

# Jian Hang

## List of Publications by Year in descending order

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87  
papers

4,829  
citations

92079

37  
h-index

103101

66  
g-index

88  
all docs

88  
docs citations

88  
times ranked

3103  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Insufficient ventilation led to a probable long-range airborne transmission of SARS-CoV-2 on two buses. <i>Building and Environment</i> , 2022, 207, 108414.   | 7.0  | 83        |
| 2  | Scaled outdoor experimental analysis of ventilation and interunit dispersion with wind and buoyancy effects in street canyons. <i>Energy and Buildings</i> , 2022, 255, 111688.  | 6.8  | 17        |
| 3  | Predominant airborne transmission and insignificant fomite transmission of SARS-CoV-2 in a two-bus COVID-19 outbreak originating from the same pre-symptomatic index case. <i>Journal of Hazardous Materials</i> , 2022, 425, 128051.      | 12.6 | 37        |
| 4  | Heat Wave Trends in Southeast Asia: Comparison of Results From Observation and Reanalysis Data. <i>Geophysical Research Letters</i> , 2022, 49, .  | 4.0  | 11        |
| 5  | Numerical Investigations of Urban Pollutant Dispersion and Building Intake Fraction with Various 3D Building Configurations and Tree Plantings. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 3524. | 2.7  | 10        |
| 6  | Impact of Indoor-Outdoor Temperature Difference on Building Ventilation and Pollutant Dispersion within Urban Communities. <i>Atmosphere</i> , 2022, 13, 28.   | 2.3  | 13        |
| 7  | Influence of urban spatial and socioeconomic parameters on PM2.5 at subdistrict level: A land use regression study in Shenzhen, China. <i>Journal of Environmental Sciences</i> , 2022, 114, 485-502.                                      | 6.3  | 15        |
| 8  | Role of pathogen-laden expiratory droplet dispersion and natural ventilation explaining a COVID-19 outbreak in a coach bus. <i>Building and Environment</i> , 2022, 220, 109160.   | 7.0  | 34        |
| 9  | Numerical investigation of the effects of environmental conditions, droplet size, and social distancing on droplet transmission in a street canyon. <i>Building and Environment</i> , 2022, 221, 109261.                                   | 7.0  | 18        |
| 10 | Numerical investigations of Re-independence and influence of wall heating on flow characteristics and ventilation in full-scale 2D street canyons. <i>Building and Environment</i> , 2021, 189, 107510.                                    | 7.0  | 52        |
| 11 | Interactive effect between long-term and short-term thermal history on outdoor thermal comfort: Comparison between Guangzhou, Zhuhai and Melbourne. <i>Science of the Total Environment</i> , 2021, 760, 144141.                           | 8.2  | 39        |
| 12 | Integrated impacts of tree planting and aspect ratios on thermal environment in street canyons by scaled outdoor experiments. <i>Science of the Total Environment</i> , 2021, 764, 142920.   | 8.2  | 67        |
| 13 | The influence of solar natural heating and NO <sub>2</sub> -O <sub>3</sub> photochemistry on flow and reactive pollutant exposure in 2D street canyons. <i>Science of the Total Environment</i> , 2021, 759, 143527.                       | 8.2  | 26        |
| 14 | Influence of acclimatization and short-term thermal history on outdoor thermal comfort in subtropical South China. <i>Energy and Buildings</i> , 2021, 231, 110541.  | 6.8  | 37        |
| 15 | Numerical investigations of wind and thermal environment in 2D scaled street canyons with various aspect ratios and solar wall heating. <i>Building and Environment</i> , 2021, 190, 107525.   | 7.0  | 18        |
| 16 | Outdoor Airborne Transmission of Coronavirus Among Apartments in High-Density Cities. <i>Frontiers in Built Environment</i> , 2021, 7, .   | 2.3  | 22        |
| 17 | Probable airborne transmission of SARS-CoV-2 in a poorly ventilated restaurant. <i>Building and Environment</i> , 2021, 196, 107788.   | 7.0  | 403       |
| 18 | Airborne transmission of pathogen-laden expiratory droplets in open outdoor space. <i>Science of the Total Environment</i> , 2021, 773, 145537.  | 8.2  | 34        |

