Tengfei Tim Zhang

List of Publications by Year
in descending order

79 papers	2,024 citations	218381 26 h-index	264894 42 g-index
85 all docs	85 docs citations	85 times ranked	1028 citing authors

#	Article	IF	Citations
1	Influencing factors in the simulation of airflow and particle transportation in aircraft cabins by CFD. Building and Environment, 2022, 207, 108413.	3.0	41
2	Measuring the flushing-generated flow and aerosols in lavatory of commercial aircraft. Building and Environment, 2022, 214, 108948.	3.0	10
3	Impact of Seat Inclination and Misalignment on Airborne Pollutant Transport in a Single-Aisle Aircraft Cabin. Applied Sciences (Switzerland), 2022, 12, 4538.	1.3	4
4	Modeling and Measuring the Leaked-Air Rate into the Insulation Layer of a Single-Aisle Aircraft Cabin. Buildings, 2022, 12, 652.	1.4	0
5	An improved wall-mounted displacement ventilation system in a large-span machining workshop. Building Simulation, 2022, 15, 1943-1953.	3.0	10
6	A passive pivoted window for stabilizing the natural ventilation rate. Energy and Buildings, 2022, 267, 112151.	3.1	5
7	Recent progress on studies of airborne infectious disease transmission, air quality, and thermal comfort in the airliner cabin air environment. Indoor Air, 2022, 32, e13032.	2.0	14
8	A Modified Surgical Face Mask to Improve Protection and Wearing Comfort. Buildings, 2022, 12, 663.	1.4	4
9	Airborne transmission of COVID–19 virus in enclosed spaces: An overview of research methods. Indoor Air, 2022, 32, .	2.0	57
10	Experimental investigation of air distribution in an airliner cabin mockup with displacement ventilation. Building and Environment, 2021, 191, 107577.	3.0	27
11	Removing painting-generated VOCs in a commercial airplane hangar with multiple portable exhaust hoods. Building and Environment, 2021, 196, 107797.	3.0	5
12	Residential building ventilation in situations with outdoor PM2.5 pollution. Building and Environment, 2021, 202, 108040.	3.0	19
13	Experimental evaluation of particle exposure at different seats in a single-aisle aircraft cabin. Building and Environment, 2021, 202, 108049.	3.0	15
14	Ventilation of ordinary face masks. Building and Environment, 2021, 205, 108261.	3.0	11
15	Numerical Investigation of Bioaerosol Transport in a Compact Lavatory. Buildings, 2021, 11, 526.	1.4	11
16	Analytical solution for the heat and mass transfer of spherical grains during drying. Biosystems Engineering, 2021, 212, 399-412.	1.9	5
17	A ventilator that responds to outdoor conditions for ventilation and air filtration. Energy and Buildings, 2020, 229, 110498.	3.1	7
18	Principles of air and contaminant movement inside and around buildings. , 2020, , 245-370.		7

