Marcel Schweiker

List of Publications by Citations

68 papers	1,630 citations	23 h-index	39 g-index
71 ext. papers	2,100 ext. citations	5.3 avg, IF	5.3 L-index

#	Paper	IF	Citations
68	Development of the ASHRAE Global Thermal Comfort Database II. *Building and Environment*, **2018**, 142, 502-512	6.5	164
67	Verification of stochastic models of window opening behaviour for residential buildings. *Journal of Building Performance Simulation*, **2012**, 5, 55-74	2.8	119
66	Comparison of theoretical and statistical models of air-conditioning-unit usage behaviour in a residential setting under Japanese climatic conditions. *Building and Environment*, **2009**, 44, 2137-2149	6.5	111
65	Does the occupant behavior match the energy concept of the building? Analysis of a German naturally ventilated office building. *Building and Environment*, **2015**, 84, 142-150	6.5	80
64	A framework for an adaptive thermal heat balance model (ATHB). *Building and Environment*, **2015**, 94, 252-262	6.5	72
63	The effect of occupancy on perceived control, neutral temperature, and behavioral patterns. *Energy and Buildings*, **2016**, 117, 246-259	7	72
62	Drivers of diversity in human thermal perception - A review for holistic comfort models. *Temperature*, **2018**, 5, 308-342	5.2	72
61	Challenging the assumptions for thermal sensation scales. *Building Research and Information*, **2017**, 45, 572-589	4.3	70
60	Review of multi-domain approaches to indoor environmental perception and behaviour. *Building and Environment*, **2020**, 176, 106804	6.5	66
59	Introducing IEA EBC annex 79: Key challenges and opportunities in the field of occupant-centric building design and operation. *Building and Environment*, **2020**, 178, 106738	6.5	62
58	Comparative effects of building envelope improvements and occupant behavioural changes on the exergy consumption for heating and cooling. *Energy Policy*, **2010**, 38, 2976-2986	7.2	47
57	A review of select human-building interfaces and their relationship to human behavior, energy use and occupant comfort. *Building and Environment*, **2020**, 178, 106920	6.5	44
56	Development and validation of a methodology to challenge the adaptive comfort model. *Building and Environment*, **2012**, 49, 336-347	6.5	44
55	What drives our behaviors in buildings? A review on occupant interactions with building systems from the lens of behavioral theories. *Building and Environment*, **2020**, 179, 106928	6.5	41
54	On uses of energy in buildings: Extracting influencing factors of occupant behaviour by means of a questionnaire survey. *Energy and Buildings*, **2018**, 168, 298-308	7	37
53	Short- and long-term acclimatization in outdoor spaces: Exposure time, seasonal and heatwave adaptation effects. *Building and Environment*, **2017**, 116, 17-29	6.5	36
52	Personal comfort systems: A review on comfort, energy, and economics. *Energy and Buildings*, **2020**, 214, 109858	7	34

51	Evaluating assumptions of scales for subjective assessment of thermal environments Do laypersons perceive them the way, we researchers believe?. *Energy and Buildings*, **2020**, 211, 109761	7	34
50	The influence of personality traits on occupant behavioural patterns. *Energy and Buildings*, **2016**, 131, 63-75	7	27
49	Adaptive comfort from the viewpoint of human body exergy consumption. *Building and Environment*, **2012**, 51, 351-360	6.5	26
48	Explaining the individual processes leading to adaptive comfort: Exploring physiological, behavioural and psychological reactions to thermal stimuli. *Journal of Building Physics*, **2013**, 36, 438-463	2.6	25
47	A framework for adopting adaptive thermal comfort principles in design and operation of buildings. *Energy and Buildings*, **2019**, 205, 109476	7	24
46	Thermo-specific self-efficacy (specSE) in relation to perceived comfort and control. *Building and Environment*, **2016**, 102, 193-206	6.5	24
45	Thermal expectation: Influencing factors and its effect on thermal perception. *Energy and Buildings*, **2020**, 210, 109729	7	21
44	comf: An R Package for Thermal Comfort Studies. *R Journal*, **2016**, 8, 341	3.3	19
43	Influences on the predictive performance of thermal sensation indices. *Building Research and Information*, **2017**, 45, 745-758	4.3	16
42	Comfort-related feedforward information: occupants choice of cooling strategy and perceived comfort. *Building Research and Information*, **2017**, 45, 222-238	4.3	15
41	Exploring internal body heat balance to understand thermal sensation. *Building Research and Information*, **2017**, 45, 808-818	4.3	14
40	Unsteady-state human-body exergy consumption rate and its relation to subjective assessment of dynamic thermal environments. *Energy and Buildings*, **2016**, 116, 164-180	7	14
39	Investigation on the effectiveness of various methods of information dissemination aiming at a change of occupant behaviour related to thermal comfort and exergy consumption. *Energy Policy*, **2011**, 39, 395-407	7.2	14
38	The Role of Occupants in Buildings Energy Performance Gap: Myth or Reality?. *Sustainability*, **2021**, 13, 3146	3.6	14
37	A seasonal approach to alliesthesia. Is there a conflict with thermal adaptation?. *Energy and Buildings*, **2020**, 212, 109745	7	13
36	The Scales Project, a cross-national dataset on the interpretation of thermal perception scales. *Scientific Data*, **2019**, 6, 289	8.2	12
35	Understanding Occupants Behaviour for Energy Efficiency in Buildings. *Current Sustainable/Renewable Energy Reports*, **2017**, 4, 8-14	2.8	10
34	Subgroups holding different conceptions of scales rate room temperatures differently. *Building and Environment*, **2018**, 128, 236-247	6.5	10