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|----|---|-----|-----------|
| 19 | APFoam 1.0: integrated computational fluid dynamics simulation of organic compound chemistry and pollutant dispersion in a typical street canyon. <i>Geoscientific Model Development</i> , 2021, 14, 4655-4681.                                 | 3.7 | 6         |
| 20 | Effects of short-term physiological and psychological adaptation on summer thermal comfort of outdoor exercising people in China. <i>Building and Environment</i> , 2021, 198, 107877.  | 7.0 | 44        |
| 21 | Effects of urban geometry on thermal environment in 2D street canyons: A scaled experimental study. <i>Building and Environment</i> , 2021, 198, 107916.  | 7.0 | 29        |
| 22 | Investigation of the Reynolds number independence of cavity flow in 2D street canyons by wind tunnel experiments and numerical simulations. <i>Building and Environment</i> , 2021, 201, 107965.  | 7.0 | 24        |
| 23 | Deposition of ambient particles in the human respiratory system based on single particle analysis: A case study in the Pearl River Delta, China. <i>Environmental Pollution</i> , 2021, 283, 117056.  | 7.7 | 1         |
| 24 | Numerical investigation of solar impacts on canyon vortices and its dynamical generation mechanism. <i>Urban Climate</i> , 2021, 39, 100978.  | 5.8 | 8         |
| 25 | Characterization of dicarboxylic acids, oxoacids, and $\alpha$ -dicarbonyls in PM <sub>2.5</sub> within the urban boundary layer in southern China: Sources and formation pathways. <i>Environmental Pollution</i> , 2021, 285, 117185.         | 7.7 | 13        |
| 26 | Steady and unsteady turbulent flows and pollutant dispersion in 2D street canyons with novel boundary conditions and various Re numbers. <i>Urban Climate</i> , 2021, 39, 100973.   | 5.8 | 4         |
| 27 | Influences of street aspect ratios and realistic solar heating on convective heat transfer and ventilation in full-scale 2D street canyons. <i>Building and Environment</i> , 2021, 204, 108125.  | 7.0 | 27        |
| 28 | Urban thermal environment and surface energy balance in 3D high-rise compact urban models: Scaled outdoor experiments. <i>Building and Environment</i> , 2021, 205, 108251.   | 7.0 | 16        |
| 29 | Effects of tree plantings and aspect ratios on pedestrian visual and thermal comfort using scaled outdoor experiments. <i>Science of the Total Environment</i> , 2021, 801, 149527.   | 8.2 | 52        |
| 30 | Numerical investigations of reactive pollutant dispersion and personal exposure in 3D urban-like models. <i>Building and Environment</i> , 2020, 169, 106569.   | 7.0 | 18        |
| 31 | Size-segregated deposition of atmospheric elemental carbon (EC) in the human respiratory system: A case study of the Pearl River Delta, China. <i>Science of the Total Environment</i> , 2020, 708, 134932.                                     | 8.2 | 12        |
| 32 | Integrated impacts of tree planting and street aspect ratios on CO dispersion and personal exposure in full-scale street canyons. <i>Building and Environment</i> , 2020, 169, 106529.  | 7.0 | 84        |
| 33 | Integrated assessment of indoor and outdoor ventilation in street canyons with naturally-ventilated buildings by various ventilation indexes. <i>Building and Environment</i> , 2020, 169, 106528.  | 7.0 | 35        |
| 34 | Integrated impacts of turbulent mixing and NO <sub>x</sub> -O <sub>3</sub> photochemistry on reactive pollutant dispersion and intake fraction in shallow and deep street canyons. <i>Science of the Total Environment</i> , 2020, 712, 135553. | 8.2 | 59        |
| 35 | The influence of aspect ratios and wall heating conditions on flow and passive pollutant exposure in 2D typical street canyons. <i>Building and Environment</i> , 2020, 168, 106536.  | 7.0 | 38        |
| 36 | Urban plume characteristics under various wind speed, heat flux, and stratification conditions. <i>Atmospheric Environment</i> , 2020, 239, 117774.   | 4.2 | 21        |