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19	Numerical investigation of gaseous pollutant cross-transmission for single-sided natural ventilation driven by buoyancy and wind. Building and Environment, 2020, 172, 106705.	3.0	26
20	Simulation Analysis of Energy and Ventilation Performance of Typical Residential Building Ventilation Modes in Five Climate Zones of China. Environmental Science and Engineering, 2020, , 1093-1101.	0.1	0
21	Numerical Study of Convection Melting Inside Ice Storage Systems by the Lattice Boltzmann Model. Heat Transfer Engineering, 2019, 40, 1709-1721.	1.2	1
22	Flow and heat transfer characteristics of ice slurry in typical components of cooling systems: A review. International Journal of Heat and Mass Transfer, 2019, 141, 922-939.	2.5	42
23	Aerosolization of Aspergillus niger spores from colonies on different positions of a circular tube. E3S Web of Conferences, 2019, 111, 02030.	0.2	2
24	Aerosolization of Aspergillus niger spores from growing colonies on a bare tube. Atmospheric Environment, 2019, 218, 117008.	1.9	3
25	Detachment of adhered particles from a cloth surface subjected to a rod strike. Aerosol Science and Technology, 2019, 53, 435-448.	1.5	3
26	A model for calculating single-sided natural ventilation rate in an urban residential apartment. Building and Environment, 2019, 147, 372-381.	3.0	29
27	Measuring moisture content in a porous insulation package with finite thickness. International Journal of Heat and Mass Transfer, 2019, 129, 144-151.	2.5	64
28	Measured moisture accumulation in aircraft walls during simulated commercial flights. Science and Technology for the Built Environment, 2018, 24, 820-829.	0.8	2
29	Measuring moisture content in porous insulation materials based on transient temperatures over a period of 100Âseconds. Science and Technology for the Built Environment, 2018, 24, 571-579.	0.8	4
30	Numerical investigation of single-sided natural ventilation driven by buoyancy and wind through variable window configurations. Energy and Buildings, 2018, 168, 147-164.	3.1	30
31	Inverse design of aircraft cabin environment using computational fluid dynamics-based proper orthogonal decomposition method. Indoor and Built Environment, 2018, 27, 1379-1391.	1.5	12
32	Measuring detachment of *Aspergillus niger* spores from colonies with an atomic force microscope. Indoor Air, 2018, 28, 744-753.	2.0	7
33	Ventilation, indoor particle filtration, and energy consumption of an apartment in northern China. Building and Environment, 2018, 143, 280-292.	3.0	31
34	Zonal network solution of temperature profiles in a ventilated wall module. Journal of Building Performance Simulation, 2018, 11, 538-552.	1.0	1
35	Numerical and analytical investigation of ice slurry isothermal flow through horizontal bends. International Journal of Refrigeration, 2018, 92, 37-54.	1.8	23
36	Mathematical and experimental investigation on pressure drop of heterogeneous ice slurry flow in horizontal pipes. International Journal of Heat and Mass Transfer, 2017, 108, 2381-2392.	2.5	38

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37	Assessment of single-sided natural ventilation driven by buoyancy forces through variable window configurations. Energy and Buildings, 2017, 139, 762-779.	3.1	54
38	Numerical and analytical investigations of heat transfer for a finned tube heat exchanger with ice slurry as cooling medium. Science and Technology for the Built Environment, 2017, 23, 478-489.	0.8	4
39	Inverse identification of multiple temporal sources releasing the same tracer gaseous pollutant. Building and Environment, 2017, 118, 184-195.	3.0	29
40	Using an air cycle heat pump system with a turbocharger to supply heating for full electric vehicles. International Journal of Refrigeration, 2017, 77, 11-19.	1.8	25
41	Simulation of the Melting Process of Ice Slurry for Energy Storage Using a Two-Fluid Lattice Boltzmann Method. Energy Procedia, 2017, 121, 110-117.	1.8	5
42	Experimental identification of key parameters contributing to moisture accumulation in an aircraft section. Building and Environment, 2017, 126, 339-347.	3.0	5
43	Gaseous pollutant transmission through windows between vertical floors in a multistory building with natural ventilation. Energy and Buildings, 2017, 153, 325-340.	3.1	16
44	Improving the built environment from the systematic view. Science and Technology for the Built Environment, 2017, 23, 227-228.	0.8	0
45	Performance Analysis of an Air Cycle Heat Pump with a Turbocharger Driven by a Blower. Procedia Engineering, 2017, 205, 2720-2727.	1.2	2
46	Field study of infiltration rate and its influence on indoor air quality in an apartment. Procedia Engineering, 2017, 205, 3954-3961.	1.2	11
47	Experimental study of relative exposure to particles transmitted from kitchen in an apartment. Procedia Engineering, 2017, 205, 3830-3837.	1.2	4
48	Analytical Modeling of Microchannel Heat Sinks Using Microencapsulated Phase Change Material Slurry for Chip Cooling. Procedia Engineering, 2017, 205, 2704-2711.	1.2	13
49	An air cycle heat pump heating system using a turbocharger for full electric vehicle. Procedia Engineering, 2017, 205, 1405-1411.	1.2	1
50	CFD modeling of moisture accumulation in the insulation layers of an aircraft. Applied Thermal Engineering, 2016, 102, 1141-1156.	3.0	5
51	CFD Study of Ice Slurry Heat Transfer Characteristics in a Straight Horizontal Tube. Procedia Engineering, 2016, 146, 504-512.	1.2	15
52	Mathematical Model of Heat Transfer for a Finned Tube Cross-flow Heat Exchanger with Ice Slurry as Cooling Medium. Procedia Engineering, 2016, 146, 513-522.	1.2	12
53	Inverse design of underfloor heating power rates and air-supply temperature for an aircraft cabin. Applied Thermal Engineering, 2016, 95, 70-78.	3.0	16
54	Prompt design of the air-supply opening size for a commercial airplane based on the proper orthogonal decomposition of flows. Building and Environment, 2016, 96, 131-141.	3.0	29

