Chun-Ho Liu

List of Publications by Year
in descending order

64	2,352	218381	214527
papers	citations	26 h-index	47 g-index

65	65	65	1377
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of building facades and ground heating on wind flow and pollutant transport in street canyons. Atmospheric Environment, 2007, 41, 9030-9049.	1.9	159
2	Effects of building aspect ratio and wind speed on air temperatures in urban-like street canyons. Building and Environment, 2010, 45, 176-188.	3.0	140
3	Characteristics of air exchange in a street canyon with ground heating. Atmospheric Environment, 2006, 40, 6396-6409.	1.9	123
4	CFD simulations of natural ventilation behaviour in high-rise buildings in regular and staggered arrangements at various spacings. Energy and Buildings, 2011, 43, 1149-1158.	3.1	122
5	Numerical investigation of pollutant transport characteristics inside deep urban street canyons. Atmospheric Environment, 2009, 43, 2410-2418.	1.9	115
6	Large-Eddy Simulation of Flow and Scalar Transport in a Modeled Street Canyon. Journal of Applied Meteorology and Climatology, 2002, 41, 660-673.	1.7	104
7	A review of strategies for mitigating roadside air pollution in urban street canyons. Environmental Pollution, 2021, 280, 116971.	3.7	94
8	Large-Eddy Simulation of Flow and Pollutant Dispersion in High-Aspect-Ratio Urban Street Canyons with Wall Model. Boundary-Layer Meteorology, 2008, 129, 249-268.	1.2	92
9	Large-Eddy Simulation of Flow and Pollutant Transport in Urban Street Canyons with Ground Heating. