Stefano Schiavon

List of Publications by Year
in descending order

94 papers	6,077 citations	76196 40 h-index	74018 75 g-index
97 all docs	97 docs citations	97 times ranked	3232 citing authors

#	Article	IF	Citations
1	Quantitative relationships between occupant satisfaction and satisfaction aspects of indoor environmental quality and building design. Indoor Air, 2012, 22, 119-131.	2.0	391
2	Personal comfort models â€“ A new paradigm in thermal comfort for occupant-centric environmental control. Building and Environment, 2018, 132, 114-124.	3.0	308
3	Personal comfort models: Predicting individuals' thermal preference using occupant heating and cooling behavior and machine learning. Building and Environment, 2018, 129, 96-106.	3.0	303
4	Development of the ASHRAE Global Thermal Comfort Database II. Building and Environment, 2018, 142, 502-512.	3.0	279
5	Analysis of the accuracy on PMV â€“ PPD model using the ASHRAE Global Thermal Comfort Database II. Building and Environment, 2019, 153, 205-217.	3.0	277
6	Occupant satisfaction in LEED and non-LEED certified buildings. Building and Environment, 2013, 68, 66-76.	3.0	214
7	Indoor environmental quality assessment models: A literature review and a proposed weighting and classification scheme. Building and Environment, 2013, 70, 210-222.	3.0	208
8	CBE Thermal Comfort Tool: Online tool for thermal comfort calculations and visualizations. SoftwareX, 2020, 12, 100563.	1.2	170
9	Personal thermal comfort models with wearable sensors. Building and Environment, 2019, 162, 106281.	3.0	160
10	Energy saving and improved comfort by increased air movement. Energy and Buildings, 2008, 40, 1954-1960.	3.1	157
11	Dynamic predictive clothing insulation models based on outdoor air and indoor operative temperatures. Building and Environment, 2013, 59, 250-260.	3.0	154
12	A review of advanced air distribution methods - theory, practice, limitations and solutions. Energy and Buildings, 2019, 202, 109359.	3.1	138
13	Thermal comfort in buildings using radiant vs. all-air systems: A critical literature review. Building and Environment, 2017, 111, 123-131.	3.0	129
14	Thermal comfort and self-reported productivity in an office with ceiling fans in the tropics. Building and Environment, 2018, 135, 202-212.	3.0	122
15	The impact of a view from a window on thermal comfort, emotion, and cognitive performance. Building and Environment, 2020, 175, 106779.	3.0	117
16	Modeling the comfort effects of short-wave solar radiation indoors. Building and Environment, 2015, 88, 3-9.	3.0	116
17	Influence of factors unrelated to environmental quality on occupant satisfaction in LEED and non-LEED certified buildings. Building and Environment, 2014, 77, 148-159.	3.0	107
18	Ten questions concerning well-being in the built environment. Building and Environment, 2020, 180, 106949.	3.0	105

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19	Energy analysis of the personalized ventilation system in hot and humid climates. Energy and Buildings, 2010, 42, 699-707.	3.1	104
20	Thermal comfort, perceived air quality, and cognitive performance when personally controlled air movement is used by tropically acclimatized persons. Indoor Air, 2017, 27, 690-702.	2.0	102
21	Automated mobile sensing: Towards high-granularity agile indoor environmental quality monitoring. Building and Environment, 2018, 127, 268-276.	3.0	98
22	Indoor environmental quality and occupant satisfaction in green-certified buildings. Building Research and Information, 2019, 47, 255-274.	2.0	89
23	Cooling load differences between radiant and air systems. Energy and Buildings, 2013, 65, 310-321.	3.1	88
24	A thermal comfort environmental chamber study of older and younger people. Building and Environment, 2019, 155, 1-14.	3.0	75
25	pythermalcomfort: A Python package for thermal comfort research. SoftwareX, 2020, 12, 100578.	1.2	72
26	PMV-based event-triggered mechanism for building energy management under uncertainties. Energy and Buildings, 2017, 152, 73-85.	3.1	69
27	Evaluating assumptions of scales for subjective assessment of thermal environments â€“ Do laypersons perceive them the way, we researchers believe?. Energy and Buildings, 2020, 211, 109761.	3.1	68
28	Web application for thermal comfort visualization and calculation according to ASHRAE Standard 55. Building Simulation, 2014, 7, 321-334.	3.0	64
29	A novel classification scheme for design and control of radiant system based on thermal response time. Energy and Buildings, 2017, 137, 38-45.	3.1	64
30	Lessons learned from 20 years of CBEâ€™s occupant surveys. Buildings and Cities, 2021, 2, 166-184.	1.1	60
31	Energy-saving strategies with personalized ventilation in cold climates. Energy and Buildings, 2009, 41, 543-550.	3.1	59
32	Simplified calculation method for design cooling loads in underfloor air distribution (UFAD) systems. Energy and Buildings, 2011, 43, 517-528.	3.1	59
33	New method for the design of radiant floor cooling systems with solar radiation. Energy and Buildings, 2016, 125, 9-18.	3.1	52
34	Design Automation for Smart Building Systems. Proceedings of the IEEE, 2018, 106, 1680-1699.	16.4	52
35	Comparison of mean radiant and air temperatures in mechanically-conditioned commercial buildings from over 200,000 field and laboratory measurements. Energy and Buildings, 2020, 206, 109582.	3.1	52
36	Sensation of draft at uncovered ankles for women exposed to displacement ventilation and underfloor air distribution systems. Building and Environment, 2016, 96, 228-236.	3.0	51

