

# Jae-Weon Jeong

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124  
papers

1,875  
citations

24  
h-index

37  
g-index

131  
ext. papers

2,267  
ext. citations

5.5  
avg, IF

5.76  
L-index

#	Paper	IF	Citations
124	Inactivation of airborne microbial contaminants by a heat-pump-driven liquid-desiccant air-conditioning system. <i>Journal of Building Engineering</i> , <b>2022</b> , 50, 104157	5.2	0
123	Energy and economic analysis of organic Rankine cycle for liquid desiccant system. <i>Energy</i> , <b>2022</b> , 241, 122869	7.9	0
122	Simplified effectiveness and number of transfer unit model for a vacuum membrane dehumidifier applied to air conditioning. <i>Applied Thermal Engineering</i> , <b>2022</b> , 210, 118404	5.8	1
121	Design of a thermoelectric generator-assisted energy harvesting block considering melting temperature of phase change materials. <i>Renewable Energy</i> , <b>2022</b> , 193, 89-112	8.1	0
120	Energy performance enhancement in air-source heat pump with a direct evaporative cooler-applied condenser. <i>Case Studies in Thermal Engineering</i> , <b>2022</b> , 35, 102137	5.6	0
119	Development of empirical models to predict latent heat exchange performance for hollow fiber membrane-based ventilation system. <i>Applied Thermal Engineering</i> , <b>2022</b> , 213, 118686	5.8	1
118	Preliminary study on air-to-air latent heat exchanger fabricated using hollow fiber composite membrane for air-conditioning applications. <i>Energy Conversion and Management</i> , <b>2021</b> , 115000	10.6	3
117	Applicability of an organic Rankine cycle for a liquid desiccant-assisted dedicated outdoor air system in apartments. <i>Case Studies in Thermal Engineering</i> , <b>2021</b> , 28, 101663	5.6	0
116	Experimental study and prediction model of a liquid desiccant unit for humidification during the heating season. <i>Journal of Building Engineering</i> , <b>2021</b> , 45, 103549	5.2	0
115	Energy Benefit of Liquid Desiccant-Assisted Humidification in Buildings during Winter Operation. <i>Energies</i> , <b>2021</b> , 14, 1360	3.1	1
114	Energy Saving Potential of Radiant Floor Heating Assisted by an Air Source Heat Pump in Residential Buildings. <i>Energies</i> , <b>2021</b> , 14, 1321	3.1	2
113	Short Term Prediction of PV Power Output Generation Using Hierarchical Probabilistic Model. <i>Energies</i> , <b>2021</b> , 14, 2822	3.1	2
112	Energy impact of vacuum-based membrane dehumidification in building air-conditioning applications. <i>Applied Thermal Engineering</i> , <b>2021</b> , 182, 116094	5.8	10
111	Design of heat pump-driven liquid desiccant air conditioning systems for residential building. <i>Applied Thermal Engineering</i> , <b>2021</b> , 183, 116207	5.8	10
110	Energy saving potential of a vacuum-based membrane dehumidifier in a dedicated outdoor air system. <i>Energy Conversion and Management</i> , <b>2021</b> , 227, 113618	10.6	7
109	Energy saving potential of a model-predicted frost prevention method for energy recovery ventilators. <i>Applied Thermal Engineering</i> , <b>2021</b> , 185, 116450	5.8	2
108	Urban Public Service Analysis by GIS-MCDA for Sustainable Redevelopment: A Case Study of a Megacity in Korea. <i>Sustainability</i> , <b>2021</b> , 13, 1472	3.6	1

