Xiaodong Cao

List of Publications by Year
in descending order

47 papers	2,258 citations	279487 23 h-index	233125 45 g-index
48 all docs	48 docs citations	48 times ranked	2584 citing authors

#	Article	IF	Citations
1	Building energy-consumption status worldwide and the state-of-the-art technologies for zero-energy buildings during the past decade. Energy and Buildings, 2016, 128, 198-213.	3.1	876
2	Particle image velocimetry measurement of indoor airflow field: A review of the technologies and applications. Energy and Buildings, 2014, 69, 367-380.	3.1	122
3	Energy savings, emission reductions, and health co-benefits of the green building movement. Journal of Exposure Science and Environmental Epidemiology, 2018, 28, 307-318.	1.8	97
4	2D-PIV measurement of aircraft cabin air distribution with a high spatial resolution. Building and Environment, 2014, 82, 9-19.	3.0	75
5	Experimental and simulation study on the performance of daylighting in an industrial building and its energy saving potential. Energy and Buildings, 2014, 73, 184-191.	3.1	70
6	Building Evidence for Health: Green Buildings, Current Science, and Future Challenges. Annual Review of Public Health, 2018, 39, 291-308.	7.6	64
7	Airplane pilot flight performance on 21 maneuvers in a flight simulator under varying carbon dioxide concentrations. Journal of Exposure Science and Environmental Epidemiology, 2019, 29, 457-468.	1.8	63
8	A label-free electrochemical DNA biosensor based on thionine functionalized reduced graphene oxide. Carbon, 2018, 129, 730-737.	5.4	60
9	Electrochemical detection of Salmonella using an invA genosensor on polypyrrole-reduced graphene oxide modified glassy carbon electrode and AuNPs-horseradish peroxidase-streptavidin as nanotag. Analytica Chimica Acta, 2019, 1074, 80-88.	2.6	55
10	Global airflow field distribution in a cabin mock-up measured via large-scale 2D-PIV. Building and Environment, 2015, 93, 234-244.	3.0	52
11	Ultrasensitive electrochemical DNA sensor for virulence invA gene of Salmonella using silver nanoclusters as signal probe. Sensors and Actuators B: Chemical, 2018, 272, 53-59.	4.0	48
12	Numerical investigation of airborne contaminant transport under different vortex structures in the aircraft cabin. International Journal of Heat and Mass Transfer, 2016, 96, 287-295.	2.5	44
13	Low pH-shifting treatment would improve functional properties of black turtle bean (Phaseolus) Tj ETQq1 1 0.784314 rgBT /Overlock	4.2	41
14	Effect of pH regulation on the components and functional properties of proteins isolated from cold-pressed rapeseed meal through alkaline extraction and acid precipitation. Food Chemistry, 2020, 327, 126998.	4.2	39
15	Study of the thermal insulation properties of the glass fiber board used for interior building envelope. Energy and Buildings, 2015, 107, 49-58.	3.1	35
16	Using Twitter to Better Understand the Spatiotemporal Patterns of Public Sentiment: A Case Study in Massachusetts, USA. International Journal of Environmental Research and Public Health, 2018, 15, 250.	1.2	35
17	Heart Rate Variability and Performance of Commercial Airline Pilots during Flight Simulations. International Journal of Environmental Research and Public Health, 2019, 16, 237.	1.2	34
18	A study of ambient fine particles at Tianjin International Airport, China. Science of the Total Environment, 2016, 556, 126-135.	3.9	33

