



CBE Publications & Report List October 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

- Gao, Y., H. Zhang, E. Arens, E. Present, B. Ning, Y. Zhai, J. Pantelic, M. Luo, L. Zhao, P. Raftery, and S. Liu. 2017. Ceiling fan air speeds around desks and office partitions. *Building and Environment*. November. <http://doi.org/10.1016/j.buildenv.2017.08.029> www.escholarship.org/uc/item/3pq2j9mh **NEW**
- Ko, W.H., G. Brager, S. Schiavon, and S. Selkowitz. 2017. Building envelope impact on human performance and well-being: Experimental study on view clarity. CBE Internal Report. October. <https://escholarship.org/uc/item/Ogj8h384> **NEW**
- Xu, Z., G. Hu, C. Spanos, and S. Schiavon. 2017. PMV-based event-triggered mechanism for building energy management under uncertainties. *Energy and Buildings*. October. <http://doi.org/10.1016/j.enbuild.2017.07.008> www.escholarship.org/uc/item/2z597468 **NEW**
- Carbonnier, K., C. Higgins, F. Bauman, C. Karmann, P. Raftery, S. Schiavon, and L. Graham. 2017. Energy Use, Occupant Surveys and Case Study Summary: Radiant Cooling and Heating in Commercial Buildings. CBE Summary Report. September. www.escholarship.org/uc/item/3cj9n3n4 **NEW**
- Duarte, C., P. Raftery, and S. Schiavon. 2017. Development of whole building energy models for detailed energy insights of a large office building with green certification rating in Singapore. *Energy Technology*. September. <http://dx.doi.org/10.1002/ente.201700564> www.escholarship.org/uc/item/0v1412gk **NEW**
- Raftery, P., C. Duarte, S. Schiavon, and F. Bauman. 2017. A new control strategy for high thermal mass radiant systems. Accepted for publication in Proceedings of *Building Simulation Conference 2017*. August. www.escholarship.org/uc/item/5tz4n92b **NEW**
- 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
- Smith, M.J., K. Warren, D. Cohen-Tanugi, S. Shames, K. Sprehn, J. Schwartz, H. Zhang, and E. Arens. 2017. Augmenting smart buildings and autonomous vehicles with wearable thermal technology. *Proceedings of HCI International 2017*. July. www.escholarship.org/uc/item/9q24x8p3 **NEW**
- Lipczynska, A., S. Schiavon, and L. Graham. 2017. Thermal comfort and self-reported productivity in an office with ceiling fans in the tropics. Proceedings of *Healthy Building 2017*. Lublin, Poland, July 2-5. **NEW**

- Zhai, Y., E. Arens, K. Elsworth, and H. Zhang. 2017. Selecting air speeds for cooling at sedentary and non-sedentary office activity levels. *Building and Environment*. June. <https://doi.org/10.1016/j.buildenv.2017.06.027> **NEW**
- Altomonte, S., S. Saadouni, M. Kent, and S. Schiavon. 2017. Satisfaction with indoor environmental quality in BREEAM and non-BREEAM certified office buildings. *Architectural Science Review*, Volume 4, 343-355. June. <http://dx.doi.org/10.1080/00038628.2017.1336983> **NEW**
- Higgins, C. and K. Carbonnier. 2017. Energy Performance of Commercial Buildings with Radiant Heating and Cooling. CBE Summary Report. June. www.escholarship.org/uc/item/34f0h35q **NEW**
- Paliaga, G., F. Farahmand, P. Raftery, and J. Woolley. 2017. TABS Radiant Cooling Design & Control in North America: Results from Expert Interviews. CBE Summary Report. June. www.escholarship.org/uc/item/0w62k5pq
- Cohn, S. 2017. Development of a personal heater efficiency index. Master of Science Thesis. Dept. Of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/4dv241wd **NEW**
- Dutra de Vasconcellos, G. 2017. Evaluation of Annual Sunlight Exposure (ASE) as a Proxy to Glare: A Field Study in a NZEB and LEED Certified Office in San Francisco. Master of Science Thesis. Dept. of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/3js1z0b8 **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
- Bauman, F., P. Raftery, J. Kim, S. Kaam, S. Schiavon, H. Zhang, E. Arens, K. Brown, T. Pepper, C. Blumstein, D. Culler, M. Andersen, G. Fierro, G. Paliaga, A. Pande, H. Cheng, and J. Stein. 2017. Changing the rules: innovative low-energy occupant-responsive HVAC controls and systems. Final project report, California Energy Commission. March. www.escholarship.org/uc/item/23t9k6rm **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
- 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>
- Filingeri, D., H. Zhang, and E. Arens. 2017. Characteristics of the local cutaneous sensory thermoneutral zone. *Journal of Neurophysiology*. February. <http://dx.doi.org/10.1152/jn.00845.2016> <http://jn.physiology.org/content/117/4/1797> **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>
- 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

2016

- 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>
- 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>
- Ghahramani, A., G. Castro, B. Becerik-Gerber, and X. Yu. Infrared thermography of human face for monitoring thermoregulation performance and estimating personal thermal comfort. *Building and Environment*. November. <https://doi.org/10.1016/j.buildenv.2016.09.005> www.escholarship.org/uc/item/37d3q23w **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
- 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
- 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
- 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
- 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](https://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

Bauman, F., T. Webster, and D. Dickerhoff. 2016. Field Study of Capitol Area East End Complex (CAEEC) Sacramento, California. Final Project Report, California Department of General Services. May.

www.escholarship.org/uc/item/066992h3 **NEW**

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

Schiavon, S., D. Rim, W. Pasut, and W. Nazaroff. 2016. Sensation of draft at uncovered ankles for women exposed to displacement ventilation and underfloor air distribution systems. *Building and Environment* 96, 228-236. February. <http://dx.doi.org/10.1016/j.buildenv.2015.11.009>
www.escholarship.org/uc/item/4p692575

2015

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* 85, 196-204.
<http://dx.doi.org/10.1016/j.buildenv.2014.11.032> www.escholarship.org/uc/item/0767n79h

Duarte, C., P. Raftery, and S. Schiavon. 2015. SinBerBEST technology energy assessment report.
www.escholarship.org/uc/item/7k1796zv

Fannon, D. 2015. Developing low-energy personal thermal comfort systems: design, performance, testing, and research methods. Master of Science Thesis. Dept. of Architecture, University of California, Berkeley.
www.escholarship.org/uc/item/92h1p54j

Shitzer, A., E. Arens, and H. Zhang. 2015. Compilation of basal metabolic and blood perfusion rates in various multi-compartment, whole-body thermoregulation models. *International Journal of Biometeorology*, November. DOI 10.1007/s00484-015-1096-5. www.escholarship.org/uc/item/7jt469t3

Bauman, F., P. Raftery, and C. Karmann. 2015. Lessons learned from field monitoring of two radiant slab office buildings in California. Proceedings, 6th International Building Physics Conference. Torino, Italy. June 14-17. www.escholarship.org/uc/item/6tj0s2bm

Indraganti, M., J. Lee, H. Zhang, and E. Arens. 2015. Thermal adaptation and insulation opportunities provided by different drapes of Indian saris. *Architectural Science Review* 58, 1.
<http://dx.doi.org/10.1080/00038628.2014.976540> www.escholarship.org/uc/item/8f10n38d

Zhai, Y., C. Elsworth, E. Arens, H. Zhang, Y. Zhang, and L. Zhao. 2015. Using air movement for comfort during moderate exercise. *Building and Environment* 94, 344-352. <http://www.escholarship.org/uc/item/6018h6wz>

Zhai, Y., Y. Zhang, H. Zhang, W. Pasut, E. Arens, and Q. Meng. 2015. Thermal comfort and perceived air quality with ceiling fans in warm-humid conditions. *Building and Environment*, 90, 178-185.

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

Schiavon S., B. Yang, W.C. Chang, and W. Nazaroff. 2015. Effect of air temperature and personally controlled air movement on thermal comfort for tropically acclimatized persons. *Proceedings of the 9th International Symposium on Heating, Ventilation and Air Conditioning (ISHVAC) and the 3rd International Conference on Building Energy and Environment (COBEE)*. Tianjin, China. July 12-15.

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://www.escholarship.org/uc/item/58m8302p>

Rim, D., S. Schiavon, and W. Nazaroff. 2015. Energy and cost associated with ventilating office buildings in a tropical climate. *PLoS ONE*, 10(5): e0127930. <http://dx.doi.org/10.1371/journal.pone.0127930>