107	Annual performance evaluation of thermoelectric generator-assisted building-integrated photovoltaic system with phase change material. <i>Renewable and Sustainable Energy Reviews</i> , <b>2021</b> , 145, 111085	16.2	7
106	Phase-change material-integrated thermoelectric radiant panel: Experimental performance analysis and system design. <i>Applied Thermal Engineering</i> , <b>2021</b> , 194, 117082	5.8	2
105	Hybrid heat-pump-driven liquid-desiccant system: Experimental performance analysis for residential air-conditioning applications. <i>Applied Thermal Engineering</i> , <b>2021</b> , 195, 117236	5.8	6
104	Photopic illuminance-based black-box model for regulation of human circadian rhythm via daylight control. <i>Building and Environment</i> , <b>2021</b> , 203, 108069	6.5	2
103	Energy efficiency and economic analysis of variable frequency drive and variable pitch system: A case study of axial fan in hospital. <i>Journal of Building Engineering</i> , <b>2021</b> , 43, 103213	5.2	2
102	Indoor Environmental Quality Survey in Research Institute: A Floor-by-Floor Analysis. <i>Sustainability</i> , <b>2021</b> , 13, 14067	3.6	
101	Energy Performance Evaluation for Exterior Insulation System Consisting of Truss-Form Wire-Frame Mullion Filled with Glass Wool. <i>Energies</i> , <b>2020</b> , 13, 4486	3.1	2
100	Phase change material-integrated thermoelectric energy harvesting block as an independent power source for sensors in buildings. <i>Renewable and Sustainable Energy Reviews</i> , <b>2020</b> , 128, 109921	16.2	13
99	Energy benefit of organic Rankine cycle in high-rise apartment building served by centralized liquid desiccant and evaporative cooling-assisted ventilation system. <i>Sustainable Cities and Society</i> , <b>2020</b> , 60, 102280	10.1	8
98	Design and preliminary results of organic rankine cycle for liquid desiccant system. <i>Applied Thermal Engineering</i> , <b>2020</b> , 178, 115596	5.8	3
97	Machine learning algorithms for predicting occupants behaviour in the manual control of windows for cross-ventilation in homes. <i>Indoor and Built Environment</i> , <b>2020</b> , 1420326X2092707	1.8	7
96	Sensor minimization method for integrated daylighting control by a mathematical approach. <i>Energy and Buildings</i> , <b>2020</b> , 214, 109891	7	2
95	Numerical and Experimental Study on the Performance of Thermoelectric Radiant Panel for Space Heating. <i>Materials</i> , <b>2020</b> , 13,	3.5	5
94	Energy Performance Comparison between Two Liquid Desiccant and Evaporative Cooling-Assisted Air Conditioning Systems. <i>Energies</i> , <b>2020</b> , 13, 522	3.1	2
93	Sterilization effectiveness of in-duct ultraviolet germicidal irradiation system in liquid desiccant and indirect/direct evaporative cooling-assisted 100% outdoor air system. <i>Building and Environment</i> , <b>2020</b> , 186, 107350	6.5	5
92	Application of a phase change material to a thermoelectric ceiling radiant cooling panel as a heat storage layer. <i>Journal of Building Engineering</i> , <b>2020</b> , 32, 101787	5.2	8
91	Annual energy harvesting performance of a phase change material-integrated thermoelectric power generation block in building walls. <i>Energy and Buildings</i> , <b>2020</b> , 228, 110470	7	15
90	Development of a Building Occupant Survey System with 3D Spatial Information. <i>Sustainability</i> , <b>2020</b> , 12, 9943	3.6	2