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37	Experimental comparison of zone cooling load between radiant and air systems. Energy and Buildings, 2014, 84, 152-159.	3.1	48
38	Influence of raised floor on zone design cooling load in commercial buildings. Energy and Buildings, 2010, 42, 1182-1191.	3.1	47
39	Comparing temperature and acoustic satisfaction in 60 radiant and all-air buildings. Building and Environment, 2017, 126, 431-441.	3.0	46
40	Satisfaction with indoor environmental quality in BREEAM and non-BREEAM certified office buildings. Architectural Science Review, 2017, 60, 343-355.	1.1	45
41	Cooling efficiency of a brushless direct current stand fan. Building and Environment, 2015, 85, 196-204.	3.0	42
42	Evaluation of the effect of landscape distance seen in window views on visual satisfaction. Building and Environment, 2020, 183, 107160.	3.0	40
43	Effect of sensor position on the performance of CO2-based demand controlled ventilation. Energy and Buildings, 2019, 202, 109358.	3.1	39
44	Longitudinal assessment of thermal and perceived air quality acceptability in relation to temperature, humidity, and CO2 exposure in Singapore. Building and Environment, 2017, 115, 80-90.	3.0	38
45	Side-by-side laboratory comparison of space heat extraction rates and thermal energy use for radiant and all-air systems. Energy and Buildings, 2018, 176, 139-150.	3.1	38
46	Personal CO2 cloud: laboratory measurements of metabolic CO2 inhalation zone concentration and dispersion in a typical office desk setting. Journal of Exposure Science and Environmental Epidemiology, 2020, 30, 328-337.	1.8	37
47	Occupant satisfaction with the indoor environment in seven commercial buildings in Singapore. Building and Environment, 2021, 188, 107443.	3.0	37
48	Energy and Cost Associated with Ventilating Office Buildings in a Tropical Climate. PLoS ONE, 2015, 10, e0122310.	1.1	37
49	A Window View Quality Assessment Framework. LEUKOS - Journal of Illuminating Engineering Society of North America, 2022, 18, 268-293.	1.5	35
50	Ceiling fans: Predicting indoor air speeds based on full scale laboratory measurements. Building and Environment, 2019, 155, 210-223.	3.0	34
51	Predicted percentage dissatisfied with ankle draft. Indoor Air, 2017, 27, 852-862.	2.0	32
52	Real-time monitoring of personal exposures to carbon dioxide. Building and Environment, 2016, 104, 59-67.	3.0	31
53	A tracking cooling fan using geofence and camera-based indoor localization. Building and Environment, 2017, 114, 36-44.	3.0	31
54	A Global Building Occupant Behavior Database. Scientific Data, 2022, 9, .	2.4	31

