

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, online at http://escholarship.org/uc/cedr_cbe.

2024

Chang, S. and Schiavon, S. Impact of Window vs Windowless Exam Rooms on Cognitive Performance: A Field Study During a University Exam. 2024. *PLEA 2024*. Accepted for publication. <https://escholarship.org/uc/item/59w0x77k> **NEW**

Belyamani, M.A., Hurley, R.F., Djamassbi, S., Somasse, G.B., Strauss, S., Zhang, H., Smith, M.J., Van Dessel, S., and Liu, S. 2024. Local wearable cooling may improve thermal comfort, emotion, and cognition. *Building and Environment*, Vol. 254. <https://doi.org/10.1016/j.buildenv.2024.111367> **NEW**

Greer, F., Raftery, P., and Horvath, A. 2024. Considerations for estimating operational greenhouse gas emissions in whole building life-cycle assessments. *Building and Environment*, Vol. 254. April. <https://doi.org/10.1016/j.buildenv.2024.111383> **NEW**

Levinson, R., Kim, D., Goudey, H., Chen, S., Zhang, H., Ghahramani, A., Huizenga, C., He, Y., Nomoto, A., Arens, E., Álvarez Suárez, A., Ritter, D., Tarin, M., and Prickett, R. 2024. Hot, cold, or just right? An infrared biometric sensor to improve occupant comfort and reduce overcooling in buildings via closed-loop control. *Energy and Buildings*, In Press, Journal Pre-proof. March. <https://doi.org/10.1016/j.enbuild.2024.114063> **NEW**

Nomoto, A., Ozeki, Y., Oiwake, M., Hisayama, R., Ogawa, Y., Akimoto, M., and Tanabe, S. 2024. Quantitative analysis of wavelength dependence of thermal perception. *Indoor Environments*, Vol. 1, Issue 1. March. <https://doi.org/10.1016/j.indenv.2023.100003> **NEW**

Chen, X., Sun, R., Saluz, U., Schiavon, S., and Geyer, P. Using causal inference to avoid fallouts in data-driven parametric analysis: A case study in the architecture, engineering, and construction industry. *Developments in the Built Environment*, Vol. 17. March. <https://doi.org/10.1016/j.dibe.2023.100296> **NEW**

Wendler, P., Raftery, P., and Cheng, H. 2024. Units: Temperature Stratification, Performance at Low Hot Water Supply Temperature, and Myths from the Field. *ASHRAE Transactions 2023*, Vol. 129 Issue Part 1, 8p. January. <https://escholarship.org/uc/item/6b9590qr> **NEW**

Vernon, D., McMurry, R., and Raftery, P. 2024. Heating Hot Water Distribution Heat Losses: Detailed Measurement. *ASHRAE Transactions*, 2024, Vol. 130 Issue Part 1, 8p. January. <http://escholarship.org/uc/item/7n6893n6> **NEW**

Das, H.P., Lin, Y.W., Agwan, U., Spangher, L., Devonport, A., Yang, Y., Drgoňa, J., Chong, A., Schiavon, S., and Spanos, C.J. 2024. Machine Learning for Smart and Energy-Efficient Buildings. *Environmental Data Science*, 2024 Volume 3, e1. January. <https://doi.org/10.1017/eds.2023.43> **NEW**

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Thawer, M. and Raftery, P. 2023. Screening Method to Identify High VAV Minimum Airflow Rates and Retrofit Opportunities. *ASHRAE Winter Meeting, Chicago*. *ASHRAE Transactions* 2024, Vol. 130 Issue Part 1, 8p. December. <https://escholarship.org/uc/item/6gz10718> **NEW**

Betti, G., Tartarini, F., Nguyen, C., & Schiavon, S. 2023. CBE Clima Tool: A free and open-source web application for climate analysis tailored to sustainable building design. *Building Simulation*, Vol. 17, pp. 493–508. December. <https://doi.org/10.1007/s12273-023-1090-5> **NEW**

Nomoto, A., Kim, D., Zhang, H., He, Y., Huizenga, C., Arens, E., Prickett, R., Swaminathan, S., and Levinson, R. 2023. Field Study of Thermal Infrared Sensing for Office Temperature Control. *2023 ASHRAE Annual Conference*. December. <https://escholarship.org/uc/item/69r9q3kg> **NEW**

Greer, F., Raftery, P., Brager, G., and Horvath, A. 2023. A perspective on tools for assessing the building sector's greenhouse gas emissions and beyond. *Environmental Research: Infrastructure and Sustainability*, Volume 3, Number 4. November. <https://doi.org/10.1088/2634-4505/ad064d> **NEW**

Gao, S., Yang, L., Li, Y., Liu, S., Zhang, H., Arens, E., and Zhai, Y. 2023. Gender and age effects on metabolic rates of office work, housework, and different walking speeds. *Energy and Buildings*. Volume 298. November. <https://doi.org/10.1016/j.enbuild.2023.113551> **NEW**

Tartarini, F., Frei, M., Schiavon, S., Chua, Y.X., and Miller, C. 2023. Cozie Apple: An iOS mobile and smartwatch application for environmental quality satisfaction and physiological data collection. *Journal of Physics: Conference Series* Volume 2600, Health & productivity. November. <https://doi.org/10.1088/1742-6596/2600/14/142003> **NEW**

Raftery, P., Cheung, T., Douglass-Jaimes, D., André, M., Li, J., Kent, M.G., Khoa, K.H., Sultan, Z., and Schiavon, S. 2023. Fans for cooling people guidebook. October. <https://cbe-berkeley.gitbook.io/fans-guidebook> <https://escholarship.org/uc/item/2qd7r5mp> **NEW**

Sultan, Z., Jia, H., and Schiavon, S. 2023. Energy Performance Assessment of COVID-19 Building Recommendations in Singapore. *Proceedings of the 5th International Conference on Building Energy and Environment*. pp 1767–1776. September. https://doi.org/10.1007/978-981-19-9822-5_184 **NEW**

- Guo, X., Wan, S., Chen, W., Zhang, H., Arens, E., Cheng, Y., and Pasut, W. 2023. Numerical simulation of cooling performance of radiant ceiling system interacting with a ceiling fan. *Energy and Buildings* 297, 113492. August. <https://doi.org/10.1016/j.enbuild.2023.113492> <https://escholarship.org/uc/item/0w2289kw> **NEW**
- Duarte, C., Raftery, P., Prakash, A., and Pepper, T. 2023. Field Demonstration of the Brick Ontology to Scale up the Deployment of ASHRAE Guideline 36 Control Sequence. *ASHRAE Transactions*. <https://escholarship.org/uc/item/5zt2d66r>
- Kent, M.G., Huynh, N.K., Mishra, A.K., Tartarini, F., Schiavon, S., et al. 2023. Energy Savings and Thermal Comfort in a Zero Energy Office Building with Fans in Singapore. *Building and Environment* 243, 110674. September. <https://doi.org/10.1016/j.buildenv.2023.110674> <https://escholarship.org/uc/item/894361mc>
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- Ko, W.H., Schiavon, S., Santos, L., Kent, M.G., Kim, H., and Keshavarzi, M. 2023. View Access Index: The effects of geometric variables of window views on occupants' satisfaction. *Building and Environment* 234, 1110132. April. <https://doi.org/10.1016/j.buildenv.2023.110132>
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