

Moncef Krarti

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/836788/publications.pdf>

Version: 2024-02-01

151
papers

3,887
citations

126907

33
h-index

133252

59
g-index

153
all docs

153
docs citations

153
times ranked

2507
citing authors

#	ARTICLE	IF	CITATIONS
1	Genetic-algorithm based approach to optimize building envelope design for residential buildings. Building and Environment, 2010, 45, 1574-1581.	6.9	383
2	A simplified method to estimate energy savings of artificial lighting use from daylighting. Building and Environment, 2005, 40, 747-754.	6.9	185
3	Optimization of envelope and HVAC systems selection for residential buildings. Energy and Buildings, 2011, 43, 3373-3382.	6.7	173
4	Estimation of lighting energy savings from daylighting. Building and Environment, 2009, 44, 509-514.	6.9	156
5	Optimal design of residential building envelope systems in the Kingdom of Saudi Arabia. Energy and Buildings, 2015, 86, 104-117.	6.7	142
6	Design optimization of energy efficient residential buildings in Tunisia. Building and Environment, 2012, 58, 81-90.	6.9	139
7	Development of a Predictive Optimal Controller for Thermal Energy Storage Systems. HVAC and R Research, 1997, 3, 233-264.	0.6	127
8	A simplified analysis method to predict the impact of shape on annual energy use for office buildings. Energy Conversion and Management, 2007, 48, 300-305.	9.2	123
9	Analytical model for heat transfer in an underground air tunnel. Energy Conversion and Management, 1996, 37, 1561-1574.	9.2	115
10	Impact of building shape on thermal performance of office buildings in Kuwait. Energy Conversion and Management, 2009, 50, 822-828.	9.2	109
11	Energy performance analysis of variable thermal resistance envelopes in residential buildings. Energy and Buildings, 2015, 103, 317-325.	6.7	105
12	Evaluation of building energy efficiency investment options for the Kingdom of Saudi Arabia. Energy, 2017, 134, 595-610.	8.8	104
13	Assessment of natural and hybrid ventilation models in whole-building energy simulations. Energy and Buildings, 2011, 43, 2251-2261.	6.7	103
14	Potential energy savings from deployment of Dynamic Insulation Materials for US residential buildings. Building and Environment, 2017, 114, 203-218.	6.9	100
15	Evaluation of net-zero energy residential buildings in the MENA region. Sustainable Cities and Society, 2016, 22, 116-125.	10.4	81
16	An analysis methodology for large-scale deep energy retrofits of existing building stocks: Case study of the Italian office building. Sustainable Cities and Society, 2018, 41, 296-311.	10.4	78
17	Guidelines for improved performance of ice storage systems. Energy and Buildings, 2003, 35, 111-127.	6.7	73
18	Optimization of energy efficiency and thermal comfort measures for residential buildings in Salamanca, Mexico. Energy and Buildings, 2012, 54, 540-549.	6.7	69

#	ARTICLE	IF	CITATIONS
19	Evaluation of large scale building energy efficiency retrofit program in Kuwait. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 50, 1069-1080.	16.4	60
20	Impact of subsidization on high energy performance designs for Kuwaiti residential buildings. <i>Energy and Buildings</i> , 2016, 116, 249-262.	6.7	60
21	ITPE technique applications to time-varying two-dimensional ground-coupling problems. <i>International Journal of Heat and Mass Transfer</i> , 1988, 31, 1899-1911.	4.8	56
22	Optimal control of building storage systems using both ice storage and thermal mass – Part I: Simulation environment. <i>Energy Conversion and Management</i> , 2012, 64, 499-508.	9.2	56
23	Impact of window selection on the energy performance of residential buildings in South Korea. <i>Energy Policy</i> , 2012, 44, 1-9.	8.8	56
24	An Overview of Artificial Intelligence-Based Methods for Building Energy Systems. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2003, 125, 331-342.	1.8	54
25	Optimal controls of building storage systems using both ice storage and thermal mass – Part II: Parametric analysis. <i>Energy Conversion and Management</i> , 2012, 64, 509-515.	9.2	52
26	The ITPE technique applied to steady-state ground-coupling problems. <i>International Journal of Heat and Mass Transfer</i> , 1988, 31, 1885-1898.	4.8	49
27	Energy performance analysis of variable reflectivity envelope systems for commercial buildings. <i>Energy and Buildings</i> , 2016, 124, 88-98.	6.7	45
28	Control strategies for dynamic insulation materials applied to commercial buildings. <i>Energy and Buildings</i> , 2017, 154, 305-320.	6.7	42
29	A Simulation Environment for the Analysis of Ice Storage Controls. <i>HVAC and R Research</i> , 1997, 3, 128-148.	0.6	39
30	Foundation heat loss from heated concrete slab-on-grade floors. <i>Building and Environment</i> , 2001, 36, 637-655.	6.9	39
31	Analysis of impact of daylight time savings on energy use of buildings in Kuwait. <i>Energy Policy</i> , 2011, 39, 2319-2329.	8.8	39
32	Parametric Analysis of Active and Passive Building Thermal Storage Utilization*. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2005, 127, 37-46.	1.8	36
33	Development of a thermal energy storage model for EnergyPlus. <i>Energy and Buildings</i> , 2004, 36, 807-814.	6.7	35
34	Macro-economic benefit analysis of large scale building energy efficiency programs in Qatar. <i>International Journal of Sustainable Built Environment</i> , 2017, 6, 597-609.	3.2	33
35	A review of optimization based tools for design and control of building energy systems. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 160, 112359.	16.4	33
36	Impact of electricity rate structures on energy cost savings of pre-cooling controls for office buildings. <i>Building and Environment</i> , 2007, 42, 2810-2818.	6.9	30

