Jian Hang

List of Publications by Citations

87 papers	2,515 citations	28 h-index	48 g-index
88 ext. papers	3,400 ext. citations	7 avg, IF	5.66 L-index

#	Paper	IF	Citations
87	The influence of building height variability on pollutant dispersion and pedestrian ventilation in idealized high-rise urban areas. *Building and Environment*, **2012**, 56, 346-360	6.5	225
86	Probable airborne transmission of SARS-CoV-2 in a poorly ventilated restaurant. *Building and Environment*, **2021**, 196, 107788	6.5	151
85	Quantitative ventilation assessments of idealized urban canopy layers with various urban layouts and the same building packing density. *Building and Environment*, **2014**, 79, 152-167	6.5	102
84	The impacts of building height variations and building packing densities on flow adjustment and city breathability in idealized urban models. *Building and Environment*, **2017**, 118, 344-361	6.5	100
83	Age of air and air exchange efficiency in idealized city models. *Building and Environment*, **2009**, 44, 1714-1723	6.5	99
82	The influence of street layouts and viaduct settings on daily carbon monoxide exposure and intake fraction in idealized urban canyons. *Environmental Pollution*, **2017**, 220, 72-86	9.3	97
81	City breathability in medium density urban-like geometries evaluated through the pollutant transport rate and the net escape velocity. *Building and Environment*, **2015**, 94, 166-182	6.5	87
80	Numerical evaluations of urban design technique to reduce vehicular personal intake fraction in deep street canyons. *Science of the Total Environment*, **2019**, 653, 968-994	10.2	81
79	The influence of human walking on the flow and airborne transmission in a six-bed isolation room: Tracer gas simulation. *Building and Environment*, **2014**, 77, 119-134	6.5	75
78	Evidence for probable aerosol transmission of SARS-CoV-2 in a poorly ventilated restaurant		71
77	Numerical investigations of flow and passive pollutant exposure in high-rise deep street canyons with various street aspect ratios and viaduct settings. *Science of the Total Environment*, **2017**, 584-585, 189-206	10.2	70
76	Transmission of pathogen-laden expiratory droplets in a coach bus. *Journal of Hazardous Materials*, **2020**, 397, 122609	12.8	70
75	Natural ventilation assessment in typical open and semi-open urban environments under various wind directions. *Building and Environment*, **2013**, 70, 318-333	6.5	66
74	Age of air and air exchange efficiency in high-rise urban areas and its link to pollutant dilution. *Atmospheric Environment*, **2011**, 45, 5572-5585	5.3	66
73	Ventilation strategy and air change rates in idealized high-rise compact urban areas. *Building and Environment*, **2010**, 45, 2754-2767	6.5	65
72	On the contribution of mean flow and turbulence to city breathability: the case of long streets with tall buildings. *Science of the Total Environment*, **2012**, 416, 362-73	10.2	61
71	Wind Conditions in Idealized Building Clusters: Macroscopic Simulations Using a Porous Turbulence Model. *Boundary-Layer Meteorology*, **2010**, 136, 129-159	3.4	53

70	Experimental and numerical studies of flows through and within high-rise building arrays and their link to ventilation strategy. *Journal of Wind Engineering and Industrial Aerodynamics*, **2011**, 99, 1036-1055	3.7	51
69	Integrated impacts of tree planting and street aspect ratios on CO dispersion and personal exposure in full-scale street canyons. *Building and Environment*, **2020**, 169, 106529	6.5	47
68	The impact of urban open space and Tilt-upTbuilding design on building intake fraction and daily pollutant exposure in idealized urban models. *Science of the Total Environment*, **2018**, 633, 1314-1328	10.2	44
67	The impacts of viaduct settings and street aspect ratios on personal intake fraction in three-dimensional urban-like geometries. *Building and Environment*, **2018**, 143, 138-162	6.5	44
66	Pollutant dispersion in idealized city models with different urban morphologies. *Atmospheric Environment*, **2009**, 43, 6011-6025	5.3	41
65	Scaled outdoor experimental studies of urban thermal environment in street canyon models with various aspect ratios and thermal storage. *Science of the Total Environment*, **2020**, 726, 138147	10.2	41
64	Potential airborne transmission between two isolation cubicles through a shared anteroom. *Building and Environment*, **2015**, 89, 264-278	6.5	40
63	Natural convection flows along a 16-storey high-rise building. *Building and Environment*, **2016**, 107, 215-225	6.5	36
62	Evaluation of computational and physical parameters influencing CFD simulations of pollutant dispersion in building arrays. *Building and Environment*, **2018**, 137, 90-107	6.5	34
61	Integrated Effects of Street Layouts and Wall Heating on Vehicular Pollutant Dispersion and their Reentry Toward Downstream Canyons. *Aerosol and Air Quality Research*, **2017**, 16, 3142-3163	4.6	32
60	On the influence of viaduct and ground heating on pollutant dispersion in 2D street canyons and toward single-sided ventilated buildings. *Atmospheric Pollution Research*, **2016**, 7, 817-832	4.5	29
59	A zonal model for assessing street canyon air temperature of high-density cities. *Building and Environment*, **2018**, 132, 160-169	6.5	26
58	Integrated impacts of turbulent mixing and NO-O photochemistry on reactive pollutant dispersion and intake fraction in shallow and deep street canyons. *Science of the Total Environment*, **2020**, 712, 135553	10.2	26
57	Numerical investigation of wind-driven natural ventilation performance in a multi-storey hospital by coupling indoor and outdoor airflow. *Indoor and Built Environment*, **2016**, 25, 1226-1247	1.8	25
56	Insufficient ventilation led to a probable long-range airborne transmission of SARS-CoV-2 on two buses. *Building and Environment*, **2022**, 207, 108414	6.5	25
55	Multilayer urban canopy modelling and mapping for traffic pollutant dispersion at high density urban areas. *Science of the Total Environment*, **2019**, 647, 255-267	10.2	24
54	Macroscopic simulations of turbulent flows through high-rise building arrays using a porous turbulence model. *Building and Environment*, **2012**, 49, 41-54	6.5	20
53	The influence of aspect ratios and solar heating on flow and ventilation in 2D street canyons by scaled outdoor experiments. *Building and Environment*, **2020**, 185, 107159	6.5	20

