

Shi-Jie Cao

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

2,996
citations

117453

34
h-index

182168

51
g-index

83
all docs

83
docs citations

83
times ranked

1686
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of ventilation performance of side air supply for large indoor spaces using deflectors and slot air outlets. <i>Indoor and Built Environment</i> , 2023, 32, 323-342.	1.5	9
2	Application of polyhedral meshing strategy in indoor environment simulation: Model accuracy and computing time. <i>Indoor and Built Environment</i> , 2022, 31, 719-731.	1.5	17
3	Energy-efficient preservation environment control for enclosed exhibition hall of earthen relics. <i>Energy and Buildings</i> , 2022, 256, 111713.	3.1	6
4	Urban development in the context of extreme flooding events. <i>Indoor and Built Environment</i> , 2022, 31, 3-6.	1.5	16
5	Ergonomics-oriented operation, maintenance and control of indoor air environment for public buildings. <i>Chinese Science Bulletin</i> , 2022, 67, 1783-1795.	0.4	6
6	A practical approach for preventing dispersion of infection disease in naturally ventilated room. <i>Journal of Building Engineering</i> , 2022, 48, 103921.	1.6	14
7	Challenges and Future Development Paths of Low Carbon Building Design: A Review. <i>Buildings</i> , 2022, 12, 163.	1.4	20
8	Ventilation Strategies for Mitigation of Infection Disease Transmission in an Indoor Environment: A Case Study in Office. <i>Buildings</i> , 2022, 12, 180.	1.4	24
9	In-kitchen aerosol exposure in twelve cities across the globe. <i>Environment International</i> , 2022, 162, 107155.	4.8	24
10	Green glass space based design for the driven of sustainable cities: A case study. <i>Sustainable Cities and Society</i> , 2022, 80, 103809.	5.1	16
11	Impact of Urban Park Design on Microclimate in Cold Regions using newly developed prediction method. <i>Sustainable Cities and Society</i> , 2022, 80, 103781.	5.1	28
12	Implementation of green infrastructure for improving the building environment of elderly care centres. <i>Journal of Building Engineering</i> , 2022, 54, 104682.	1.6	6
13	A global challenge for smart and healthy care homes for the elderly. <i>Indoor and Built Environment</i> , 2022, 31, 1733-1737.	1.5	1
14	Environmental co-benefits of urban design to mitigate urban heat island and PM _{2.5} pollution: Considering prevailing wind's effects. <i>Indoor and Built Environment</i> , 2022, 31, 1787-1805.	1.5	13
15	Nature-based solution of greenery configuration design by comprehensive benefit evaluation of microclimate environment and carbon sequestration. <i>Energy and Buildings</i> , 2022, 270, 112264.	3.1	19
16	Ventilation impacts on infection risk mitigation, improvement of environmental quality and energy efficiency for subway carriages. <i>Building and Environment</i> , 2022, 222, 109358.	3.0	16
17	In-car particulate matter exposure across ten global cities. <i>Science of the Total Environment</i> , 2021, 750, 141395.	3.9	46
18	Numerical study on the integrated effects of supplied air velocity and exhaust velocity on particles removal for industrial buildings. <i>Energy and Built Environment</i> , 2021, 2, 380-391.	2.9	13

#	ARTICLE	IF	CITATIONS
19	Development trend and challenges of sustainable urban design in the digital age. Indoor and Built Environment, 2021, 30, 3-6.	1.5	51
20	Fast prediction for multi-parameters (concentration, temperature and humidity) of indoor environment towards the online control of HVAC system. Building Simulation, 2021, 14, 649-665.	3.0	29
21	Quantitative investigations on setting parameters of air conditioning (air-supply speed and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	1.5	17
22	Technology pathway of efficient and climate-friendly cooling in buildings: Towards carbon neutrality. Indoor and Built Environment, 2021, 30, 1307-1311.	1.5	24
23	Occupant-density-detection based energy efficient ventilation system: Prevention of infection transmission. Energy and Buildings, 2021, 240, 110883.	3.1	96
24	Influences of the optimized air curtain at subway entrance to reduce the ingress of outdoor airborne particles. Energy and Buildings, 2021, 244, 111028.	3.1	31
25	Indoor airborne disinfection with electrostatic disinfectant (ESD): Numerical simulations of ESD performance and reduction of computing time. Building and Environment, 2021, 200, 107956.	3.0	24
26	Spatial distribution characteristics of PM2.5 concentration around residential buildings in urban traffic-intensive areas: From the perspectives of health and safety. Safety Science, 2021, 141, 105318.	2.6	35
27	Potential health risks due to in-car aerosol exposure across ten global cities. Environment International, 2021, 155, 106688.	4.8	23
28	Mitigating COVID-19 infection disease transmission in indoor environment using physical barriers. Sustainable Cities and Society, 2021, 74, 103175.	5.1	83
29	Impacts of urban-scale building height diversity on urban climates: A case study of Nanjing, China. Energy and Buildings, 2021, 251, 111350.	3.1	38
30	Construction of linear temperature model using non-dimensional heat exchange ratio: Towards fast prediction of indoor temperature and heating, ventilation and air conditioning systems control. Energy and Buildings, 2021, 251, 111351.	3.1	13
31	Removal of SARS-CoV-2 using UV+Filter in built environment. Sustainable Cities and Society, 2021, 74, 103226.	5.1	39
32	Identification of zonal pollutant diffusion characteristics using dynamic mode decomposition: Towards the deployment of sensors. Building and Environment, 2021, 206, 108379.	3.0	7
33	Non-uniform risk assessment methods for personalized ventilation on prevention and control of COVID-19. Chinese Science Bulletin, 2021, 66, 465-474.	0.4	7
34	Determining V-I characteristics of energy-efficient electrostatic assisted air filtration system by utilizing the back-corona induced current model. Energy and Built Environment, 2021, , .	2.9	0
35	Implementation and visualization of artificial intelligent ventilation control system using fast prediction models and limited monitoring data. Sustainable Cities and Society, 2020, 52, 101860.	5.1	88
36	The effect of vent inlet aspect ratio and its location on ventilation efficiency. Indoor and Built Environment, 2020, 29, 180-195.	1.5	31