- Raftery, P., F. Bauman, S. Schiavon, and T. Epp. 2015. Laboratory testing of a displacement ventilation diffuser for underfloor air distribution systems. *Energy and Buildings*. doi:10.1016/j.enbuild.2015.09.005 www.escholarship.org/uc/item/9qz2w733
- Ning, B., S. Schiavon, and F. Bauman. 2015. A Classification Scheme for Radiant Systems based on Thermal Time Constant. *Proceedings of the 9th International Symposium on Heating, Ventilation and Air Conditioning (ISHVAC) and the 3rd International Conference on Building Energy and Environment (COBEE)*. Tianjin, China. July 12-15. www.escholarship.org/uc/item/1sx88662
- Bauman, F., H. Zhang, E. Arens, P. Raftery, C. Karmann, J. Feng, Y. Zhai, D. Dickerhoff, S. Schiavon, and X. Zhou. 2015. Advanced Integrated Systems Technology Development: Personal Comfort Systems and Radiant Slab Systems. *Final report to CEC*. June. www.escholarship.org/uc/item/88p8v7zb <http://www.energy.ca.gov/2016publications/CEC-500-2016-068/index.html>
- Zhang, H., E. Arens, M. Taub, D. Dickerhoff, F. Bauman, M. Fountain, W. Pasut, D. Fannon, Y.C. Zhai, and M. Pigman. 2015. Using footwarmers in offices for thermal comfort and energy savings. *Energy and Buildings*. July. <http://dx.doi.org/10.1016/j.enbuild.2015.06.086> www.escholarship.org/uc/item/3cf6268m
- Arens, E., H. Zhang, T. Hoyt, S. Kaam, F. Bauman, Y.C. Zhai, G. Paliaga, J. Stein, B. Tully, J. Rimmer, and J. Toftum. 2015. Effects of Diffuser Airflow Minima on Occupant Comfort, Air Mixing, and Building Energy Use (RP-1515). *Science and Technology for the Built Environment 0*, 1-16. <http://dx.doi.org/10.1080/23744731.2015.1060104> www.escholarship.org/uc/item/6kj9t7cj
- Walker, K. 2015. Indoor environment quality in LEED buildings: Understanding conditions affecting performance. Masters of Science Thesis. Dept. of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/13p0k3sx
- Adams, R.I., S. Bhangar, W. Pasut, E.A. Arens, J.W. Taylor, S.E. Lindow, W.W. Nazaroff, and T.D. Bruns. 2015. Chamber bioaerosol study: Outdoor air and human occupants as sources of indoor airborne microbes. *PLoS ONE* 10(5): e0128022. DOI: 10.1371/journal.pone.0128022
- 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>
- Zhang, H., E. Arens, and Y. Zhai. 2015. A review of the corrective power of personal comfort systems in non-neutral ambient environments. *Building and Environment*, 91, 15-41. <http://dx.doi.org/10.1016/j.buildenv.2015.03.013> www.escholarship.org/uc/item/4kv4f2mk
- Bhangar, S., R. Adams, W. Pasut, J.A. Huffman, E. Arens, J. Taylor, T. Bruns, and W. Nazaroff. 2015. Chamber bioaerosol study: Human emissions of size-resolved fluorescent biological aerosol particles. *Indoor Air*. <http://dx.doi.org/10.1111/ina.12195> www.escholarship.org/uc/item/67d8h687
- Brager, G., H. Zhang, and E. Arens. 2015. Evolving opportunities for providing thermal comfort. *Building Research and Information*, Vol. 43, No. 3, 1–14. <http://dx.doi.org/10.1080/09613218.2015.993536> www.escholarship.org/uc/item/77c0q85j
- Hoyt, T., E. Arens, and H. Zhang. 2015. Extending air temperature setpoints: Simulated energy savings and design considerations for new and retrofit buildings. *Building and Environment* 88, 89-96. <http://dx.doi.org/10.1016/j.buildenv.2014.09.010> <https://escholarship.org/uc/item/13s1q2xc>

Kim, H., and E. Macdonald. 2015. Wind and the city: An evaluation of San Francisco's planning approach since 1985. *Environment and Planning B*. September. <http://dx.doi.org/10.1177/0265813515607474>
www.escholarship.org/uc/item/2dm1k82k

Arens, E., T. Hoyt, X. Zhou, L. Huang, H. Zhang and S. Schiavon. 2015. Modeling the comfort effects of short-wave solar radiation indoors. *Building and Environment* 88, 3-9. (Earlier version in *Proceedings of the 13th International Conference Indoor Air 2014*, Hong Kong. July 7-12)
<http://dx.doi.org/10.1016/j.buildenv.2014.09.004> <https://escholarship.org/uc/item/89m1h2dg>

