

# Zhiwen Luo

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

1,721  
citations

236612

25  
h-index

288905

40  
g-index

55  
all docs

55  
docs citations

55  
times ranked

1503  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of inter-building longwave radiative exchanges on building energy performance and indoor overheating. <i>Building and Environment</i> , 2022, 209, 108628.	3.0	11
2	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.	1.2	7
3	Revising the definition of anthropogenic heat flux from buildings: role of human activities and building storage heat flux. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 4721-4735.	1.9	8
4	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.	3.0	26
5	The impact of indoor thermal stratification on the dispersion of human speech droplets. <i>Indoor Air</i> , 2021, 31, 369-382.	2.0	31
6	Airborne transmission of pathogen-laden expiratory droplets in open outdoor space. <i>Science of the Total Environment</i> , 2021, 773, 145537.	3.9	27
7	Impact of COVID-19 lockdown on NO <sub>2</sub> and PM <sub>2.5</sub> exposure inequalities in London, UK. <i>Environmental Research</i> , 2021, 198, 111236.	3.7	13
8	Revisiting physical distancing threshold in indoor environment using infection-risk-based modeling. <i>Environment International</i> , 2021, 153, 106542.	4.8	29
9	Crowdsourcing Urban Air Temperature Data for Estimating Urban Heat Island and Building Heating/Cooling Load in London. <i>Energies</i> , 2021, 14, 5208.	1.6	9
10	Comparing different approaches for assessing the impact of COVID-19 lockdown on urban air quality in Reading, UK. <i>Atmospheric Research</i> , 2021, 261, 105730.	1.8	12
11	Urban meteorological forcing data for building energy simulations. <i>Building and Environment</i> , 2021, 204, 108088.	3.0	23
12	An analytical model to predict the temperature in subway-tunnels by coupling thermal mass and ventilation. <i>Journal of Building Engineering</i> , 2021, 44, 102564.	1.6	4
13	Numerical investigations of reactive pollutant dispersion and personal exposure in 3D urban-like models. <i>Building and Environment</i> , 2020, 169, 106569.	3.0	17
14	Impact of neighbourhood-scale climate characteristics on building heating demand and night ventilation cooling potential. <i>Renewable Energy</i> , 2020, 150, 943-956.	4.3	28
15	Evaluating single-sided natural ventilation models against full-scale idealised measurements: Impact of wind direction and turbulence. <i>Building and Environment</i> , 2020, 170, 106556.	3.0	24
16	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.	3.0	31
17	A laboratory study of the expiratory airflow and particle dispersion in the stratified indoor environment. <i>Building and Environment</i> , 2020, 180, 106988.	3.0	28
18	Quantifying the Health Burden Misclassification from the Use of Different PM <sub>2.5</sub> Exposure Tier Models: A Case Study of London. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 1099.	1.2	10