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37	Ventilation online monitoring and control system from the perspectives of technology application. Indoor and Built Environment, 2020, 29, 587-602.	1.5	40
38	Challenges of using mobile phone signalling data to estimate urban population density: Towards smart cities and sustainable urban development. Indoor and Built Environment, 2020, 29, 147-150.	1.5	18
39	Heating, ventilating and air conditioning system and environmental control for wellbeing. Indoor and Built Environment, 2020, 29, 1191-1194.	1.5	15
40	HVAC systems for environmental control to minimize the COVID-19 infection. Indoor and Built Environment, 2020, 29, 1195-1201.	1.5	93
41	New and emerging building ventilation technologies. Indoor and Built Environment, 2020, 29, 483-484.	1.5	13
42	Impacts of Urban Form on Thermal Environment Near the Surface Region at Pedestrian Height: A Case Study Based on High-Density Built-Up Areas of Nanjing City in China. Sustainability, 2020, 12, 1737.	1.6	26
43	The 2019-nCoV epidemic control strategies and future challenges of building healthy smart cities. Indoor and Built Environment, 2020, 29, 639-644.	1.5	85
44	Development of self-adaptive low-dimension ventilation models using OpenFOAM: Towards the application of AI based on CFD data. Building and Environment, 2020, 171, 106671.	3.0	20
45	Sensor deployment strategy using cluster analysis of Fuzzy C-Means Algorithm: Towards online control of indoor environment's safety and health. Sustainable Cities and Society, 2020, 59, 102190.	5.1	47
46	Development and application of linear ventilation and temperature models for indoor environmental prediction and HVAC systems control. Sustainable Cities and Society, 2019, 51, 101673.	5.1	95
47	Fast prediction for indoor environment: Models assessment. Indoor and Built Environment, 2019, 28, 727-730.	1.5	49
48	A newly developed electrostatic enhanced pleated air filters towards the improvement of energy and filtration efficiency. Sustainable Cities and Society, 2019, 49, 101569.	5.1	43
49	Incorporating online monitoring data into fast prediction models towards the development of artificial intelligent ventilation systems. Sustainable Cities and Society, 2019, 47, 101498.	5.1	64
50	Study on the subway environment induced by moving train using Gaussian distributed momentum source theory method. Indoor and Built Environment, 2019, 28, 1083-1091.	1.5	13
51	Effect of Residential Greenness and Nearby Parks on Respiratory and Allergic Diseases among Middle School Adolescents in a Chinese City. International Journal of Environmental Research and Public Health, 2019, 16, 991.	1.2	25
52	Optimization of fibrous air filter on the basis of particle condensational growth during the air cooling and de-humidification process using mathematical modeling. IOP Conference Series: Materials Science and Engineering, 2019, 609, 042033.	0.3	0
53	Ventilation inlets design based on ventilation performance assessment using a dimensionless time scale. Indoor and Built Environment, 2019, 28, 1049-1063.	1.5	21
54	Challenges of using CFD simulation for the design and online control of ventilation systems. Indoor and Built Environment, 2019, 28, 3-6.	1.5	71