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55	Full scale laboratory experiment on the cooling capacity of a radiant floor system. Energy and Buildings, 2018, 170, 134-144.	3.1	29
56	Detailed experimental investigation of air speed field induced by ceiling fans. Building and Environment, 2018, 142, 342-360.	3.0	29
57	A data-driven approach to defining acceptable temperature ranges in buildings. Building and Environment, 2019, 153, 302-312.	3.0	29
58	Improved long-term thermal comfort indices for continuous monitoring. Energy and Buildings, 2020, 224, 110270.	3.1	27
59	Introduction of a Cooling-Fan Efficiency Index. HVAC and R Research, 2009, 15, 1121-1144.	0.9	26
60	Thermal decay in underfloor air distribution (UFAD) systems: Fundamentals and influence on system performance. Applied Energy, 2012, 91, 197-207.	5.1	26
61	Meta-analysis of 35 studies examining the effect of indoor temperature on office work performance. Building and Environment, 2021, 203, 108037.	3.0	26
62	Sizeâ€resolved dynamics of indoor and outdoor fluorescent biological aerosol particles in a bedroom: A oneâ€month case study in Singapore. Indoor Air, 2020, 30, 942-954.	2.0	25
63	Correlations in thermal comfort and natural wind. Journal of Thermal Biology, 2013, 38, 419-426.	1.1	23
64	Influence of Three Dynamic Predictive Clothing Insulation Models on Building Energy Use, HVAC Sizing and Thermal Comfort. Energies, 2014, 7, 1917-1934.	1.6	21
65	Effect of acoustical clouds coverage and air movement on radiant chilled ceiling cooling capacity. Energy and Buildings, 2018, 158, 939-949.	3.1	21
66	Side-by-side laboratory comparison of radiant and all-air cooling: How natural ventilation cooling and heat gain characteristics impact space heat extraction rates and daily thermal energy use. Energy and Buildings, 2019, 200, 68-85.	3.1	21
67	A data-driven analysis of occupant workspace dissatisfaction. Building and Environment, 2021, 205, 108270.	3.0	21
68	Overcooling of offices reveals gender inequity in thermal comfort. Scientific Reports, 2021, 11, 23684.	1.6	21
69	Chilled ceiling and displacement ventilation system: Laboratory study with high cooling load. Science and Technology for the Built Environment, 2015, 21, 944-956.	0.8	20
70	The Scales Project, a cross-national dataset on the interpretation of thermal perception scales. Scientific Data, 2019, 6, 289.	2.4	19
71	Field investigations of a smiley-face polling station for recording occupant satisfaction with indoor climate. Building and Environment, 2020, 185, 107266.	3.0	19
72	Predicted percentage dissatisfied with vertical temperature gradient. Energy and Buildings, 2020, 220, 110085.	3.1	18

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73	Plug load energy analysis: The role of plug loads in LEED certification and energy modeling. Energy and Buildings, 2014, 76, 328-335.	3.1	17
74	Stratification prediction model for perimeter zone UFAD diffusers based on laboratory testing with solar simulator. Energy and Buildings, 2014, 82, 786-794.	3.1	17
75	Cooling capacity and acoustic performance of radiant slab systems with free-hanging acoustical clouds. Energy and Buildings, 2017, 138, 676-686.	3.1	17
76	Ventilation, thermal and luminous autonomy metrics for an integrated design process. Building and Environment, 2018, 145, 153-165.	3.0	17
77	Development of Wholeâ€Building Energy Models for Detailed Energy Insights of a Large Office Building with Green Certification Rating in Singapore. Energy Technology, 2018, 6, 84-93.	1.8	15
78	Impacts of life satisfaction, job satisfaction and the Big Five personality traits on satisfaction with the indoor environment. Building and Environment, 2022, 212, 108783.	3.0	15
79	Targeted occupant surveys: A novel method to effectively relate occupant feedback with environmental conditions. Building and Environment, 2020, 184, 107129.	3.0	14
80	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
81	A dimensionality reduction method to select the most representative daylight illuminance distributions. Journal of Building Performance Simulation, 2020, 13, 122-135.	1.0	13
82	Balancing thermal comfort datasets. , 2020, , .		13
83	Laboratory testing of a displacement ventilation diffuser for underfloor air distribution systems. Energy and Buildings, 2015, 108, 82-91.	3.1	12
84	Adaptable cooling coil performance during part loads in the tropicsâ€"A computational evaluation. Energy and Buildings, 2018, 159, 148-163.	3.1	12
85	A Bayesian method of evaluating discomfort due to glare: The effect of order bias from a large glare source. Building and Environment, 2018, 146, 258-267.	3.0	11
86	Application of Gaggeâ€™s energy balance model to determine humidity-dependent temperature thresholds for healthy adults using electric fans during heatwaves. Building and Environment, 2022, 207, 108437.	3.0	11
87	Coordinate control of air movement for optimal thermal comfort. Science and Technology for the Built Environment, 2018, 24, 886-896.	0.8	10
88	Impact of Cognitive Tasks on CO₂ and Isoprene Emissions from Humans. Environmental Science & Technology, 2021, 55, 139-148.	4.6	10
89	Unsupervised personal thermal comfort prediction via adversarial domain adaptation. , 2021, , .		6
90	Adventitious ventilation: a new definition for an old mode?. Indoor Air, 2014, 24, 557-558.	2.0	3

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91	Experimental evaluation of visual flicker caused by ceiling fans. Building and Environment, 2020, 182, 107060.	3.0	3
92	Field evaluation of thermal and acoustical comfort in eight North-American buildings using embedded radiant systems. PLoS ONE, 2021, 16, e0258888.	1.1	2
93	Effects of IAQ on Office Work Performance. , 2022, , 1-27.		1
94	Indoor environmental quality monitoring by autonomous mobile sensing. , 2017, , .		0