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His research interests include thermal comfort, perceived air quality, air movement, laboratory and field test methods, personal comfort systems, natural ventilation and energy efficiency in buildings.

Yongchao received a BS in Architectural Design from Shandong University in 2006, and a Ph.D. in Building Science from South China University of Technology in 2013. While working on his Ph.D., Yongchao spent two years as a visiting student researcher at Center of Built Environment, University of California, Berkeley, where he became a Postdoctoral Researcher after receiving his Ph.D.. His research focuses on air movement and comfort in hot-humid environments, gender differences in thermal comfort and outdoor thermal environment monitoring in cities in hot-humid climate.

Publications

Title	Citation	Year
<u>Selecting air speeds for cooling at sedentary and non-sedentary office activity levels</u>		2017
Y Zhai, E Arens, K Elsworth, H Zhang - Building and Environment, 2017 - Elsevier		
<u>Human comfort and perceived air quality in warm and humid environments with ceiling fans</u>	19	2015
Y Zhai, Y Zhang, H Zhang, W Pasut, E Arens, Q Meng Building and Environment 90, 178-185		
<u>Comfort under personally controlled air movement in warm and humid environments</u>	45	2013
Y Zhai, H Zhang, Y Zhang, W Pasut, E Arens, Q Meng Building and environment 65, 109-117		
<u>Using air movement for comfort during moderate exercise</u>	5	2015
Y Zhai, C Elsworth, E Arens, H Zhang, Y Zhang, L Zhao Building and Environment 94, 344-352		
<u>A review of the corrective power of personal comfort systems in non-neutral ambient environments</u>	42	2015
H Zhang, E Arens, Y Zhai Building and Environment 91, 15-41		
<u>Energy-efficient comfort with a heated/cooled chair: Results from</u>	27	2015

human subject tests

W Pasut, H Zhang, E Arens, Y Zhai
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Effect of a heated and cooled office chair on thermal comfort

W Pasut, H Zhang, E Arens, S Kaam, Y Zhai 24 2013
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Application of a stochastic window use model in EnergyPlus

S Dutton, H Zhang, Y Zhai, E Arens, YB Smires, S Brunswick, K Konis, ... 10 2012
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Thermal and air quality acceptability in buildings that reduce energy by reducing minimum airflow from overhead diffusers

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Effects of diffuser airflow minima on occupant comfort, air mixing, and building energy use (RP-1515)

E Arens, H Zhang, T Hoyt, S Kaam, F Bauman, Y Zhai, G Paliaga, J Stein, ... 5 2015
Science and Technology for the Built Environment 21 (8), 1075-1090

Use of adaptive actions and thermal comfort in a naturally ventilated office

A Honnekeri, MC Pigman, H Zhang, E Arens, M Fountain, Y Zhai, ... 4 2014
IndoorAir

Air movement as an energy efficient means toward occupant comfort

E Arens, H Zhang, W Pasut, Y Zhai, T Hoyt, L Huang 1 2013

Final Report Air movement as an energy efficient means toward
occupant comfort

EA PI, H Zhang, W Pasut, Y Zhai, T Hoyt, L Huang

2013