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|----|---|------|-----------|
| 37 | Cross-modal effects of thermal and visual conditions on outdoor thermal and visual comfort perception. <i>Building and Environment</i> , 2020, 186, 107297.   | 7.0  | 38        |
| 38 | The influence of aspect ratios and solar heating on flow and ventilation in 2D street canyons by scaled outdoor experiments. <i>Building and Environment</i> , 2020, 185, 107159.   | 7.0  | 63        |
| 39 | Numerical studies of passive and reactive pollutant dispersion in high-density urban models with various building densities and height variations. <i>Building and Environment</i> , 2020, 177, 106916.                                       | 7.0  | 20        |
| 40 | Bioaccessibility and exposure assessment of PM <sub>2.5</sub> - and PM <sub>10</sub> -bound rare earth elements in Oil City, Northeast China. <i>Journal of Hazardous Materials</i> , 2020, 396, 122520.                                      | 12.6 | 9         |
| 41 | Urban heat island circulations over the Beijing-Tianjin region under calm and fair conditions. <i>Building and Environment</i> , 2020, 180, 107063.   | 7.0  | 32        |
| 42 | Characteristics of urban air pollution in different regions of China between 2015 and 2019. <i>Building and Environment</i> , 2020, 180, 107048.  | 7.0  | 29        |
| 43 | Investigation of interunit dispersion in 2D street canyons: A scaled outdoor experiment. <i>Building and Environment</i> , 2020, 171, 106673.   | 7.0  | 26        |
| 44 | Transmission of pathogen-laden expiratory droplets in a coach bus. <i>Journal of Hazardous Materials</i> , 2020, 397, 122609.   | 12.6 | 143       |
| 45 | Scaled outdoor experimental studies of urban thermal environment in street canyon models with various aspect ratios and thermal storage. <i>Science of the Total Environment</i> , 2020, 726, 138147.   | 8.2  | 101       |
| 46 | Multilayer urban canopy modelling and mapping for traffic pollutant dispersion at high density urban areas. <i>Science of the Total Environment</i> , 2019, 647, 255-267.   | 8.2  | 41        |
| 47 | Projections of long-term human multimedia exposure to metal(loid)s and the health risks derived from atmospheric deposition: A case study in the Pearl River Delta region, South China. <i>Environment International</i> , 2019, 132, 105051. | 10.1 | 12        |
| 48 | Inhalation bioaccessibility of polycyclic aromatic hydrocarbons in heavy PM <sub>2.5</sub> pollution days: Implications for public health risk assessment in northern China. <i>Environmental Pollution</i> , 2019, 255, 113296.              | 7.7  | 17        |
| 49 | Ingestion bioaccessibility of indoor dust-bound PAHs: Inclusion of a sorption sink to simulate passive transfer across the small intestine. <i>Science of the Total Environment</i> , 2019, 659, 1546-1554.                                   | 8.2  | 15        |
| 50 | Interacting urban heat island circulations as affected by weak background wind. <i>Building and Environment</i> , 2019, 160, 106224.  | 7.0  | 18        |
| 51 | Association between parental perceptions of odors and childhood asthma in subtropical South China with a hot humid climate. <i>Building and Environment</i> , 2019, 159, 106155.  | 7.0  | 5         |
| 52 | In Vitro investigations of high molecular weight polycyclic aromatic hydrocarbons in winter airborne particles using simulated lung fluids. <i>Atmospheric Environment</i> , 2019, 201, 293-300.  | 4.2  | 12        |
| 53 | Numerical evaluations of urban design technique to reduce vehicular personal intake fraction in deep street canyons. <i>Science of the Total Environment</i> , 2019, 653, 968-994.  | 8.2  | 142       |
| 54 | Urban heat island circulations of an idealized circular city as affected by background wind speed. <i>Building and Environment</i> , 2019, 148, 433-447.  | 7.0  | 29        |

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|----|--|-----|-----------|
| 55 | The influence of advertisement boards, street and source layouts on CO dispersion and building intake fraction in three-dimensional urban-like models. <i>Building and Environment</i> , 2019, 150, 297-321.               | 7.0 | 36        |
| 56 | Impact of indoor-outdoor temperature differences on dispersion of gaseous pollutant and particles in idealized street canyons with and without viaduct settings. <i>Building Simulation</i> , 2019, 12, 285-297.           | 5.5 | 29        |
| 57 | The impact of urban open space and "lift-up" building design on building intake fraction and daily pollutant exposure in idealized urban models. <i>Science of the Total Environment</i> , 2018, 633, 1314-1328.           | 8.2 | 88        |
| 58 | Evaluation of computational and physical parameters influencing CFD simulations of pollutant dispersion in building arrays. <i>Building and Environment</i> , 2018, 137, 90-107.   | 7.0 | 68        |
| 59 | A zonal model for assessing street canyon air temperature of high-density cities. <i>Building and Environment</i> , 2018, 132, 160-169.  | 7.0 | 41        |
| 60 | Natural Ventilation of a Small-Scale Road Tunnel by Wind Catchers: A CFD Simulation Study. <i>Atmosphere</i> , 2018, 9, 411.   | 2.3 | 13        |
| 61 | The impact of semi-open settings on ventilation in idealized building arrays. <i>Urban Climate</i> , 2018, 25, 196-217.  | 5.8 | 22        |
| 62 | The impacts of viaduct settings and street aspect ratios on personal intake fraction in three-dimensional urban-like geometries. <i>Building and Environment</i> , 2018, 143, 138-162.                                     | 7.0 | 63        |
| 63 | Numerical investigations of flow and passive pollutant exposure in high-rise deep street canyons with various street aspect ratios and viaduct settings. <i>Science of the Total Environment</i> , 2017, 584-585, 189-206. | 8.2 | 118       |
| 64 | The impacts of building height variations and building packing densities on flow adjustment and city breathability in idealized urban models. <i>Building and Environment</i> , 2017, 118, 344-361.                        | 7.0 | 164       |
| 65 | The Influence of Building Packing Densities on Flow Adjustment and City Breathability in Urban-like Geometries. <i>Procedia Engineering</i> , 2017, 198, 758-769.  | 1.2 | 12        |
| 66 | The influence of street layouts and viaduct settings on daily carbon monoxide exposure and intake fraction in idealized urban canyons. <i>Environmental Pollution</i> , 2017, 220, 72-86.                                  | 7.7 | 145       |
| 67 | A combined fully-resolved and porous approach for building cluster wind flows. <i>Building Simulation</i> , 2017, 10, 97-109.  | 5.5 | 13        |
| 68 | Solar Radiation Intensity and Outdoor Thermal Comfort in Royal Botanic Garden Melbourne during Heatwave Conditions. <i>Procedia Engineering</i> , 2017, 205, 3456-3462.  | 1.2 | 16        |
| 69 | Impacts of Urban Layouts and Open Space on Urban Ventilation Evaluated by Concentration Decay Method. <i>Atmosphere</i> , 2017, 8, 169.  | 2.3 | 15        |
| 70 | On the influence of viaduct and ground heating on pollutant dispersion in 2D street canyons and toward single-sided ventilated buildings. <i>Atmospheric Pollution Research</i> , 2016, 7, 817-832.                        | 3.9 | 55        |
| 71 | Natural convection flows along a 16-storey high-rise building. <i>Building and Environment</i> , 2016, 107, 215-225.   | 7.0 | 55        |
| 72 | Numerical investigation of wind-driven natural ventilation performance in a multi-storey hospital by coupling indoor and outdoor airflow. <i>Indoor and Built Environment</i> , 2016, 25, 1226-1247.                       | 2.8 | 43        |