89	Thermoelectric Module Integrated Fuel Cell in a Liquid Desiccant-Assisted Air-Conditioning System. <i>Heat Transfer Engineering</i> , <b>2020</b> , 41, 779-799	1.7	4
88	Energy benefits of organic Rankine cycle in a liquid desiccant and evaporative cooling-assisted air conditioning system. <i>Renewable Energy</i> , <b>2020</b> , 147, 2358-2373	8.1	9
87	Energy-saving potential of dedicated outdoor-air system assisted by vacuum-based membrane dehumidifier. <i>E3S Web of Conferences</i> , <b>2019</b> , 111, 01087	0.5	1
86	Development of empirical models to predict cooling performance of a thermoelectric radiant panel. <i>Energy and Buildings</i> , <b>2019</b> , 202, 109387	7	5
85	Field measurement of U-value using multiple sensors at test chamber and EIFS building. <i>Journal of Asian Architecture and Building Engineering</i> , <b>2019</b> , 18, 60-68	1	0
84	Energy Performance Comparison between Liquid-Desiccant-Assisted Air Conditioning System and Dedicated Outdoor Air System in Different Climatic Regions. <i>Energies</i> , <b>2019</b> , 12, 1798	3.1	2
83	Indoor Air Quality Enhancement Performance of Liquid Desiccant and Evaporative Cooling-Assisted Air Conditioning Systems. <i>Sustainability</i> , <b>2019</b> , 11, 1036	3.6	5
82	Optimum regeneration temperature of a desiccant solution in a packaged liquid desiccant-assisted air conditioning unit. <i>International Journal of Refrigeration</i> , <b>2019</b> , 101, 155-166	3.8	9
81	Applicability and energy saving potential of thermoelectric radiant panels in high-speed train cabins. <i>International Journal of Refrigeration</i> , <b>2019</b> , 104, 229-245	3.8	8
80	A numerical model and validation of phase change material integrated thermoelectric radiant cooling panel. <i>E3S Web of Conferences</i> , <b>2019</b> , 111, 01001	0.5	2
79	Effect of Desiccant Solution Temperature on Regeneration Performance of a Cross-Flow Regenerator. <i>E3S Web of Conferences</i> , <b>2019</b> , 111, 01086	0.5	
78	Experimental evaluation of phase change material in radiant cooling panels integrated with thermoelectric modules. <i>E3S Web of Conferences</i> , <b>2019</b> , 111, 01002	0.5	1
77	Passive generation from a novel thermoelectric energy harvesting system model integrated with phase change material. <i>E3S Web of Conferences</i> , <b>2019</b> , 111, 03060	0.5	
76	Applicability of thermoelectric heat pump in a dedicated outdoor air system. <i>Energy</i> , <b>2019</b> , 173, 244-262	7.9	19
75	Experimental analysis of dehumidification performance of an evaporative cooling-assisted internally cooled liquid desiccant dehumidifier. <i>Applied Energy</i> , <b>2019</b> , 235, 177-185	10.7	23
74	Experimental analysis of dehumidification performance of counter and cross-flow liquid desiccant dehumidifiers. <i>Applied Thermal Engineering</i> , <b>2019</b> , 150, 210-223	5.8	31
73	Energy benefit of a cascade liquid desiccant dehumidification in a desiccant and evaporative cooling-assisted building air-conditioning system. <i>Applied Thermal Engineering</i> , <b>2019</b> , 147, 291-301	5.8	15
72	Performance investigation of an independent dedicated outdoor air system for energy-plus houses. <i>Applied Thermal Engineering</i> , <b>2019</b> , 146, 306-317	5.8	10