#	ARTICLE	IF	CITATIONS
37	Benefits of energy efficiency programs for residential buildings in Bahrain. Journal of Building Engineering, 2018, 18, 40-50.	3.4	30
38	Energy efficiency optimization of new and existing office buildings in Guanajuato, Mexico. Sustainable Cities and Society, 2015, 17, 132-140.	10.4	28
39	Comparative evaluation of optimal energy efficiency designs for French and US office buildings. Energy and Buildings, 2015, 93, 332-344.	6.7	26
40	Evaluation of energy performance of dynamic overhang systems for US residential buildings. Energy and Buildings, 2021, 234, 110699.	6.7	25
41	Energy efficiency of residential buildings in the kingdom of Saudi Arabia: Review of status and future roadmap. Journal of Building Engineering, 2021, 36, 102143.	3.4	24
42	Heat transfer analysis of thermo-active foundations. Energy and Buildings, 2015, 86, 492-501.	6.7	23
43	Bayesian-Emulator based parameter identification for calibrating energy models for existing buildings. Building Simulation, 2016, 9, 411-428.	5.6	23
44	Evaluation of Energy Efficiency Potential for the Building Sector in the Arab Region. Energies, 2019, 12, 4279.	3.1	22
45	Thermally optimal insulation distribution for underground structures. Energy and Buildings, 2000, 32, 251-265.	6.7	21
46	Development of an optimal daylighting controller. Building and Environment, 2011, 46, 1011-1022.	6.9	20
47	Steady-state heat transfer beneath partially insulated slab-on-grade floor. International Journal of Heat and Mass Transfer, 1989, 32, 961-969.	4.8	19
48	Analysis of Thermo-Active Foundations With U-Tube Heat Exchangers. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.8	17
49	Evaluation of Passive Cooling Systems for Residential Buildings in the Kingdom of Saudi Arabia. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.8	17
50	Optimization of Korean crop storage insulation systems. Energy Conversion and Management, 2003, 44, 1145-1162.	9.2	16
51	Time-varying heat transfer from slab-on-grade floors with vertical insulation. Building and Environment, 1994, 29, 55-61.	6.9	15
52	Effect of spatial variation of soil thermal properties on slab-on-ground heat transfer. Building and Environment, 1996, 31, 51-57.	6.9	15
53	Local/global analysis of transient heat transfer from building foundations. Building and Environment, 2004, 39, 495-504.	6.9	13
54	Comparative Analysis of Prediction Accuracy from Daylighting Simulation Tools. LEUKOS - Journal of Illuminating Engineering Society of North America, 2015, 11, 49-60.	2.9	13