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55	Experimental investigation of jet-induced resuspension of indoor deposited particles. Aerosol Science and Technology, 2016, 50, 230-241.	1.5	11
56	Inverse identification of the release location, temporal rates, and sensor alarming time of an airborne pollutant source. Indoor Air, 2015, 25, 415-427.	2.0	40
57	Optimal specification of target temperature points for inverse design of an indoor thermal environment. Building and Environment, 2015, 92, 518-527.	3.0	8
58	A general model for two-stage vapor compression heat pump systems. International Journal of Refrigeration, 2015, 51, 88-102.	1.8	49
59	State-of-the-art methods for inverse design of an enclosed environment. Building and Environment, 2015, 91, 91-100.	3.0	40
60	Measuring moisture content in a porous insulation material using a hot wire. Building and Environment, 2015, 84, 22-31.	3.0	12
61	Inverse determination of wall boundary convective heat fluxes in indoor environments based on CFD. Energy and Buildings, 2014, 73, 130-136.	3.1	19
62	Prediction of airflow rate through a ventilated wall module. Energy and Buildings, 2014, 82, 651-659.	3.1	12
63	Simulation on a Two-Stage Compression Heat Pump with Focus on Optimum Control. Lecture Notes in Electrical Engineering, 2014, , 381-397.	0.3	1
64	An adjustment to the standard temperature wall function for CFD modeling of indoor convective heat transfer. Building and Environment, 2013, 68, 159-169.	3.0	24
65	Numerical investigation of ice slurry isothermal flow in various pipes. International Journal of Refrigeration, 2013, 36, 70-80.	1.8	58
66	Heterogeneous ice slurry flow and concentration distribution in horizontal pipes. International Journal of Heat and Fluid Flow, 2013, 44, 425-434.	1.1	41
67	An inverse method based on CFD to quantify the temporal release rate of a continuously released pollutant source. Atmospheric Environment, 2013, 77, 62-77.	1.9	54
68	A personal air distribution system with air terminals embedded in chair armrests on commercial airplanes. Building and Environment, 2012, 47, 89-99.	3.0	78
69	Insulation of commercial aircraft with an air stream barrier along fuselage. Building and Environment, 2012, 57, 97-109.	3.0	13
70	Intermediate pressure of two-stage compression system under different conditions based on compressor coupling model. International Journal of Refrigeration, 2012, 35, 827-840.	1.8	21
71	Inversely tracking indoor airborne particles to locate their release sources. Atmospheric Environment, 2012, 55, 328-338.	1.9	56
72	Quantify impacted scope of human expired air under different head postures and varying exhalation rates. Building and Environment, 2011, 46, 1928-1936.	3.0	34

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73	An under-aisle air distribution system facilitating humidification of commercial aircraft cabins. Building and Environment, 2010, 45, 907-915.	3.0	53
74	Flow impact of an air conditioner to portable air cleaning. Building and Environment, 2010, 45, 2047-2056.	3.0	36
75	A simplified approach to describe complex diffusers in displacement ventilation for CFD simulations. Indoor Air, 2009, 19, 255-267.	2.0	53
76	Experimental and numerical investigation of airflow and contaminant transport in an airliner cabin mockup. Building and Environment, 2009, 44, 85-94.	3.0	247
77	Optimal Sensor Placement for Airborne Contaminant Detection in an Aircraft Cabin. HVAC and R Research, 2007, 13, 683-696.	0.9	43
78	Novel air distribution systems for commercial aircraft cabins. Building and Environment, 2007, 42, 1675-1684.	3.0	169
79	Measuring moisture content in building insulation materials by a hot film. Science and Technology for the Built Environment, 0, , 1-20.	0.8	1