52	The influence of advertisement boards, street and source layouts on CO dispersion and building intake fraction in three-dimensional urban-like models. *Building and Environment*, **2019**, 150, 297-321	6.5	20
51	Impact of indoor-outdoor temperature differences on dispersion of gaseous pollutant and particles in idealized street canyons with and without viaduct settings. *Building Simulation*, **2019**, 12, 285-297	3.9	19
50	Urban heat island circulations of an idealized circular city as affected by background wind speed. *Building and Environment*, **2019**, 148, 433-447	6.5	16
49	Numerical investigations of Re-independence and influence of wall heating on flow characteristics and ventilation in full-scale 2D street canyons. *Building and Environment*, **2021**, 189, 107510	6.5	16
48	Interactive effect between long-term and short-term thermal history on outdoor thermal comfort: Comparison between Guangzhou, Zhuhai and Melbourne. *Science of the Total Environment*, **2021**, 760, 144141	10.2	15
47	Investigation of interunit dispersion in 2D street canyons: A scaled outdoor experiment. *Building and Environment*, **2020**, 171, 106673	6.5	14
46	The influence of aspect ratios and wall heating conditions on flow and passive pollutant exposure in 2D typical street canyons. *Building and Environment*, **2020**, 168, 106536	6.5	14
45	Integrated impacts of tree planting and aspect ratios on thermal environment in street canyons by scaled outdoor experiments. *Science of the Total Environment*, **2021**, 764, 142920	10.2	14
44	Characteristics of urban air pollution in different regions of China between 2015 and 2019. *Building and Environment*, **2020**, 180, 107048	6.5	13
43	The impact of semi-open settings on ventilation in idealized building arrays. *Urban Climate*, **2018**, 25, 196-217	6.8	12
42	Integrated assessment of indoor and outdoor ventilation in street canyons with naturally-ventilated buildings by various ventilation indexes. *Building and Environment*, **2020**, 169, 106528	6.5	12
41	Impacts of Urban Layouts and Open Space on Urban Ventilation Evaluated by Concentration Decay Method. *Atmosphere*, **2017**, 8, 169	2.7	11
40	Cross-modal effects of thermal and visual conditions on outdoor thermal and visual comfort perception. *Building and Environment*, **2020**, 186, 107297	6.5	11
39	Influence of acclimatization and short-term thermal history on outdoor thermal comfort in subtropical South China. *Energy and Buildings*, **2021**, 231, 110541	7	11
38	Inhalation bioaccessibility of polycyclic aromatic hydrocarbons in heavy PM pollution days: Implications for public health risk assessment in northern China. *Environmental Pollution*, **2019**, 255, 113296	9.3	10
37	Effects of short-term physiological and psychological adaptation on summer thermal comfort of outdoor exercising people in China. *Building and Environment*, **2021**, 198, 107877	6.5	10
36	Ingestion bioaccessibility of indoor dust-bound PAHs: Inclusion of a sorption sink to simulate passive transfer across the small intestine. *Science of the Total Environment*, **2019**, 659, 1546-1554	10.2	9
35	The Influence of Building Packing Densities on Flow Adjustment and City Breathability in Urban-like Geometries. *Procedia Engineering*, **2017**, 198, 758-769		9