#	ARTICLE	IF	CITATIONS
55	Two-Dimensional Heat Transfer From Earth-Sheltered Buildings. Journal of Solar Energy Engineering, Transactions of the ASME, 1990, 112, 43-50.	1.8	13
56	Optimal Hybrid Power Energy Systems for Residential Communities in Saudi Arabia. Journal of Solar Energy Engineering, Transactions of the ASME, 2019, 141, .	1.8	12
57	Time-varying heat transfer from horizontally insulated slab-on-grade floors. Building and Environment, 1994, 29, 63-71.	6.9	11
58	Performance of precooling strategies using switchable insulation systems for commercial buildings. Applied Energy, 2021, 303, 117631.	10.1	11
59	Analysis of Daylighting Benefits for Office Buildings in Egypt. Journal of Solar Energy Engineering, Transactions of the ASME, 2005, 127, 366-370.	1.8	10
60	Implementation of a building foundation heat transfer model in EnergyPlus. Journal of Building Performance Simulation, 2009, 2, 127-142.	2.0	10
61	An ice rink floor thermal model suitable for whole-building energy simulation analysis. Building and Environment, 2011, 46, 1087-1093.	6.9	10
62	An Analysis Model for Domestic Hot Water Distribution Systems. , 2011, , .		10
63	Hourly Solar Radiation Model Suitable for Worldwide Typical Weather File Generation. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	9
64	Performance of Thermoactive Foundations for Commercial Buildings. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	9
65	Kiva TM : a numerical framework for improving foundation heat transfer calculations. Journal of Building Performance Simulation, 2015, 8, 449-468.	2.0	9
66	Energy Efficient Systems and Strategies for Heating, Ventilating, and Air Conditioning (HVAC) of Buildings. Journal of Green Building, 2008, 3, 44-55.	0.8	9
67	Heat transfer beneath ice-rink floors. Building and Environment, 2008, 43, 1687-1698.	6.9	8
68	Design Optimization of Energy Efficient Office Buildings in Tunisia. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	8
69	Steady-state heat transfer from slab-on-grade floors with vertical insulation. International Journal of Heat and Mass Transfer, 1993, 36, 2147-2155.	4.8	7
70	Slab heat loss calculation with non-uniform inside air temperature profiles. Energy Conversion and Management, 1996, 37, 1435-1444.	9.2	7
71	Steady-Periodic Three-Dimensional Foundation Heat Transfer From Refrigerated Structures. Journal of Solar Energy Engineering, Transactions of the ASME, 2000, 122, 69-83.	1.8	7
72	Analysis of Heat and Moisture Transfer Beneath Freezer Foundationsâ€”Part I. Journal of Solar Energy Engineering, Transactions of the ASME, 2004, 126, 716-725.	1.8	7

#	ARTICLE	IF	CITATIONS
73	Optimal electrical circuiting layout and desk location for daylighting controlled spaces. Energy and Buildings, 2012, 51, 122-130.	6.7	7
74	Assessment of infiltration heat recovery and its impact on energy consumption for residential buildings. Energy Conversion and Management, 2014, 78, 316-323.	9.2	7
75	Evaluation of Optimal Hybrid Distributed Generation Systems for an Isolated Rural Settlement in Masirah Island, Oman. Distributed Generation and Alternative Energy Journal, 2015, 30, 23-42.	0.8	7
76	Energy Performance Evaluation of Shallow Ground Source Heat Pumps for Residential Buildings. Energies, 2022, 15, 1025.	3.1	7
77	Benefits of switchable insulation systems for residential buildings in France. Energy and Buildings, 2022, 259, 111868.	6.7	7
78	Review of Adoption Status of Sustainable Energy Technologies in the US Residential Building Sector. Energies, 2022, 15, 2027.	3.1	7
79	Steady-state heat transfer from horizontally insulated slabs. International Journal of Heat and Mass Transfer, 1993, 36, 2135-2145.	4.8	6
80	Time-varying heat transfer from partially insulated basements. International Journal of Heat and Mass Transfer, 1994, 37, 1657-1671.	4.8	6
81	Foundation heat transfer analysis for buildings with thermal piles. Energy Conversion and Management, 2015, 89, 449-457.	9.2	6
82	Evaluation of Thermo-Active Foundations for Heating and Cooling Residential Buildings. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.8	6
83	Steady-State Component of Three-Dimensional Slab-on-Grade Foundation Heat Transfer. Journal of Solar Energy Engineering, Transactions of the ASME, 2001, 123, 18-29.	1.8	5
84	Analysis of Heat and Moisture Transfer Beneath Freezer Foundations-Part II. Journal of Solar Energy Engineering, Transactions of the ASME, 2004, 126, 726-731.	1.8	5
85	Optimal insulation for ice rink floors. Energy and Buildings, 2015, 108, 358-364.	6.7	5
86	Analysis of high-energy performance residences in Nigeria. Energy Efficiency, 2019, 12, 681-695.	2.8	5
87	Impact of Wall Constructions on Energy Performance of Switchable Insulation Systems. Energies, 2020, 13, 6068.	3.1	5
88	Optimal Control Strategies for Switchable Transparent Insulation Systems Applied to Smart Windows for US Residential Buildings. Energies, 2021, 14, 2917.	3.1	5
89	A simulation method for fluctuating temperatures in crawlspace foundations. Energy and Buildings, 1997, 26, 183-188.	6.7	4
90	Optimization of Hybrid Distributed Generation Systems For Rural Communities in Alaska. Distributed Generation and Alternative Energy Journal, 2013, 28, 7-31.	0.8	4

