

Contents

Editorial

- 3 **Challenges of using CFD simulation for the design and online control of ventilation systems**

S.-J. Cao

Original Papers

- 7 **A highly active K/Cu-Mn-O catalyst for the removal of nitric oxide in indoor air**
 C. Wang, F. Li, Z. Sun and Q. Song
- 17 **The effect of solar reflectance, infrared emissivity, and thermal insulation of roofs on the annual energy consumption of single-family households in México**
 J. Lucero-Álvarez and I. R. Martín-Domínguez
- 34 **A study of correlation between flame height and gap width of an internal fire whirl in a vertical shaft with a single corner gap**
 G. W. Zou, H. Y. Hung and W. K. Chow
- 46 **Investigation of physiological differences between immersive virtual environment and indoor environment in a building**
 D. Yeom, J.-H. Choi and Y. Zhu

- 63 **Occupants' perception of air movements and air quality in a simulated classroom with an intermittent air supply system**
 A. Kabanshi, B. Yang, P. Sörqvist and M. Sandberg
- 77 **Effects of shaft inclination angle on the capacity of smoke exhaust under tunnel fire**
 Y. Yao, S. Zhang, L. Shi and X. Cheng
- 88 **Effects of simulated weightlessness on thermal sweating of human body: An experimental study**
 H. Zhu, H. Wang, C. Yu and Z. Liu
- 100 **Bridging the gap: The need for a systems thinking approach in understanding and addressing energy and environmental performance in buildings**
 C. Shrubsole, I. G. Hamilton, N. Zimmermann, G. Papachristos, T. Broyd, E. Burman, D. Mumovic, Y. Zhu, B. Lin and M. Davies
- 118 **Investigation of thermal comfort and the nozzle usage behaviour in aircraft cabins**
 Z. Fang, H. Liu, B. Li and A. Baldwin
- 132 **Dampness problems in Tianjin dwellings: A cross-sectional study of associations with building characteristics and lifestyles**
 X. Kong, Y. Sun, L. B. Weschler and J. Sundell