Jian Hang

List of Publications by Year in descending order

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87	4,829	92079	103101
papers	citations	37 h-index	66 g-index

88	88	88	3103
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probable airborne transmission of SARS-CoV-2 in a poorly ventilated restaurant. Building and Environment, 2021, 196, 107788.	7.0	403
2	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.	7.0	331
3	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.	7.0	164
4	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.	7.7	145
5	Transmission of pathogen-laden expiratory droplets in a coach bus. Journal of Hazardous Materials, 2020, 397, 122609.	12.6	143
6	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.	8.2	142
7	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.	7.0	140
8	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.	7.0	140
9	Age of air and air exchange efficiency in idealized city models. Building and Environment, 2009, 44, 1714-1723.	7.0	131
10	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.	7.0	122
11	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.	8.2	118
12	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.	8.2	101
13	Natural ventilation assessment in typical open and semi-open urban environments under various wind directions. Building and Environment, 2013, 70, 318-333.	7.0	97
14	Age of air and air exchange efficiency in high-rise urban areas and its link to pollutant dilution. Atmospheric Environment, 2011, 45, 5572-5585.	4.2	95
15	The impact of urban open space and â€˜lift-upâ€™ building design on building intake fraction and daily pollutant exposure in idealized urban models. Science of the Total Environment, 2018, 633, 1314-1328.	8.2	88
16	Ventilation strategy and air change rates in idealized high-rise compact urban areas. Building and Environment, 2010, 45, 2754-2767.	7.0	87
17	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, 362-373.	8.2	84
18	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.	7.0	84

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19	Insufficient ventilation led to a probable long-range airborne transmission of SARS-CoV-2 on two buses. Building and Environment, 2022, 207, 108414.	7.0	83
20	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.	4.0	77
21	Wind Conditions in Idealized Building Clusters: Macroscopic Simulations Using a Porous Turbulence Model. Boundary-Layer Meteorology, 2010, 136, 129-159.	2.2	69
22	Evaluation of computational and physical parameters influencing CFD simulations of pollutant dispersion in building arrays. Building and Environment, 2018, 137, 90-107.	7.0	68
23	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.	8.2	67
24	Potential airborne transmission between two isolation cubicles through a shared anteroom. Building and Environment, 2015, 89, 264-278.	7.0	63
25	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.	7.0	63
26	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.	7.0	63
27	Integrated impacts of turbulent mixing and NOX-O3 photochemistry on reactive pollutant dispersion and intake fraction in shallow and deep street canyons. Science of the Total Environment, 2020, 712, 135553.	8.2	59
28	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.	3.9	55
29	Natural convection flows along a 16-storey high-rise building. Building and Environment, 2016, 107, 215-225.	7.0	55
30	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.	7.0	52
31	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.	8.2	52
32	Pollutant dispersion in idealized city models with different urban morphologies. Atmospheric Environment, 2009, 43, 6011-6025.	4.2	51
33	Effects of short-term physiological and psychological adaptation on summer thermal comfort of outdoor exercising people in China. Building and Environment, 2021, 198, 107877.	7.0	44
34	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.	2.8	43
35	Integrated Effects of Street Layouts and Wall Heating on Vehicular Pollutant Dispersion and their Reentry Toward Downstream Canyons. Aerosol and Air Quality Research, 2016, 16, 3142-3163.	2.1	43
36	A zonal model for assessing street canyon air temperature of high-density cities. Building and Environment, 2018, 132, 160-169.	7.0	41

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37	Multilayer urban canopy modelling and mapping for traffic pollutant dispersion at high density urban areas. Science of the Total Environment, 2019, 647, 255-267.	8.2	41
38	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.	8.2	39
39	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.	7.0	38
40	Cross-modal effects of thermal and visual conditions on outdoor thermal and visual comfort perception. Building and Environment, 2020, 186, 107297.	7.0	38
41	Influence of acclimatization and short-term thermal history on outdoor thermal comfort in subtropical South China. Energy and Buildings, 2021, 231, 110541.	6.8	37
42	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, 2022, 425, 128051.	12.6	37
43	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.	7.0	36
44	Integrated assessment of indoor and outdoor ventilation in street canyons with naturally-ventilated buildings by various ventilation indexes. Building and Environment, 2020, 169, 106528.	7.0	35
45	Airborne transmission of pathogen-laden expiratory droplets in open outdoor space. Science of the Total Environment, 2021, 773, 145537.	8.2	34
46	Role of pathogen-laden expiratory droplet dispersion and natural ventilation explaining a COVID-19 outbreak in a coach bus. Building and Environment, 2022, 220, 109160.	7.0	34
47	Macroscopic simulations of turbulent flows through high-rise building arrays using a porous turbulence model. Building and Environment, 2012, 49, 41-54.	7.0	33
48	Urban heat island circulations over the Beijing-Tianjin region under calm and fair conditions. Building and Environment, 2020, 180, 107063.	7.0	32
49	Urban heat island circulations of an idealized circular city as affected by background wind speed. Building and Environment, 2019, 148, 433-447.	7.0	29
50	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.	5.5	29
51	Characteristics of urban air pollution in different regions of China between 2015 and 2019. Building and Environment, 2020, 180, 107048.	7.0	29
52	Effects of urban geometry on thermal environment in 2D street canyons: A scaled experimental study. Building and Environment, 2021, 198, 107916.	7.0	29
53	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.	7.0	27
54	Investigation of interunit dispersion in 2D street canyons: A scaled outdoor experiment. Building and Environment, 2020, 171, 106673.	7.0	26