#	ARTICLE	IF	CITATIONS
91	Three-dimensional accuracy with two-dimensional computation speed: using the Kiva numerical framework to improve foundation heat transfer calculations. Journal of Building Performance Simulation, 2017, 10, 161-182.	2.0	4
92	Optimal control strategies for hollow core ventilated slab systems. Journal of Building Engineering, 2019, 24, 100762.	3.4	4
93	Experimental Analysis of Heat Transfer From Ice Rink Floors. , 2006, , 681.		3
94	Hybrid Distributed Power Generation for an Isolated Rural Settlement in Masirah Island, Oman. , 2011, , .		3
95	Behavior and Testing Performance of a Gas Tankless Water Heater. , 2011, , .		3
96	A frequency-domain regression method for estimating building foundation heat transfer. Journal of Building Performance Simulation, 2012, 5, 93-104.	2.0	3
97	Development of design guidelines for thermo-active foundations. Indoor and Built Environment, 2018, 27, 805-817.	2.8	3
98	Advanced Building Energy Efficiency Systems. , 2018, , 45-115.		3
99	A Review and Categorization of Grid-Interactive Efficient Building Technologies for Building Performance Simulation. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	3
100	Optimal controls of precooling strategies using switchable insulation systems for commercial buildings. Applied Energy, 2022, 320, 119298.	10.1	3
101	Time-varying heat transfer from adjacent slab-on-grade floors. International Journal of Energy Research, 1998, 22, 289-301.	4.5	2
102	Local/global analysis applications to ground-coupled heat transfer. International Journal of Thermal Sciences, 2003, 42, 871-880.	4.9	2
103	A Simplified Method to Predict Energy Cost Savings in Office Buildings Using a Hybrid Desiccant, Absorption Chiller, and Natural Gas Turbine Cogeneration System With Thermal Storage. , 2007, , 787.		2
104	Impact of Solar Model Selection on Building Energy Analysis for Kuwait. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	2
105	Impact of Layered Soil on Foundation Heat Transfer for Slab-On Grade Floors. Journal of Solar Energy Engineering, Transactions of the ASME, 2012, 134, .	1.8	2
106	Control Strategies for Building Energy Systems. , 2018, , 117-187.		2
107	Integrated Design and Retrofit of Buildings. , 2018, , 313-384.		2
108	Cost-Effectiveness and Resiliency Evaluation of Net-Zero Energy U.S. Residential Communities. ASME Journal of Engineering for Sustainable Buildings and Cities, 2021, 2, .	0.9	2

