# Marcel Schweiker

List of Publications by Year
in descending order



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|---|---|---|---|
| 70 papers | 2,680 citations | 186209 28 h-index | 189801 50 g-index |
| 71 all docs | 71 docs citations | 71 times ranked | 1657 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Development of the ASHRAE Global Thermal Comfort Database II. Building and Environment, 2018, 142, 502-512. | 3.0 | 279 |
| 2 | 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. | 3.0 | 138 |
| 3 | Verification of stochastic models of window opening behaviour for residential buildings. Journal of Building Performance Simulation, 2012, 5, 55-74. | 1.0 | 138 |
| 4 | 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. | 3.0 | 129 |
| 5 | Review of multiâ€domain approaches to indoor environmental perception and behaviour. Building and Environment, 2020, 176, 106804. | 3.0 | 127 |
| 6 | Drivers of diversity in human thermal perception â€“ A review for holistic comfort models. Temperature, 2018, 5, 308-342. | 1.6 | 110 |
| 7 | Does the occupant behavior match the energy concept of the building? â€“ Analysis of a German naturally ventilated office building. Building and Environment, 2015, 84, 142-150. | 3.0 | 107 |
| 8 | Challenging the assumptions for thermal sensation scales. Building Research and Information, 2017, 45, 572-589. | 2.0 | 103 |
| 9 | The effect of occupancy on perceived control, neutral temperature, and behavioral patterns. Energy and Buildings, 2016, 117, 246-259. | 3.1 | 98 |
| 10 | Personal comfort systems: A review on comfort, energy, and economics. Energy and Buildings, 2020, 214, 109858. | 3.1 | 92 |
| 11 | A framework for an adaptive thermal heat balance model (ATHB). Building and Environment, 2015, 94, 252-262. | 3.0 | 89 |
| 12 | A review of select human-building interfaces and their relationship to human behavior, energy use and occupant comfort. Building and Environment, 2020, 178, 106920. | 3.0 | 79 |
| 13 | 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. | 3.0 | 73 |
| 14 | 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 |
| 15 | Evolution and performance analysis of adaptive thermal comfort models â€“ A comprehensive literature review. Building and Environment, 2022, 217, 109020. | 3.0 | 61 |
| 16 | Comparative effects of building envelope improvements and occupant behavioural changes on the exergy consumption for heating and cooling. Energy Policy, 2010, 38, 2976-2986. | 4.2 | 55 |
| 17 | Development and validation of a methodology to challenge the adaptive comfort model. Building and Environment, 2012, 49, 336-347. | 3.0 | 50 |
| 18 | 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. | 3.1 | 50 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | The Role of Occupants in Buildingsâ€™ Energy Performance Gap: Myth or Reality?. Sustainability, 2021, 13, 3146. | 1.6 | 46 |
| 20 | Short- and long-term acclimatization in outdoor spaces: Exposure time, seasonal and heatwave adaptation effects. Building and Environment, 2017, 116, 17-29. | 3.0 | 43 |
| 21 | The influence of personality traits on occupant behavioural patterns. Energy and Buildings, 2016, 131, 63-75. | 3.1 | 39 |
| 22 | Adaptive comfort from the viewpoint of human body exergy consumption. Building and Environment, 2012, 51, 351-360. | 3.0 | 36 |
| 23 | Thermal expectation: Influencing factors and its effect on thermal perception. Energy and Buildings, 2020, 210, 109729. | 3.1 | 36 |
| 24 | Thermo-specific self-efficacy (specSE) in relation to perceived comfort and control. Building and Environment, 2016, 102, 193-206. | 3.0 | 32 |
| 25 | Test rooms to study human comfort in buildings: A review of controlled experiments and facilities. Renewable and Sustainable Energy Reviews, 2021, 149, 111359. | 8.2 | 32 |
| 26 | A framework for adopting adaptive thermal comfort principles in design and operation of buildings. Energy and Buildings, 2019, 205, 109476. | 3.1 | 31 |
| 27 | Personalized ceiling fans: Effects of air motion, air direction and personal control on thermal comfort. Energy and Buildings, 2021, 235, 110721. | 3.1 | 31 |
| 28 | 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. | 1.2 | 30 |
| 29 | A seasonal approach to alliesthesia. Is there a conflict with thermal adaptation?. Energy and Buildings, 2020, 212, 109745. | 3.1 | 30 |
| 30 | Immersive virtual environments for occupant comfort and adaptive behavior research â€“ A comprehensive review of tools and applications. Building and Environment, 2022, 207, 108396. | 3.0 | 26 |
| 31 | comf: An R Package for Thermal Comfort Studies. R Journal, 2016, 8, 341. | 0.7 | 25 |
| 32 | Adaptive thermal comfort model based on field studies in five climate zones across India. Building and Environment, 2022, 219, 109187. | 3.0 | 22 |
| 33 | Ten questions concerning the potential of digital production and new technologies for contemporary earthen constructions. Building and Environment, 2021, 206, 108240. | 3.0 | 21 |
| 34 | Influences on the predictive performance of thermal sensation indices. Building Research and Information, 2017, 45, 745-758. | 2.0 | 20 |
| 35 | Exploring internal body heat balance to understand thermal sensation. Building Research and Information, 2017, 45, 808-818. | 2.0 | 19 |
| 36 | The Scales Project, a cross-national dataset on the interpretation of thermal perception scales. Scientific Data, 2019, 6, 289. | 2.4 | 19 |