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55	The influence of solar natural heating and NO -O3 photochemistry on flow and reactive pollutant exposure in 2D street canyons. Science of the Total Environment, 2021, 759, 143527.	8.2	26
56	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.	7.0	24
57	The impact of semi-open settings on ventilation in idealized building arrays. Urban Climate, 2018, 25, 196-217.	5.8	22
58	Outdoor Airborne Transmission of Coronavirus Among Apartments in High-Density Cities. Frontiers in Built Environment, 2021, 7, .	2.3	22
59	Urban plume characteristics under various wind speed, heat flux, and stratification conditions. Atmospheric Environment, 2020, 239, 117774.	4.2	21
60	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.	7.0	20
61	Interacting urban heat island circulations as affected by weak background wind. Building and Environment, 2019, 160, 106224.	7.0	18
62	Numerical investigations of reactive pollutant dispersion and personal exposure in 3D urban-like models. Building and Environment, 2020, 169, 106569.	7.0	18
63	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.	7.0	18
64	Numerical investigation of the effects of environmental conditions, droplet size, and social distancing on droplet transmission in a street canyon. Building and Environment, 2022, 221, 109261.	7.0	18
65	Inhalation bioaccessibility of polycyclic aromatic hydrocarbons in heavy PM2.5 pollution days: Implications for public health risk assessment in northern China. Environmental Pollution, 2019, 255, 113296.	7.7	17
66	Scaled outdoor experimental analysis of ventilation and interunit dispersion with wind and buoyancy effects in street canyons. Energy and Buildings, 2022, 255, 111688.	6.8	17
67	Solar Radiation Intensity and Outdoor Thermal Comfort in Royal Botanic Garden Melbourne during Heatwave Conditions. Procedia Engineering, 2017, 205, 3456-3462.	1.2	16
68	Urban thermal environment and surface energy balance in 3D high-rise compact urban models: Scaled outdoor experiments. Building and Environment, 2021, 205, 108251.	7.0	16
69	Impacts of Urban Layouts and Open Space on Urban Ventilation Evaluated by Concentration Decay Method. Atmosphere, 2017, 8, 169.	2.3	15
70	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.	8.2	15
71	Influence of urban spatial and socioeconomic parameters on PM2.5 at subdistrict level: A land use regression study in Shenzhen, China. Journal of Environmental Sciences, 2022, 114, 485-502.	6.3	15
72	A combined fully-resolved and porous approach for building cluster wind flows. Building Simulation, 2017, 10, 97-109.	5.5	13

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73	Natural Ventilation of a Small-Scale Road Tunnel by Wind Catchers: A CFD Simulation Study. Atmosphere, 2018, 9, 411.	2.3	13
74	Characterization of dicarboxylic acids, oxoacids, and Î±-dicarbonyls in PM2.5 within the urban boundary layer in southern China: Sources and formation pathways. Environmental Pollution, 2021, 285, 117185.	7.7	13
75	Impact of Indoor-Outdoor Temperature Difference on Building Ventilation and Pollutant Dispersion within Urban Communities. Atmosphere, 2022, 13, 28.	2.3	13
76	The Influence of Building Packing Densities on Flow Adjustment and City Breathability in Urban-like Geometries. Procedia Engineering, 2017, 198, 758-769.	1.2	12
77	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.	10.1	12
78	In Vitro investigations of high molecular weight polycyclic aromatic hydrocarbons in winter airborne particles using simulated lung fluids. Atmospheric Environment, 2019, 201, 293-300.	4.2	12
79	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.	8.2	12
80	Heat Wave Trends in Southeast Asia: Comparison of Results From Observation and Reanalysis Data. Geophysical Research Letters, 2022, 49, .	4.0	11
81	Numerical Investigations of Urban Pollutant Dispersion and Building Intake Fraction with Various 3D Building Configurations and Tree Plantings. International Journal of Environmental Research and Public Health, 2022, 19, 3524.	2.7	10
82	Bioaccessiblity and exposure assessment of PM2.5- and PM10-bound rare earth elements in Oil City, Northeast China. Journal of Hazardous Materials, 2020, 396, 122520.	12.6	9
83	Numerical investigation of solar impacts on canyon vortices and its dynamical generation mechanism. Urban Climate, 2021, 39, 100978.	5.8	8
84	APFoam 1.0: integrated computational fluid dynamics simulation of O₃â€“NO_{<i>x</i>}â organic compound chemistry and pollutant dispersion in a typical street canyon. Geoscientific Model Development, 2021, 14, 4655-4681.	3.7	6
85	Association between parental perceptions of odors and childhood asthma in subtropical South China with a hot humid climate. Building and Environment, 2019, 159, 106155.	7.0	5
86	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.	5.8	4
87	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.	7.7	1