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19	Experimental study of transient air distribution of a jet collision region in an aircraft cabin mock-up. Energy and Buildings, 2016, 127, 786-793.	3.1	32
20	The on-board carbon dioxide concentrations and ventilation performance in passenger cabins of US domestic flights. Indoor and Built Environment, 2019, 28, 761-771.	1.5	30
21	2D-PIV measurement of isothermal air jets from a multi-slot diffuser in aircraft cabin environment. Building and Environment, 2016, 99, 44-58.	3.0	26
22	Influencing factors and energy-saving control strategies for indoor fine particles in commercial office buildings in six Chinese cities. Energy and Buildings, 2017, 149, 171-179.	3.1	24
23	PIV methods for quantifying human thermal plumes in a cabin environment without ventilation. Journal of Visualization, 2017, 20, 535-548.	1.1	24
24	Gold nanoparticle-doped three-dimensional reduced graphene hydrogel modified electrodes for amperometric determination of indole-3-acetic acid and salicylic acid. Nanoscale, 2019, 11, 10247-10256.	2.8	24
25	Predicting contaminant dispersion using modified turbulent Schmidt numbers from different vortex structures. Building and Environment, 2018, 130, 120-127.	3.0	23
26	Coupled simulation of natural ventilation and daylighting for a residential community design. Energy and Buildings, 2014, 68, 686-695.	3.1	22
27	Large-scale and long-term monitoring of the thermal environments and adaptive behaviors in Chinese urban residential buildings. Building and Environment, 2020, 168, 106524.	3.0	22
28	Impact of atmospheric particulate matter pollutants to IAQ of airport terminal buildings: A first field study at Tianjin Airport, China. Atmospheric Environment, 2018, 179, 222-226.	1.9	21
29	The effects of elevated carbon dioxide concentration and mental workload on task performance in an enclosed environmental chamber. Building and Environment, 2020, 178, 106938.	3.0	20
30	Physiological responses to elevated carbon dioxide concentration and mental workload during performing MATB tasks. Building and Environment, 2021, 195, 107752.	3.0	20
31	Associations between acute exposures to $PM_{2.5}$ and carbon dioxide indoors and cognitive function in office workers: a multicountry longitudinal prospective observational study. Environmental Research Letters, 2021, 16, 094047.	2.2	19
32	Numerical study of the instantaneous flow fields by large eddy simulation and stability analysis in a single aisle cabin model. Building and Environment, 2016, 96, 1-11.	3.0	14
33	The effects of carbon dioxide exposure concentrations on human vigilance and sentiment in an enclosed workplace environment. Indoor Air, 2021, 31, 467-479.	2.0	13
34	Ventilation similarity of an aircraft cabin mockup with a real MD-82 commercial airliner. Building and Environment, 2017, 111, 80-90.	3.0	12
35	Radon-induced lung cancer deaths may be overestimated due to failure to account for confounding by exposure to diesel engine exhaust in BEIR VI miner studies. PLoS ONE, 2017, 12, e0184298.	1.1	11
36	Assessment of noise in the airplane cabin environment. Journal of Exposure Science and Environmental Epidemiology, 2018, 28, 568-578.	1.8	10

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37	PIV measurement of human thermal convection flow in a simplified vehicle cabin. Building and Environment, 2018, 144, 305-315.	3.0	10
38	Combined effects of pH and thermal treatments on IgE-binding capacity and conformational structures of lectin from black kidney bean (Phaseolus vulgaris L.). Food Chemistry, 2020, 329, 127183.	4.2	10
39	Ultrafine particles in the cabin of a waiting commercial airliner at Tianjin International Airport, China. Indoor and Built Environment, 2018, 27, 1247-1258.	1.5	7
40	Numerical Simulations of the Instantaneous Flow Fields in a Generic Aircraft Cabin with Various Categories Turbulence Models. Procedia Engineering, 2015, 121, 1827-1835.	1.2	5
41	Experimental Investigation of Air Quality in a Subway Station with Fully Enclosed Platform Screen Doors. International Journal of Environmental Research and Public Health, 2020, 17, 5213.	1.2	5
42	2D-PIV Experimental Study on the Air Distribution with Natural Convection Effect of Passengers in an Air Cabin Mockup. Procedia Engineering, 2015, 121, 866-874.	1.2	4
43	Experimental study of the changes in thermal expectation during simulated flights in a civil aircraft cabin mockup. Indoor and Built Environment, 2020, 29, 1277-1288.	1.5	2
44	Reconstruction of airflow path parameters in multizone models based on Bayesian inference and measured data. Building and Environment, 2022, 209, 108689.	3.0	2
45	Response to â€œA critical look at â€˜Energy savings, emissions reductions, and health co-benefits of the green building movementâ€™â€• Journal of Exposure Science and Environmental Epidemiology, 2019, 29, 594-596.	1.8	1
46	An Overview of the Applications of Particle Image Velocimetry for Indoor Airflow Field Measurement. Lecture Notes in Electrical Engineering, 2014, , 223-231.	0.3	1
47	Associations of Human Cognitive Abilities with Elevated Carbon Dioxide Concentrations in an Enclosed Chamber. Atmosphere, 2022, 13, 891.	1.0	1