71	Energy saving potential of thermoelectric radiant cooling panels with a dedicated outdoor air system. <i>Energy and Buildings</i> , <b>2018</b> , 169, 353-365	7	23
70	Energy saving potential of thermoelectric modules integrated into liquid desiccant system for solution heating and cooling. <i>Applied Thermal Engineering</i> , <b>2018</b> , 136, 49-62	5.8	18
69	Impact of Heat Pump-Driven Liquid Desiccant Dehumidification on the Energy Performance of an Evaporative Cooling-Assisted Air Conditioning System. <i>Energies</i> , <b>2018</b> , 11, 345	3.1	12
68	Empirical Analysis for the Heat Exchange Effectiveness of a Thermoelectric Liquid Cooling and Heating Unit. <i>Energies</i> , <b>2018</b> , 11, 580	3.1	6
67	Energy Performance of Liquid Desiccant and Evaporative Cooling-Assisted 100% Outdoor Air Systems under Various Climatic Conditions. <i>Energies</i> , <b>2018</b> , 11, 1377	3.1	9
66	Evaluation of thermal comfort in an office building served by a liquid desiccant-assisted evaporative cooling air-conditioning system. <i>Energy and Buildings</i> , <b>2018</b> , 172, 361-370	7	15
65	Thermoelectric radiant cooling panel design: Numerical simulation and experimental validation. <i>Applied Thermal Engineering</i> , <b>2018</b> , 144, 248-261	5.8	26
64	Impact of an Ultraviolet Reactor on the Improvement of Air Quality Leaving a Direct Evaporative Cooler. <i>Sustainability</i> , <b>2018</b> , 10, 1123	3.6	2
63	Evaluation of UR-UVGI System for Sterilization Effect on Microorganism Contamination in Negative Pressure Isolation Ward. <i>Sustainability</i> , <b>2018</b> , 10, 3192	3.6	8
62	Evaluation of the visibility of colored objects under led lighting with various correlated color temperatures. <i>Color Research and Application</i> , <b>2017</b> , 42, 78-88	1.3	7
61	Impact of district heat source on primary energy savings of a desiccant-enhanced evaporative cooling system. <i>Energy</i> , <b>2017</b> , 123, 432-444	7.9	20
60	Energy saving assessment of a desiccant-enhanced evaporative cooling system in variable air volume applications. <i>Applied Thermal Engineering</i> , <b>2017</b> , 117, 94-108	5.8	18
59	Empirical analysis of indoor air quality enhancement potential in a liquid-desiccant assisted air conditioning system. <i>Building and Environment</i> , <b>2017</b> , 121, 11-25	6.5	19
58	Experimental study on airtightness test methods in large buildings; proposal of averaging pressure difference method. <i>Building and Environment</i> , <b>2017</b> , 122, 61-71	6.5	9
57	Cooling performance measurement of two cross-flow indirect evaporative coolers in general and regenerative operation modes. <i>Applied Energy</i> , <b>2017</b> , 195, 268-277	10.7	34
56	Experimental verification of a virtual water flowmeter applicable to air conditioning systems. <i>Energy and Buildings</i> , <b>2017</b> , 155, 425-438	7	8
55	Mass loading of particles in the supply ducts of mechanical ventilation systems in homes. <i>Building and Environment</i> , <b>2017</b> , 126, 348-354	6.5	3
54	Energy-Saving Benefits of Adiabatic Humidification in the Air Conditioning Systems of Semiconductor Cleanrooms. <i>Energies</i> , <b>2017</b> , 10, 1774	3.1	13

53	Energy Saving Potential of a Thermoelectric Heat Pump-Assisted Liquid Desiccant System in a Dedicated Outdoor Air System. <i>Energies</i> , <b>2017</b> , 10, 1306	3.1	5
52	Operating Energy Savings of a Liquid Desiccant and Evaporative Cooling-Assisted Air-Handling System in Marine Applications. <i>Energies</i> , <b>2017</b> , 10, 487	3.1	5
51	Impact of aisle containment on energy performance of a data center when using an integrated water-side economizer. <i>Applied Thermal Engineering</i> , <b>2016</b> , 105, 372-384	5.8	26
50	Primary energy savings in desiccant and evaporative cooling-assisted 100% outdoor air system combined with a fuel cell. <i>Applied Energy</i> , <b>2016</b> , 180, 446-456	10.7	20
49	Occupant behavior regarding the manual control of windows in residential buildings. <i>Energy and Buildings</i> , <b>2016</b> , 127, 206-216	7	70
48	Empirical model for predicting the dehumidification effectiveness of a liquid desiccant system. <i>Energy and Buildings</i> , <b>2016</b> , 126, 447-454	7	26
47	Estimating thermal performance and energy saving potential of residential buildings using utility bills. <i>Energy and Buildings</i> , <b>2016</b> , 110, 23-30	7	28
46	Operating energy savings in a liquid desiccant and dew point evaporative cooling-assisted 100% outdoor air system. <i>Energy and Buildings</i> , <b>2016</b> , 116, 535-552	7	37
45	Retrofit of a liquid desiccant and evaporative cooling-assisted 100% outdoor air system for enhancing energy saving potential. <i>Applied Thermal Engineering</i> , <b>2016</b> , 96, 441-453	5.8	20
44	DPHX (dew point evaporative heat exchanger): System design and performance analysis. <i>Energy</i> , <b>2016</b> , 101, 132-145	7.9	16
43	Energy benefit of a dedicated outdoor air system over a desiccant-enhanced evaporative air conditioner. <i>Applied Thermal Engineering</i> , <b>2016</b> , 108, 804-815	5.8	21
42	Energy conservation benefit of water-side free cooling in a liquid desiccant and evaporative cooling-assisted 100% outdoor air system. <i>Energy and Buildings</i> , <b>2015</b> , 104, 302-315	7	13
41	Simplified model for packed-bed tower regenerator in a liquid desiccant system. <i>Applied Thermal Engineering</i> , <b>2015</b> , 89, 717-726	5.8	41
40	Practical thermal performance correlations for a wet-coil indirect evaporative cooler. <i>Energy and Buildings</i> , <b>2015</b> , 96, 285-298	7	18
39	Application of desiccant systems for improving the performance of an evaporative cooling-assisted 100% outdoor air system in hot and humid climates. <i>Journal of Building Performance Simulation</i> , <b>2015</b> , 8, 173-190	2.8	10
38	A simplified PEM fuel cell model for building cogeneration applications. <i>Energy and Buildings</i> , <b>2015</b> , 107, 213-225	7	26
37	Energy saving potential of various air-side economizers in a modular data center. <i>Applied Energy</i> , <b>2015</b> , 138, 258-275	10.7	67
36	Simplified server model to simulate data center cooling energy consumption. <i>Energy and Buildings</i> , <b>2015</b> , 86, 328-339	7	45

