



CBE Publications & Report List May 2017

Papers that summarize research by CBE and affiliated institutions have appeared in the following journals, trade magazines, and conference proceedings. Many of these publications are also available from the eScholarship Repository, on-line at http://escholarship.org/uc/cedr_cbe.

2017

- Ko, W.H. and S. Schiavon. 2017. Balancing Thermal and Luminous Autonomy in the Assessment of Building Performance. Accepted for publication in Proceedings of *Building Simulation Conference 2017*. August. www.escholarship.org/uc/item/7b4909sf **NEW**
- Talami, R., C. Karmann, F. Bauman, S. Schiavon, and P. Raftery. 2017. Recent trends in radiant system technology in North America. Internal report. April. www.escholarship.org/uc/item/7pz8p9r6 **NEW**
- Karmann, K., F. Bauman, P. Raftery, S. Schiavon, W. Frantz, and K. Roy. 2017. Cooling capacity and acoustic performance of radiant slab systems with free-hanging acoustical clouds. *Energy and Buildings*. March. www.escholarship.org/uc/item/8r07k5g3 **NEW**
- Kaam, S., P. Raftery, H. Cheng, and G. Paliaga. 2017. Time-averaged ventilation for optimized control of variable-air-volume systems. *Energy and Buildings*. March. www.escholarship.org/uc/item/5jq443p4 <http://dx.doi.org/10.1016/j.enbuild.2016.11.059> **NEW**
- Ning, B., S. Schiavon, and F. Bauman. 2017. A novel classification scheme for design and control of radiant system based on thermal response time. *Energy and Buildings*. February. www.escholarship.org/uc/item/2j75g92w <http://dx.doi.org/10.1016/j.enbuild.2016.12.013> **NEW**
- Cheung, T., S. Schiavon, E. Gall, M. Jin, and W. Nazaroff. 2017. Longitudinal assessment of thermal and perceived air quality acceptability in relation to temperature, humidity, and CO₂ exposure in Singapore. *Building and Environment*. January. www.escholarship.org/uc/item/483474qj **NEW**

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- Liu, S., S. Schiavon, A. Kabanshi, and W. Nazaroff. 2016. Predicted Percentage Dissatisfied with Ankle Draft. *Indoor Air*. December. www.escholarship.org/uc/item/9076254n <http://dx.doi.org/10.1111/ina.12364> **NEW**
- Liu, S., L. Yin, W.K. Ho, K.V. Ling, and S. Schiavon. 2016. A Tracking Cooling Fan Using Geofence and Camera-Based Indoor Localization. *Building and Environment*. November. www.escholarship.org/uc/item/5br8q4x4 <http://dx.doi.org/10.1016/j.buildenv.2016.11.047> **NEW**

- de Dear, R., V. Foldvary, H. Zhang, E. Arens, M. Luo, T. Parkinson, X. Du, W. Zhang, C. Chun, and S. Liu. 2016. Comfort is in the mind of the beholder: A review of progress in adaptive thermal comfort research over the past two decades. *The Fifth International Conference on Human-Environment System*. Nagoya, Japan. October 29-November 2. <http://dx.doi.org/10.1016/j.buildenv.2017.01.014>
www.escholarship.org/uc/item/62n2985w **NEW**
- Karmann, C., S. Schiavon, and F. Bauman. 2016. Thermal comfort in buildings using radiant vs. all-air systems: A critical review. *Building and Environment*. October. www.escholarship.org/uc/item/1vb3d1j8
NEW
- Schiavon, S., B. Yang, Y. Donner, V. Chang, and W. Nazaroff. 2016. Thermal comfort, perceived air quality and cognitive performance when personally controlled air movement is used by tropically acclimatized persons. *Indoor Air*. October. <http://dx.doi.org/10.1111/ina.12352> **NEW**
- Kim, H. and E. Macdonald. 2016. Measuring the effectiveness of San Francisco's planning standard for pedestrian wind comfort. *International Journal of Sustainable Development and World Ecology*. October. www.escholarship.org/uc/item/748006tf **NEW**
- Kim, A., S. Schiavon, L. Graham, and W.H. Ko. 2016. Lighting for circadian health: Survey module and non-invasive open-source wearable sensor system. Internal report. October. www.escholarship.org/uc/item/8bf683j8 **NEW**
- Zhao, P., T. Peffer, R. Narayanamurthy, G. Fierro, P. Raftery, S. Kaam, and J. Kim. 2016. Getting into the zone: how the internet of things can improve energy efficiency and demand response in a commercial building. *Proceedings of ACEEE Summer Study on Energy Efficiency in Buildings*. Pacific Grove, CA. August 21-26. 12 pp. www.escholarship.org/uc/item/5bm711zk
- Peffer, T., M. Pritoni, G. Fierro, S. Kaam, J. Kim, and P. Raftery. 2016. Writing controls sequences for buildings: from HVAC industry enclave to hacker's weekend project. *Proceedings of ACEEE Summer Study on Energy Efficiency in Buildings*. Pacific Grove, CA. August 21-26. 12 pp. www.escholarship.org/uc/item/3671b82b
- Andersen, M., G. Fierro, S. Kumar, J. Kim, E. Arens, H. Zhang, P. Raftery, and D. Culler. 2016. Well-connected microzones for increased building efficiency and occupant comfort. *Proceedings of ACEEE Summer Study on Energy Efficiency in Buildings*. Pacific Grove, CA. August 21-26. 16 pp. www.escholarship.org/uc/item/7710g5cb
- Feng, J.D., S. Schiavon, and F. Bauman. 2016. New method for the design of radiant floor cooling systems with solar radiation. *Energy and Buildings* 125, 9-18. August. <http://dx.doi.org/10.1016/j.enbuild.2016.04.048> www.escholarship.org/uc/item/5sj3h2s5
- Gall, E., T. Cheung, I. Luhung, S. Schiavon, and W. Nazaroff. 2016. Real-time monitoring of personal exposure to carbon dioxide. *Building and Environment* 104, 59-67. August. <http://dx.doi.org/10.1016/j.buildenv.2016.04.021> www.escholarship.org/uc/item/0q1269cv
- Gandhi, P. and G. Brager. 2016. Commercial office plug load energy consumption trends and the role of occupant behavior. *Energy and Buildings* 125, 1-8. August. [doi:10.1016/j.enbuild.2016.04.057](http://dx.doi.org/10.1016/j.enbuild.2016.04.057)
- Altomonte, S., S. Saadouni, S. Schiavon. 2016. Occupant Satisfaction in LEED and BREEAM-Certified Office Buildings. *Proceedings of PLEA 2016 - 36th International Conference on Passive and Low Energy Architecture: Cities, Buildings, People: Towards Regenerative Environments*. Los Angeles, CA. July 10-13. www.escholarship.org/uc/item/77j647gr