#	ARTICLE	IF	CITATIONS
109	Optimal Control Strategies for Switchable Roof Insulation Systems Applied to US Residential Buildings. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	2
110	Evaluation of Ground Source Heat Pump Energy, Demand, and Greenhouse Potential in Colorado Residential Buildings. , 2010, , .		2
111	Parametric Analysis of Active and Passive Building Thermal Storage Utilization. , 2004, , 193.		1
112	Evaluation of Measurement and Verification Procedures for Retrofit Savings Using Calibrated Energy Building Models. , 2010, , .		1
113	Analysis of Thermo-Active Foundations With U-Tube Heat Exchangers. , 2011, , .		1
114	Evaluation of Energy Efficiency Improvement Program for Rental Homes. , 2011, , .		1
115	Analysis of End-Use Impact of Daylighting and Glare Controls for Private Office Spaces. LEUKOS - Journal of Illuminating Engineering Society of North America, 2015, 11, 61-87.	2.9	1
116	Integrated Design of Communities. , 2018, , 385-470.		1
117	Evaluation of Ground-Source Variable Refrigerant Flow System for U.S. Office Buildings. Sustainability, 2018, 10, 1621.	3.2	1
118	Impact of Shape on Residential Buildings Energy Performance. , 2005, , .		1
119	Evaluation of Energy Savings by Optimization Control in Thermal Energy Storage System. , 2006, , .		1
120	CFD-Based Parametric Analysis on the Performance of Personalized Partition Air Distribution Systems. , 2006, , .		1
121	Identifying Inefficient Single-Family Homes With Utility Bill Analysis. , 2010, , .		1
122	Greening Tenant/Landlord Processes: Demonstrating Transformation in the Industry. , 2010, , .		1
123	Analysis of the Energy Saving Potentials for Near-Zero Energy Buildings in Shanghai. , 2011, , .		1
124	Chapter 4 Analysis Methods for Building Energy Auditing. Mechanical and Aerospace Engineering, 2016, , 61-82.	0.0	1
125	Evaluation of Interactions Between Thermal Piles Integrated in Building Foundations. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	1
126	Multiple-Benefit Analysis of Scaling-Up Building Energy Efficiency Programs: The Case Study of Tunisia. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	1

#	ARTICLE	IF	CITATIONS
127	Feasibility Assessment of a Grid-Connected Carbon-Neutral Community in Midland, Texas. ASME Journal of Engineering for Sustainable Buildings and Cities, 2020, 1, .	0.9	1
128	Experimental Analysis of Thermal Comfort-Based Controls. , 2004, , 277.		0
129	Comparative Evaluation of Indoor Thermal Comfort for Green and Conventional Office Buildings. , 2004, , 177.		0
130	Genetic-Algorithm Based Controls for Daylighting. , 2006, , 609.		0
131	Comparative Thermal Analysis of Structural Insulated Panels and Wood Frame Walls for Residential Buildings. , 2006, , 659.		0
132	Impact of Solar Model Selection on Building Energy Analysis for Kuwait. , 2006, , 629.		0
133	Analysis of Demand Side Management Measures for Residential Buildings. , 2006, , 671.		0
134	Impact of Shape on Building Energy Use in Tunisia. , 2006, , 621.		0
135	Impact of Shape on Thermal Performance of Office Buildings in Kuwait. , 2007, , 607.		0
136	Analysis of Impact of Daylight Time Savings on Energy Use of Buildings in Kuwait. , 2009, , .		0
137	Impact of Layered Soil on Foundation Heat Transfer for Slab-On Grade Floors. , 2009, , .		0
138	Residential Energy Analysis: Regression Analysis of Heating Degree Days With Temperature Setback for Selected ASHRAE Climate Zones. , 2011, , .		0
139	Energy Efficiency Design Strategies for Greenhouse in Colorado. , 2012, , .		0
140	Evaluation of Hybrid Distributed Generation Systems for Four Locations in Mexico. , 2012, , .		0
141	Performance of Thermoactive Foundations for Commercial Buildings. , 2012, , .		0
142	Distributed Generation for Village of Hope. , 2012, , .		0
143	Analysis of Daylighting Benefits for Office Buildings in Egypt. , 2004, , .		0
144	Analysis of Electrical Energy Savings From Daylighting Through Skylights. , 2005, , .		0

#	ARTICLE	IF	CITATIONS
145	Controls of Multiple Chillers in Central Cooling Plants. , 2005, , .		0
146	A Simplified Method to Estimate Cooling Energy Savings From Night Ventilation for Office Buildings. , 2007, , .		0
147	Development of an Hourly Optimization Tool for Renewable Energy Systems. , 2010, , .		0
148	A Simple Method to Estimate Energy Savings for Structural Insulated Panels Applied to Single Family Homes. , 2010, , .		0
149	A Methodology to Quantify Residential Energy-Efficiency in a Heating-Dominated Climate. , 2011, , .		0
150	Hybrid Distributed Power Generation for Apartment Building Complexes in Korea. , 2012, , .		0
151	Impact of Above-Grade Walls on Three-Dimensional Building Foundation Heat Transfer From Slab-On Grade Floors. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.8	0