35	Optimum supply air temperature ranges of various air-side economizers in a modular data center. <i>Applied Thermal Engineering</i> , <b>2015</b> , 77, 163-179	5.8	44
34	Empirical Performance Prediction Model for Polymer Electrolyte Membrane Fuel Cell (PEMFC). <i>Journal of the Architectural Institute of Korea Planning &amp; Design</i> , <b>2015</b> , 31, 203-210		
33	Annual operating energy savings of liquid desiccant and evaporative-cooling-assisted 100% outdoor air system. <i>Energy and Buildings</i> , <b>2014</b> , 76, 538-550	7	57
32	Optimization of a free-form building shape to minimize external thermal load using genetic algorithm. <i>Energy and Buildings</i> , <b>2014</b> , 85, 473-482	7	51
31	Impact of integrated hot water cooling and desiccant-assisted evaporative cooling systems on energy savings in a data center. <i>Energy</i> , <b>2014</b> , 78, 384-396	7.9	26
30	Effects of types of ventilation system on indoor particle concentrations in residential buildings. <i>Indoor Air</i> , <b>2014</b> , 24, 629-38	5.4	62
29	Integration of hot-water cooling and evaporative cooling system for datacenter <b>2014</b> , 15-20		2
28	Development of Desiccant and Evaporative Cooling Based 100% Outdoor System <b>2013</b> ,		1
27	Energy saving potential of liquid desiccant in evaporative-cooling-assisted 100% outdoor air system. <i>Energy</i> , <b>2013</b> , 59, 726-736	7.9	65
26	Energy saving potential of a hybrid ventilation system integrated with heat storage material. <i>Energy and Buildings</i> , <b>2013</b> , 57, 346-353	7	12
25	Feasibility of building envelope air leakage measurement using combination of air-handler and blower door. <i>Energy and Buildings</i> , <b>2013</b> , 62, 436-441	7	17
24	Applying micro genetic algorithm to numerical model for luminous intensity distribution of planar prism LED luminaire. <i>Optics Communications</i> , <b>2013</b> , 293, 22-30	2	8
23	Thermal characteristic prediction models for a free-form building in various climate zones. <i>Energy</i> , <b>2013</b> , 50, 468-476	7.9	9
22	Cooling performance of a 100% outdoor air system integrated with indirect and direct evaporative coolers. <i>Energy</i> , <b>2013</b> , 52, 245-257	7.9	53
21	Building Envelope Leakage Measurement Using the Air-Handler Fan Pressurization Approach <b>2013</b> ,		1
20	Energy Saving Potentials of Demand-Controlled Ventilation Based On the Real-Time Traffic Load in Underground Parking Facilities <b>2013</b> ,		2
19	Development of a Numerical Model for the Luminous Intensity Distribution of a Planar Prism LED Luminaire for Applying an Optimization Algorithm. <i>LEUKOS - Journal of Illuminating Engineering Society of North America</i> , <b>2012</b> , 9, 57-72	3.5	1
18	Precise control of a correlated color temperature tunable luminaire for a suitable luminous environment. <i>Building and Environment</i> , <b>2012</b> , 57, 302-312	6.5	15