33	Occupancy and Occupants□Actions **2018**, 7-38		10
32	INVESTIGATION ON THE RELATIONSHIP BETWEEN OCCUPANTS' INDIVIDUAL DIFFERENCE AND AIR-CONDITIONING USAGE DURING NIGHTTIME IN SUMMER. *Journal of Environmental Engineering (Japan)*, **2008**, 73, 1275-1282	0.3	8
31	Get the picture? Lessons learned from a smartphone-based post-occupancy evaluation. *Energy Research and Social Science*, **2019**, 56, 101224	7.7	7
30	Study on the effect of preference of air-conditioning usage on the exergy consumption pattern within a built environment. *International Journal of Exergy*, **2012**, 11, 409	1.2	7
29	Personalized ceiling fans: Effects of air motion, air direction and personal control on thermal comfort. *Energy and Buildings*, **2021**, 235, 110721	7	7
28	Experimental Evaluation of Radiant Heating Ceiling Systems Based on Thermal Comfort Criteria. *Energies*, **2018**, 11, 2932	3.1	7
27	Test rooms to study human comfort in buildings: A review of controlled experiments and facilities. *Renewable and Sustainable Energy Reviews*, **2021**, 149, 111359	16.2	7
26	Necessary Conditions for Multi-Domain Indoor Environmental Quality Standards. *Sustainability*, **2020**, 12, 8439	3.6	6
25	What does "moderate pain" mean? Subgroups holding different conceptions of rating scales evaluate experimental pain differently. *European Journal of Pain*, **2020**, 24, 625-638	3.7	6
24	Seeing is believing: an innovative approach to post-occupancy evaluation. *Energy Efficiency*, **2020**, 13, 473-486	3	6
23	Insights into the effects of occupant behaviour lifestyles and building automation on building energy use. *Energy Procedia*, **2017**, 140, 48-56	2.3	5
22	Long-term monitoring data from a naturally ventilated office building. *Scientific Data*, **2019**, 6, 293	8.2	5
21	Immersive virtual environments for occupant comfort and adaptive behavior research □A comprehensive review of tools and applications. *Building and Environment*, **2021**, 108396	6.5	5
20	The Effect of Thermal Inertia on Office Workers Subjective and Physiological Responses; and Performance Under Summer Conditions. *Energy Procedia*, **2015**, 78, 2953-2958	2.3	4
19	Does thermal control improve visual satisfaction? Interactions between occupants' self-perceived control, visual, thermal, and overall satisfaction. *Indoor Air*, **2021**, 31, 2329-2349	5.4	4
18	Ten questions concerning the potential of digital production and new technologies for contemporary earthen constructions. *Building and Environment*, **2021**, 206, 108240	6.5	4
17	Evaluating the performance of thermal sensation prediction with a biophysical model. *Indoor Air*, **2017**, 27, 1012-1021	5.4	3
16	Personal thermal perception models using skin temperatures and HR/HRV features **2019**,		3

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15	Reliability of an Item Set Assessing Indoor Climate in Offices: Results From Field Studies and Laboratory Research. *Frontiers in Built Environment*, **2019**, 5,	2.2	3
14	Quantifying individual adaptive processes: first experiences with an experimental design dedicated to reveal further insights to thermal adaptation. *Architectural Science Review*, **2013**, 56, 93-98	2.6	3
13	Laboratory Approaches to Studying Occupants **2018**, 169-212		3
12	Assessing comfort in the workplace: A unified theory of behavioral and thermal expectations. *Building and Environment*, **2022**, 109015	6.5	3
11	Modelling drivers of variance and adaptation for the prediction of thermal perception and energy use in zero energy buildings. *IOP Conference Series: Materials Science and Engineering*, **2019**, 609, 042039	0.4	2
10	Evolution and performance analysis of adaptive thermal comfort models: A comprehensive literature review. *Building and Environment*, **2022**, 109020	6.5	2
9	Historical buildings: energy conservation potentialities. *International Journal of Building Pathology and Adaptation*, **2019**, 37, 306-325	1.6	1
8	Extreme events, energy security and equality through micro- and macro-levels: Concepts, challenges and methods. *Energy Research and Social Science*, **2022**, 85, 102401	7.7	1
7	Numerical evaluation of thermal comfort using a large eddy lattice Boltzmann method. *Building and Environment*, **2021**, 192, 107618	6.5	1
6	Adaptive processes explain variations in human thermal sensation. *Temperature*, **2016**, 3, 518-520	5.2	1
5	Combining adaptive and heat balance models for thermal sensation prediction: A new approach towards a theory and data-driven adaptive thermal heat balance model.. *Indoor Air*, **2022**, 32, e13018	5.4	1
4	Adaptive thermal comfort model based on field studies in five climate zones across India. *Building and Environment*, **2022**, 219, 109187	6.5	1
3	The ambivalence of personal control over indoor climate: how much personal control is adequate?. *E3S Web of Conferences*, **2020**, 172, 06010	0.5	0
2	Perception of repeated pain relief with controllable and uncontrollable pain. *European Journal of Pain*, **2021**, 25, 1702-1711	3.7	0
1	Information sharing preferences within buildings: Benefits of cognitive interviewing for enhancing a discrete choice experiment. *Energy and Buildings*, **2022**, 258, 111786	7	