Pasut, W., H. Zhang, E. Arens, and Y. Zhai. 2015. Energy-efficient comfort with a heated/cooled chair: Results from human subject tests. *Building and Environment*, Vol. 84, pp. 10-21.
<http://dx.doi.org/10.1016/j.buildenv.2014.10.026> <https://escholarship.org/uc/item/2tq3z4cw>

Filingeri, D. and G. Havenith. 2015. Human skin wetness perception: psychophysical and neurophysiological bases. *Temperature* 2(1): 86-104. <http://dx.doi.org/10.1080/23328940.2015.1008878>

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Wang, M., E. Wolfe, D. Ghosh, J. Bozeman, K. Chen, T. Han, H. Zhang, and E. Arens. 2014. Localized cooling for human comfort. *SAE International Journal of Passenger Cars-Mechanical Systems*, Volume 7, Issue 2. 755-768. www.escholarship.org/uc/item/9x2366mk

Raftery, P., E. Lee, T. Webster, T. Hoyt, and F. Bauman. 2014. Effects of furniture and contents on peak cooling load. *Energy & Buildings*, Volume 85. December. [doi:10.1016/j.enbuild.2014.09.081](https://doi.org/10.1016/j.enbuild.2014.09.081)
www.escholarship.org/uc/item/7c75472m

Filingeri, D. 2014. Why wet feels wet? An investigation into the neurophysiology of human skin wetness perception. Doctoral Thesis. Dept. of Philosophy, Loughborough University.
www.escholarship.org/uc/item/615214hj

Kim, H. 2014. Urban form, wind, comfort, and sustainability: The San Francisco experience. Doctor of Philosophy Dissertation. Dept. of City and Regional Planning, University of California, Berkeley.
<http://www.escholarship.org/uc/item/0h50x0h8>

Schiavon, S. 2014. Adventitious ventilation: A new definition for an old mode? *Indoor Air*, Volume 24, 557-558. doi: <http://dx.doi.org/10.1111/ina.12155> <http://www.escholarship.org/uc/item/8hm7w0bk>

Gandhi, P., G. Brager, and S. Dutton. 2014. Mixed mode simulation tools. CBE Internal Report, October.
<https://escholarship.org/uc/item/97t4t6dg>

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<https://escholarship.org/uc/item/7m31g4t4>

Mozingo, L., and E. Arens. 2014. Quantifying the Comprehensive Greenhouse Gas Co-Benefits of Green Buildings. Final Report. Center for Resource Efficient Communities and the Center for the Built Environment, UC Berkeley.

Honnekeri, A. 2014. Indoor environmental quality, adaptive action and thermal comfort in naturally ventilated and mixed-mode buildings. Master of Science Thesis, Dept. of Architecture, University of California, Berkeley. <https://escholarship.org/uc/item/2br3c58b>

Lehrer, D., J. Vasudev, and S. Kaam. 2014. A usability study of a social media prototype for building energy feedback and operations. *Proceedings 2014 ACEEE Summer Study on Energy Efficiency in Buildings*. Pacific Grove, CA, August. <http://escholarship.org/uc/item/7mc5n81t>

- Wang, M., E. Wolfe, D. Ghosh, J. Bozeman, K. Chen, T. Han, H. Zhang, and E. Arens. 2014. Localized cooling for human comfort. *SAE International Journal of Passenger Cars-Mechanical Systems*, Volume 7 (2) 755-768.
- Fu, M., T. Yu, H. Zhang, E. Arens, W. Weng, and H. Yuan. 2014. A model of heat and moisture transfer through clothing integrated with the UC Berkeley comfort model. *Building and Environment*, Volume 80, 96-104. www.escholarship.org/uc/item/2xb9w37j
- Konis, K. Predicting visual comfort in side-lit open-plan core zones: Results of a field study pairing high dynamic range images with subjective responses. 2014. *Energy and Buildings*, Volume 77, 67-79. July. <http://dx.doi.org/10.1016/j.enbuild.2014.03.035> www.escholarship.org/uc/item/4ss6f8rw
- Fu, M., T. Yu, H. Zhang, W. Weng, and H. Yuan. 2014. Heat and moisture transfer through clothing for a person with contact surface. *Proceedings of the 13th International Conference Indoor Air 2014*, Hong Kong. July 7-12. www.escholarship.org/uc/item/27q9255f
- Chen, B. 2014. Assessment and Improvements of the CBE Underfloor Air Distribution (UFAD) Cooling Load Design Tool. Master of Science Thesis. Dept of Architecture, University of California, Berkeley. www.escholarship.org/uc/item/40h5c3nv
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