17	Energy performance of an evaporative cooler assisted 100% outdoor air system in the heating season operation. <i>Energy and Buildings</i> , <b>2012</b> , 49, 402-409	7	9
16	Energy Saving Potentials of a 100% Outdoor Air System Integrated with Indirect and Direct Evaporative Coolers for Clean Rooms. <i>Journal of Asian Architecture and Building Engineering</i> , <b>2012</b> , 11, 399-405	1	2
15	Overall Heat Transfer Coefficient of a Korean Traditional Building Envelope Estimated Through Heat Flux Measurement. <i>Journal of Asian Architecture and Building Engineering</i> , <b>2011</b> , 10, 263-270	1	3
14	Experimental study on the heat exchange effectiveness of a dry coil indirect evaporation cooler under various operating conditions. <i>Energy</i> , <b>2011</b> , 36, 6479-6489	7.9	18
13	Performance of integrated systems of automated roller shade systems and daylight responsive dimming systems. <i>Building and Environment</i> , <b>2011</b> , 46, 747-757	6.5	19
12	Energy conservation potential of an indirect and direct evaporative cooling assisted 100% outdoor air system. <i>Building Services Engineering Research and Technology</i> , <b>2011</b> , 32, 345-360	2.3	15
11	A Preliminary Study on the Performance of Daylight Responsive Dimming Systems with Improved Closed-Loop Control Algorithm. <i>LEUKOS - Journal of Illuminating Engineering Society of North America</i> , <b>2011</b> , 8, 41-59	3.5	3
10	Improvement in demand-controlled ventilation simulation on multi-purposed facilities under an occupant based ventilation standard. <i>Simulation Modelling Practice and Theory</i> , <b>2010</b> , 18, 51-62	3.9	17
9	Critical Review of Aerosol Particle Transport Models for Building HVAC Ducts. <i>Journal of Architectural Engineering</i> , <b>2009</b> , 15, 74-83	1.5	7
8	Development of conceptual model of construction factory for automated construction. <i>Building and Environment</i> , <b>2009</b> , 44, 1634-1642	6.5	10
7	Case studies of building envelope leakage measurement using an air-handler fan pressurisation approach. <i>Building Services Engineering Research and Technology</i> , <b>2008</b> , 29, 137-155	2.3	16
6	Feasibility of wireless measurements for semi-empirical multizone airflow model tuning. <i>Building and Environment</i> , <b>2008</b> , 43, 1507-1520	6.5	24
5	Practical cooling capacity estimation model for a suspended metal ceiling radiant cooling panel. <i>Building and Environment</i> , <b>2007</b> , 42, 3176-3185	6.5	55
4	Practical thermal performance correlations for molecular sieve and silica gel loaded enthalpy wheels. <i>Applied Thermal Engineering</i> , <b>2005</b> , 25, 719-740	5.8	50
3	Simplified cooling capacity estimation model for top insulated metal ceiling radiant cooling panels. <i>Applied Thermal Engineering</i> , <b>2004</b> , 24, 2055-2072	5.8	60
2	Impact of Mixed Convection on Ceiling Radiant Cooling Panel Capacity. <i>HVAC and R Research</i> , <b>2003</b> , 9, 251-257		23
1	Ceiling radiant cooling panel capacity enhanced by mixed convection in mechanically ventilated spaces. <i>Applied Thermal Engineering</i> , <b>2003</b> , 23, 2293-2306	5.8	69