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|----|--|-----|-----------|
| 73 | Integrated Effects of Street Layouts and Wall Heating on Vehicular Pollutant Dispersion and their Reentry Toward Downstream Canyons. <i>Aerosol and Air Quality Research</i> , 2016, 16, 3142-3163.                    | 2.1 | 43        |
| 74 | Potential airborne transmission between two isolation cubicles through a shared anteroom. <i>Building and Environment</i> , 2015, 89, 264-278.   | 7.0 | 63        |
| 75 | City breathability in medium density urban-like geometries evaluated through the pollutant transport rate and the net escape velocity. <i>Building and Environment</i> , 2015, 94, 166-182.                            | 7.0 | 122       |
| 76 | The influence of human walking on the flow and airborne transmission in a six-bed isolation room: Tracer gas simulation. <i>Building and Environment</i> , 2014, 77, 119-134.  | 7.0 | 140       |
| 77 | Quantitative ventilation assessments of idealized urban canopy layers with various urban layouts and the same building packing density. <i>Building and Environment</i> , 2014, 79, 152-167.                           | 7.0 | 140       |
| 78 | Natural ventilation assessment in typical open and semi-open urban environments under various wind directions. <i>Building and Environment</i> , 2013, 70, 318-333.  | 7.0 | 97        |
| 79 | Macroscopic simulations of turbulent flows through high-rise building arrays using a porous turbulence model. <i>Building and Environment</i> , 2012, 49, 41-54.   | 7.0 | 33        |
| 80 | The influence of building height variability on pollutant dispersion and pedestrian ventilation in idealized high-rise urban areas. <i>Building and Environment</i> , 2012, 56, 346-360.                               | 7.0 | 331       |
| 81 | On the contribution of mean flow and turbulence to city breathability: The case of long streets with tall buildings. <i>Science of the Total Environment</i> , 2012, 416, 362-373.                                     | 8.2 | 84        |
| 82 | Experimental and numerical studies of flows through and within high-rise building arrays and their link to ventilation strategy. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2011, 99, 1036-1055. | 4.0 | 77        |
| 83 | Age of air and air exchange efficiency in high-rise urban areas and its link to pollutant dilution. <i>Atmospheric Environment</i> , 2011, 45, 5572-5585.  | 4.2 | 95        |
| 84 | Wind Conditions in Idealized Building Clusters: Macroscopic Simulations Using a Porous Turbulence Model. <i>Boundary-Layer Meteorology</i> , 2010, 136, 129-159.   | 2.2 | 69        |
| 85 | Ventilation strategy and air change rates in idealized high-rise compact urban areas. <i>Building and Environment</i> , 2010, 45, 2754-2767.   | 7.0 | 87        |
| 86 | Pollutant dispersion in idealized city models with different urban morphologies. <i>Atmospheric Environment</i> , 2009, 43, 6011-6025.   | 4.2 | 51        |
| 87 | Age of air and air exchange efficiency in idealized city models. <i>Building and Environment</i> , 2009, 44, 1714-1723.  | 7.0 | 131       |