- Gall, E., T. Cheung, L. Luhung, S. Schiavon, and W. Nazaroff. 2016. Real-time measurement of personal exposures to carbon dioxide. *Proceedings of the 14th International Conference Indoor Air 2016*. Ghent, Belgium. July 3-8.
- Landsman, J. and G. Brager. 2016. Performance, prediction, and optimization of night ventilation across different climates: an assessment of mechanical and natural night ventilation *Proceedings of PLEA 2016 - 36th International Conference on Passive and Low Energy Architecture: Cities, Buildings, People: Towards Regenerative Environments*. Los Angeles, CA. July 11-13. www.escholarship.org/uc/item/5cq9t8d2
- Kabanshi, A., S. Liu, and S. Schiavon. 2016. Potential adaptive behaviors to counteract thermal discomfort in spaces with displacement ventilation or underfloor air distribution systems. *Proceedings of the 14th International Conference Indoor Air 2016*. Ghent, Belgium. July 3-8.
- Filingeri, D. 2016. Neurophysiology of skin thermal sensations. *Comprehensive Physiology* 6, 1429-1491. July. <http://dx.doi.org/10.1002/cphy.c150040>
- Adams, K., E. Arens, D. Banks, S. Brunswick, G. Carrilho da Graca, N. Daish, S. Dutton, M. Fountain, B. Fisk, R. Gerard, F. Gillan, G. Gross, P. Haves, M. Hill, A. Honnekeri, M. Hovanec, T. Lawton, P. Linden, M. Pigman, P. Switenki, G. Szakats, R. Thomas, Y. Zhai, and H. Zhang. 2016. Natural ventilation for energy savings in California commercial buildings. Final Project Report, California Energy Commission. June. 516 pp. <http://www.escholarship.org/uc/item/4cd386s7>
- Foldvary, V. 2016. Assessment of indoor environmental quality in residential buildings before and after renovation. Doctor of Philosophy Dissertation. Dept. of Civil Engineering, Slovak University of Technology in Bratislava. June. www.escholarship.org/uc/item/7p13k7zd
- Landsman, J. 2016. Performance, Prediction and Optimization of Night Ventilation across Different Climates. Master of Science Thesis. Dept. of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/6n99w3bx
- Indraganti, M., J. Lee, H. Zhang, and E. Arens. 2016. Why is the Indian Sari an all-weather gear? Clothing insulation of Sari, Salwar-Kurti, Pancha, Lungi, and Dhoti. *Proceedings of the 9th Windsor Conference*. April. www.escholarship.org/uc/item/0080t60q (Earlier version in *Proceedings of the 8th Windsor Conference*. April 2014. <http://www.escholarship.org/uc/item/1wp225b2>)
- Kim, H., and E. Macdonald. 2016. Does wind discourage sustainable transportation mode choice? Findings from San Francisco, California, USA. *Sustainability* 8, 257. March. <http://dx.doi.org/10.3390/su8030257> www.escholarship.org/uc/item/6gz6t90p
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- Gandhi, P. 2015. Commercial office plug load energy consumption trends and the role of occupant behavior. Master of Science Thesis. Dept. of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/2c76d4nw
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- Schiavon, S., F. Bauman, B. Tully, and J. Rimmer. 2015. Chilled ceiling and displacement ventilation system: Laboratory study with high cooling load. *Science and Technology for the Built Environment* (Previously HVAC&R). <http://dx.doi.org/10.1080/23744731.2015.1034061> <http://escholarship.org/uc/item/58m8302p>
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- Yang, B., S. Schiavon, C. Sekhar, K.W. Cheong, K.W. Tham, and W. Nazaroff. 2015. Cooling efficiency of a brushless direct current stand fan. *Building and Environment*. 196-204. <http://dx.doi.org/10.1016/j.buildenv.2014.11.032> <http://www.escholarship.org/uc/item/0mx5r4hd>
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