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| 37 | Unsteady-state human-body exergy consumption rate and its relation to subjective assessment of dynamic thermal environments. Energy and Buildings, 2016, 116, 164-180. | 3.1 | 17 |
| 38 | Comfort-related feedforward information: occupantsâ€™ choice of cooling strategy and perceived comfort. Building Research and Information, 2017, 45, 222-238. | 2.0 | 17 |
| 39 | Long-term monitoring data from a naturally ventilated office building. Scientific Data, 2019, 6, 293. | 2.4 | 17 |
| 40 | Necessary Conditions for Multi-Domain Indoor Environmental Quality Standards. Sustainability, 2020, 12, 8439. | 1.6 | 16 |
| 41 | Occupancy and Occupantsâ€™ Actions. , 2018, , 7-38. | | 16 |
| 42 | 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. | 4.2 | 15 |
| 43 | Understanding Occupantsâ€™ Behaviour for Energy Efficiency in Buildings. Current Sustainable/Renewable Energy Reports, 2017, 4, 8-14. | 1.2 | 15 |
| 44 | Numerical evaluation of thermal comfort using a large eddy lattice Boltzmann method. Building and Environment, 2021, 192, 107618. | 3.0 | 15 |
| 45 | Does thermal control improve visual satisfaction? Interactions between occupantsâ€™ selfâ€perceived control, visual, thermal, and overall satisfaction. Indoor Air, 2021, 31, 2329-2349. | 2.0 | 15 |
| 46 | Subgroups holding different conceptions of scales rate room temperatures differently. Building and Environment, 2018, 128, 236-247. | 3.0 | 13 |
| 47 | Seeing is believing: an innovative approach to post-occupancy evaluation. Energy Efficiency, 2020, 13, 473-486. | 1.3 | 12 |
| 48 | Get the picture? Lessons learned from a smartphone-based post-occupancy evaluation. Energy Research and Social Science, 2019, 56, 101224. | 3.0 | 11 |
| 49 | Assessing comfort in the workplace: A unified theory of behavioral and thermal expectations. Building and Environment, 2022, 216, 109015. | 3.0 | 11 |
| 50 | Experimental Evaluation of Radiant Heating Ceiling Systems Based on Thermal Comfort Criteria. Energies, 2018, 11, 2932. | 1.6 | 10 |
| 51 | Extreme events, energy security and equality through micro- and macro-levels: Concepts, challenges and methods. Energy Research and Social Science, 2022, 85, 102401. | 3.0 | 10 |
| 52 | 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. | 0.1 | 9 |
| 53 | What does â€œmoderate painâ€• mean? Subgroups holding different conceptions of rating scales evaluate experimental pain differently. European Journal of Pain, 2020, 24, 625-638. | 1.4 | 9 |
| 54 | Combining adaptive and heat balance models for thermal sensation prediction: A new approach towards a theory and dataâ€driven adaptive thermal heat balance model. Indoor Air, 2022, 32, e13018. | 2.0 | 9 |

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|---|---|---|---|
| 55 | 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. | 0.2 | 7 |
| 56 | Evaluating the performance of thermal sensation prediction with a biophysical model. Indoor Air, 2017, 27, 1012-1021. | 2.0 | 7 |
| 57 | Insights into the effects of occupant behaviour lifestyles and building automation on building energy use. Energy Procedia, 2017, 140, 48-56. | 1.8 | 7 |
| 58 | Personal thermal perception models using skin temperatures and HR/HRV features. , 2019, , . | | 6 |
| 59 | Reliability of an Item Set Assessing Indoor Climate in Officesâ€"Results From Field Studies and Laboratory Research. Frontiers in Built Environment, 2019, 5, . | 1.2 | 5 |
| 60 | The ambivalence of personal control over indoor climate â€" how much personal control is adequate?. E3S Web of Conferences, 2020, 172, 06010. | 0.2 | 5 |
| 61 | The Effect of Thermal Inertia on Office Workers Subjective and Physiological Responses; and Performance Under Summer Conditions. Energy Procedia, 2015, 78, 2953-2958. | 1.8 | 4 |
| 62 | 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. | 1.1 | 3 |
| 63 | Historical buildingsâ€™ energy conservation potentialities. International Journal of Building Pathology and Adaptation, 2019, 37, 306-325. | 0.7 | 3 |
| 64 | Laboratory Approaches to Studying Occupants. , 2018, , 169-212. | | 3 |
| 65 | Documenting occupant models for building performance simulation: a state-of-the-art. Journal of Building Performance Simulation, 2022, 15, 634-655. | 1.0 | 3 |
| 66 | 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. | 0.3 | 2 |
| 67 | Information sharing preferences within buildings: Benefits of cognitive interviewing for enhancing a discrete choice experiment. Energy and Buildings, 2022, 258, 111786. | 3.1 | 2 |
| 68 | Adaptive processes explain variations in human thermal sensation. Temperature, 2016, 3, 518-520. | 1.6 | 1 |
| 69 | Perception of repeated pain relief with controllable and uncontrollable pain. European Journal of Pain, 2021, 25, 1702-1711. | 1.4 | 1 |
| 70 | New Approaches to Modelling Occupant Comfort. Buildings, 2022, 12, 985. | 1.4 | 0 |