34	A combined fully-resolved and porous approach for building cluster wind flows. *Building Simulation*, **2017**, 10, 97-109	3.9	9
33	Solar Radiation Intensity and Outdoor Thermal Comfort in Royal Botanic Garden Melbourne during Heatwave Conditions. *Procedia Engineering*, **2017**, 205, 3456-3462		8
32	Urban plume characteristics under various wind speed, heat flux, and stratification conditions. *Atmospheric Environment*, **2020**, 239, 117774	5.3	8
31	Natural Ventilation of a Small-Scale Road Tunnel by Wind Catchers: A CFD Simulation Study. *Atmosphere*, **2018**, 9, 411	2.7	8
30	Effects of tree plantings and aspect ratios on pedestrian visual and thermal comfort using scaled outdoor experiments. *Science of the Total Environment*, **2021**, 801, 149527	10.2	8
29	Interacting urban heat island circulations as affected by weak background wind. *Building and Environment*, **2019**, 160, 106224	6.5	7
28	Size-segregated deposition of atmospheric elemental carbon (EC) in the human respiratory system: A case study of the Pearl River Delta, China. *Science of the Total Environment*, **2020**, 708, 134932	10.2	7
27	Outdoor Airborne Transmission of Coronavirus Among Apartments in High-Density Cities. *Frontiers in Built Environment*, **2021**, 7,	2.2	7
26	In Vitro investigations of high molecular weight polycyclic aromatic hydrocarbons in winter airborne particles using simulated lung fluids. *Atmospheric Environment*, **2019**, 201, 293-300	5.3	6
25	Numerical studies of passive and reactive pollutant dispersion in high-density urban models with various building densities and height variations. *Building and Environment*, **2020**, 177, 106916	6.5	6
24	Urban heat island circulations over the Beijing-Tianjin region under calm and fair conditions. *Building and Environment*, **2020**, 180, 107063	6.5	6
23	Numerical investigations of reactive pollutant dispersion and personal exposure in 3D urban-like models. *Building and Environment*, **2020**, 169, 106569	6.5	6
22	Airborne transmission of pathogen-laden expiratory droplets in open outdoor space. *Science of the Total Environment*, **2021**, 773, 145537	10.2	6
21	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. *Environment International*, **2019**, 132, 105051	12.9	5
20	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.. *Journal of Hazardous Materials*, **2021**, 425, 128051	12.8	5
19	Numerical investigations of wind and thermal environment in 2D scaled street canyons with various aspect ratios and solar wall heating. *Building and Environment*, **2021**, 190, 107525	6.5	5
18	The influence of solar natural heating and NO-O photochemistry on flow and reactive pollutant exposure in 2D street canyons. *Science of the Total Environment*, **2021**, 759, 143527	10.2	5
17	Association between parental perceptions of odors and childhood asthma in subtropical South China with a hot humid climate. *Building and Environment*, **2019**, 159, 106155	6.5	4

16	Effects of urban geometry on thermal environment in 2D street canyons: A scaled experimental study. *Building and Environment*, **2021**, 198, 107916	6.5	4
15	Urban thermal environment and surface energy balance in 3D high-rise compact urban models: Scaled outdoor experiments. *Building and Environment*, **2021**, 205, 108251	6.5	4
14	Investigation of the Reynolds number independence of cavity flow in 2D street canyons by wind tunnel experiments and numerical simulations. *Building and Environment*, **2021**, 201, 107965	6.5	3
13	Bioaccessiblity and exposure assessment of PM- and PM-bound rare earth elements in Oil City, Northeast China. *Journal of Hazardous Materials*, **2020**, 396, 122520	12.8	2
12	Heat wave trends in Southeast Asia: Comparison of results from observation and reanalysis data. *Geophysical Research Letters*,	4.9	1
11	Scaled outdoor experimental analysis of ventilation and interunit dispersion with wind and buoyancy effects in street canyons. *Energy and Buildings*, **2021**, 111688	7	1
10	APFoam 1.0: integrated computational fluid dynamics simulation of O₃NO_{<i>x</i>}volatile organic compound chemistry and pollutant dispersion in a typical street canyon. *Geoscientific Model Development*, **2021**, 14, 4655-4681	6.3	1
9	Numerical investigation of solar impacts on canyon vortices and its dynamical generation mechanism. *Urban Climate*, **2021**, 39, 100978	6.8	1
8	Characterization of dicarboxylic acids, oxoacids, and dicarbonyls in PM within the urban boundary layer in southern China: Sources and formation pathways. *Environmental Pollution*, **2021**, 285, 117185	9.3	1
7	Numerical investigation of the effects of environmental conditions, droplet size, and social distancing on droplet transmission in a street canyon. *Building and Environment*, **2022**, 109261	6.5	1
6	Influences of street aspect ratios and realistic solar heating on convective heat transfer and ventilation in full-scale 2D street canyons. *Building and Environment*, **2021**, 204, 108125	6.5	0
5	Impact of Indoor-Outdoor Temperature Difference on Building Ventilation and Pollutant Dispersion within Urban Communities. *Atmosphere*, **2022**, 13, 28	2.7	0
4	Influence of urban spatial and socioeconomic parameters on PM at subdistrict level: A land use regression study in Shenzhen, China.. *Journal of Environmental Sciences*, **2022**, 114, 485-502	6.4	0
3	Role of pathogen-laden expiratory droplet dispersion and natural ventilation explaining a COVID-19 outbreak in a coach bus. *Building and Environment*, **2022**, 109160	6.5	0
2	Deposition of ambient particles in the human respiratory system based on single particle analysis: A case study in the Pearl River Delta, China. *Environmental Pollution*, **2021**, 283, 117056	9.3	
1	Steady and unsteady turbulent flows and pollutant dispersion in 2D street canyons with novel boundary conditions and various Re numbers. *Urban Climate*, **2021**, 39, 100973	6.8	