38
11	Requirement analysis for building performance simulation tools conformed to fit design practice. Automation in Construction, 2020, 116, 103226.	4.8	6
12	Bottom-up modelling methodology for urban-scale analysis of residential space heating demand response. Applied Energy, 2019, 242, 181-204.	5.1	80
13	The effect of including hydronic radiator dynamics in model predictive control of space heating. Energy and Buildings, 2019, 183, 772-784.	3.1	27
14	Prerequisites for reliable sensitivity analysis of a high fidelity building energy model. Energy and Buildings, 2019, 183, 1-16.	3.1	20
15	Towards practical model predictive control of residential space heating: Eliminating the need for weather measurements. Energy and Buildings, 2018, 170, 206-216.	3.1	15
16	Investigating the performance of scenario-based model predictive control of space heating in residential buildings. Journal of Building Performance Simulation, 2018, 11, 485-498.	1.0	13
17	A hybrid Decision Support System for Generation of Holistic Renovation Scenariosâ€"Cases of Energy Consumption, Investment Cost, and Thermal Indoor Comfort. Sustainability, 2018, 10, 1255.	1.6	20
18	Predicting Danish residential heating energy use from publicly available building characteristics. Energy and Buildings, 2018, 173, 28-37.	3.1	9

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19	Hierarchical calibration of archetypes for urban building energy modeling. Energy and Buildings, 2018, 175, 219-234.	3.1	60
20	Method for room occupancy detection based on trajectory of indoor climate sensor data. Building and Environment, 2017, 115, 147-156.	3.0	98
21	The absolute environmental performance of buildings. Building and Environment, 2017, 119, 87-98.	3.0	61
22	Model predictive control for demand response of domestic hot water preparation in ultra-low temperature district heating systems. Energy and Buildings, 2017, 146, 55-64.	3.1	62
23	Space heating demand response potential of retrofitted residential apartment blocks. Energy and Buildings, 2017, 141, 158-166.	3.1	64
24	Rapid simulation of various types of HVAC systems in the early design stage. Energy Procedia, 2017, 122, 469-474.	1.8	9
25	Bayesian calibration of building energy models: Comparison of predictive accuracy using metered utility data of different temporal resolution. Energy Procedia, 2017, 122, 277-282.	1.8	33
26	System identification of thermal building models for demand response – A practical approach. Energy Procedia, 2017, 122, 937-942.	1.8	12
27	Comparison of centralized and decentralized model predictive control in a building retrofit scenario. Energy Procedia, 2017, 122, 979-984.	1.8	11
28	Handling thermal comfort in economic model predictive control schemes for demand response. Energy Procedia, 2017, 122, 985-990.	1.8	4
29	Evaluation of Grey-Box Model Parameter Estimates Intended for Thermal Characterization of Buildings. Energy Procedia, 2017, 132, 982-987.	1.8	20
30	Multi-market demand response using economic model predictive control of space heating in residential buildings. Energy and Buildings, 2017, 150, 253-261.	3.1	46
31	Explaining variability in metered energy use for similar buildings using Bayesian inference. Energy Procedia, 2017, 132, 897-902.	1.8	5
32	Method for including the economic value of indoor climate as design criterion in optimisation of office building design. Building and Environment, 2017, 122, 15-22.	3.0	9
33	The effect of increased classroom ventilation rate indicated by reduced CO ₂ concentration on the performance of schoolwork by children. Indoor Air, 2016, 26, 366-379.	2.0	68
34	Establishing an image-based ground truth for validation of sensor data-based room occupancy detection. Energy and Buildings, 2016, 130, 787-793.	3.1	48
35	Choosing the appropriate sensitivity analysis method for building energy model-based investigations. Energy and Buildings, 2016, 130, 166-176.	3.1	87
36	Demand response potential of model predictive control of space heating based on price and carbon dioxide intensity signals. Energy and Buildings, 2016, 125, 196-204.	3.1	79

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#	Article	IF	CITATION
37	Investigation of the displacement effect of a diffuse ceiling ventilation system. Energy and Buildings, 2014, 85, 265-274.	3.1	19
38	A simple tool to evaluate the effect of the urban canyon on daylight level and energy demand in the early stages of building design. Solar Energy, 2014, 108, 61-68.	2.9	16
39	The effect of weather forecast uncertainty on a predictive control concept for building systems operation. Applied Energy, 2014, 116, 311-321.	5.1	48
40	Method for component-based economical optimisation for use in design of new low-energy buildings. Renewable Energy, 2012, 38, 173-180.	4.3	45
41	Method for simulating predictive control of building systems operation in the early stages of building design. Applied Energy, 2011, 88, 4597-4606.	5.1	32
42	Method and simulation program informed decisions in the early stages of building design. Energy and Buildings, 2010, 42, 1113-1119.	3.1	103