#	ARTICLE	IF	CITATIONS
19	A novel solar-assisted ground-source heat pump (SAGSHP) with seasonal heat-storage and heat cascade utilization: Field test and performance analysis. <i>Solar Energy</i> , 2020, 201, 362-372.	2.9	24
20	Street canyon ventilation and airborne pollutant dispersion: 2-D versus 3-D CFD simulations. <i>Sustainable Cities and Society</i> , 2019, 50, 101700.	5.1	57
21	Impacts of urban microclimate on summertime sensible and latent energy demand for cooling in residential buildings of Hong Kong. <i>Energy</i> , 2019, 189, 116208.	4.5	34
22	Research of near-wall thermodynamic state for indoor airflow over the vertical heating unit using TIV/PIV/RTD. <i>Building and Environment</i> , 2019, 165, 106406.	3.0	4
23	Assessment of Overheating Risk in Gynaecology Scanning Rooms during Near-Heatwave Conditions: A Case Study of the Royal Berkshire Hospital in the UK. <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 3347.	1.2	7
24	Influence of neighbouring structures on building façade pressures: Comparison between full-scale, wind-tunnel, CFD and practitioner guidelines. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2019, 189, 22-33.	1.7	23
25	Numerical and experimental studies of a Capillary-Tube embedded PCM component for improving indoor thermal environment. <i>Applied Thermal Engineering</i> , 2019, 148, 466-477.	3.0	34
26	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.	3.0	32
27	An investigation of formaldehyde concentration in residences and the development of a model for the prediction of its emission rates. <i>Building and Environment</i> , 2019, 147, 540-550.	3.0	20
28	The impact of building operations on urban heat/cool islands under urban densification: A comparison between naturally-ventilated and air-conditioned buildings. <i>Applied Energy</i> , 2019, 235, 129-138.	5.1	34
29	Two-dimensional flow visualization and velocity measurement in natural convection near indoor heated surfaces using a thermal image velocimetry method. <i>Applied Thermal Engineering</i> , 2019, 146, 556-568.	3.0	11
30	A novel flow-guide device for uniform exhaust in a central air exhaust ventilation system. <i>Building and Environment</i> , 2019, 149, 134-145.	3.0	28
31	Health and economic benefits of building ventilation interventions for reducing indoor PM2.5 exposure from both indoor and outdoor origins in urban Beijing, China. <i>Science of the Total Environment</i> , 2018, 626, 546-554.	3.9	40
32	Optimizing the thermal performance of building envelopes for energy saving in underground office buildings in various climates of China. <i>Tunnelling and Underground Space Technology</i> , 2018, 77, 26-35.	3.0	34
33	Field measurement of natural ventilation rate in an idealised full-scale building located in a staggered urban array: Comparison between tracer gas and pressure-based methods. <i>Building and Environment</i> , 2018, 137, 246-256.	3.0	59
34	Effects of variability of local winds on cross ventilation for a simplified building within a full-scale asymmetric array: Overview of the Silsoe field campaign. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 175, 408-418.	1.7	23
35	Natural Ventilation of a Small-Scale Road Tunnel by Wind Catchers: A CFD Simulation Study. <i>Atmosphere</i> , 2018, 9, 411.	1.0	12
36	The urban cool island phenomenon in a high-rise high-density city and its mechanisms. <i>International Journal of Climatology</i> , 2017, 37, 890-904.	1.5	124

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37	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.	3.7	133
38	Guest Editorial Ventilation for Healthy Indoor Environments in Various Types of Buildings Extended Papers from Indoor Air 2014. <i>International Journal of Ventilation</i> , 2015, 14, 109-110.	0.2	0
39	Revisiting the "Venturi effect"™ in passage ventilation between two non-parallel buildings. <i>Building and Environment</i> , 2015, 94, 714-722.	3.0	39
40	Energy-based sustainability assessment of different energy options for green buildings. <i>Energy Conversion and Management</i> , 2015, 100, 97-102.	4.4	35
41	Subsurface urban heat island and its effects on horizontal ground-source heat pump potential under climate change. <i>Applied Thermal Engineering</i> , 2015, 90, 530-537.	3.0	27
42	A field study of urban microclimates in London. <i>Renewable Energy</i> , 2015, 73, 3-9.	4.3	55
43	An integrated study of urban microclimates in Chongqing, China: Historical weather data, transverse measurement and numerical simulation. <i>Sustainable Cities and Society</i> , 2015, 14, 187-199.	5.1	32
44	Inhalation exposure to particulate matter in rooms with underfloor air distribution. <i>Indoor and Built Environment</i> , 2014, 23, 236-245.	1.5	9
45	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.	3.0	131
46	Natural ventilation assessment in typical open and semi-open urban environments under various wind directions. <i>Building and Environment</i> , 2013, 70, 318-333.	3.0	89
47	Ventilation in a Street Canyon under Diurnal Heating Conditions. <i>International Journal of Ventilation</i> , 2012, 11, 141-154.	0.2	11
48	Effects of Urban Ventilation Patterns on the Carbon Monoxide Concentration in a High-Rise Mega City. <i>International Journal of Ventilation</i> , 2011, 10, 239-250.	0.2	3
49	Passive urban ventilation by combined buoyancy-driven slope flow and wall flow: Parametric CFD studies on idealized city models. <i>Atmospheric Environment</i> , 2011, 45, 5946-5956.	1.9	60
50	Intake fraction of nonreactive motor vehicle exhaust in Hong Kong. <i>Atmospheric Environment</i> , 2010, 44, 1913-1918.	1.9	54
51	Possible Role of Aerosol Transmission in a Hospital Outbreak of Influenza. <i>Clinical Infectious Diseases</i> , 2010, 51, 1176-1183.	2.9	104