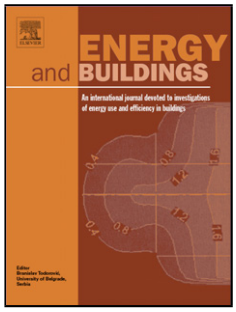

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Author: <ce:author id="aut0005" author-id="S0378778816320771-a373f92c7b00d8fa0a95d39db6b1ba74"> Yang He<ce:author id="aut0010" author-id="S0378778816320771-a3d724d7e5bf761aff7298d30c0c642c"> Hang Yu<ce:author id="aut0015" author-id="S0378778816320771-4452947e954396fd4126f88ca584b72d"> Akihito Ozaki<ce:author id="aut0020" author-id="S0378778816320771-3a8b5c4db7b0b0484324f30d4b3e3f09"> Nannan Dong<ce:author id="aut0025" author-id="S0378778816320771-e1e7f7012ce504922b73abc2410ca0e1"> Shiling Zheng

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An investigation on the thermal and energy performance of living wall system in Shanghai area

Yang He[1], Hang Yu[1]*, Akihito Ozaki[2], Nannan Dong[3], Shiling Zheng[4]

1) HVAC&GAS Institute, School of Mechanical Engineering, Tongji University, Shanghai, P.R. China
2) Graduate School of Human-Environment Studies, Kyushu University, Fukuoka, Japan
3) Department of Landscape Studies, College of Architecture and Urban Planning, Tongji University, Shanghai, P.R. China
4) Department of Architecture, College of Architecture and Urban Planning, Tongji University, Shanghai, P.R. China

*: Corresponding author
Email: tjyuhang@163.com
Tel：+86 18817308597

Highlights:

(1) A coupled heat and moisture transfer model of living wall is developed and validated.

(2) A thermal performance comparison between living wall and common wall is presented.

(3) The impact of orientation on relative thermal benefits of living wall is analyzed.

(4) Equivalent thermal resistance of living wall is calculated in summer and winter.

(5) Sensitivity test of various factors on equivalent thermal resistance is conducted.