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55	Investigation of temperature regulation effects on indoor thermal comfort, air quality, and energy savings toward green residential buildings. <i>Science and Technology for the Built Environment</i> , 2019, 25, 309-321.	0.8	36
56	Prevalence of asthma and allergic symptoms in Suzhou, China: Trends by domestic migrant status. <i>Journal of Exposure Science and Environmental Epidemiology</i> , 2019, 29, 531-538.	1.8	6
57	Energy analysis of a hybrid radiant cooling system under hot and humid climates: A case study at Shanghai in China. <i>Building and Environment</i> , 2018, 137, 208-214.	3.0	54
58	Impacts of humidification process on indoor thermal comfort and air quality using portable ultrasonic humidifier. <i>Building and Environment</i> , 2018, 133, 62-72.	3.0	64
59	Influence of air change rates on indoor CO ₂ stratification in terms of Richardson number and vorticity. <i>Building and Environment</i> , 2018, 129, 74-84.	3.0	79
60	Evaluation of polyethylene and steel heat exchangers of ground source heat pump systems based on seasonal performance comparison and life cycle assessment. <i>Energy and Buildings</i> , 2018, 162, 54-64.	3.1	28
61	Impact of ventilation rates on indoor thermal comfort and energy efficiency of ground-source heat pump system. <i>Sustainable Cities and Society</i> , 2018, 37, 154-163.	5.1	79
62	The impact of ventilation parameters on thermal comfort and energy-efficient control of the ground-source heat pump system. <i>Energy and Buildings</i> , 2018, 179, 324-332.	3.1	15
63	Numerical study on the influence of human walking on contaminant transport indoors by using momentum theory method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 397, 012079.	0.3	1
64	Ventilation control strategy using low-dimensional linear ventilation models and artificial neural network. <i>Building and Environment</i> , 2018, 144, 316-333.	3.0	130
65	Fast and accurate prediction of airflow and drag force for duct ventilation using wall-modeled large-eddy simulation. <i>Building and Environment</i> , 2018, 141, 226-235.	3.0	24
66	Investigation on thermal performance of steel heat exchanger for ground source heat pump systems using full-scale experiments and numerical simulations. <i>Applied Thermal Engineering</i> , 2017, 115, 91-98.	3.0	60
67	An investigation of the PM _{2.5} and NO ₂ concentrations and their human health impacts in the metro subway system of Suzhou, China. <i>Environmental Sciences: Processes and Impacts</i> , 2017, 19, 666-675.	1.7	64
68	Incorporating denitrification-decomposition method to estimate field emissions for Life Cycle Assessment. <i>Science of the Total Environment</i> , 2017, 593-594, 65-74.	3.9	9
69	Experimental and numerical study on the thermal performance of ground source heat pump with a set of designed buried pipes. <i>Applied Thermal Engineering</i> , 2017, 114, 110-117.	3.0	57
70	Influential factors on thermoacoustic efficiency of multilayered graphene film loudspeakers for optimal design. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	15
71	The effects of ventilation and floor heating systems on the dispersion and deposition of fine particles in an enclosed environment. <i>Building and Environment</i> , 2017, 125, 192-205.	3.0	107
72	Study on the impacts of human walking on indoor particles dispersion using momentum theory method. <i>Building and Environment</i> , 2017, 126, 195-206.	3.0	90

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73	The impact of manufacturing parameters on submicron particle emissions from a desktop 3D printer in the perspective of emission reduction. <i>Building and Environment</i> , 2016, 104, 311-319.	3.0	92
74	Associated relationship between ventilation rates and indoor air quality. <i>RSC Advances</i> , 2016, 6, 111427-111435.	1.7	37
75	Evaluation of the Influence of Transitional Slot Reynolds Numbers on Ventilation Efficiency in Mechanically Ventilated Enclosures. <i>Procedia Engineering</i> , 2015, 121, 635-644.	1.2	2
76	Influence of atmospheric fine particulate matter (PM 2.5) pollution on indoor environment during winter in Beijing. <i>Building and Environment</i> , 2015, 87, 283-291.	3.0	83
77	Fast prediction of indoor pollutant dispersion based on reduced-order ventilation models. <i>Building Simulation</i> , 2015, 8, 415-420.	3.0	24
78	Investigation of Ultra-fine Particle Emissions of Desktop 3D Printers in the Clean Room. <i>Procedia Engineering</i> , 2015, 121, 506-512.	1.2	49
79	Asymptotic conditions for the use of linear ventilation models in the presence of buoyancy forces. <i>Building Simulation</i> , 2014, 7, 131-136.	3.0	16
80	Influence of turbulent boundary conditions on RANS simulations of pollutant dispersion in mechanically ventilated enclosures with transitional slot Reynolds number. <i>Building and Environment</i> , 2013, 59, 397-407.	3.0	52
81	On the construction and use of linear low-dimensional ventilation models. <i>Indoor Air</i> , 2012, 22, 427-441.	2.0	48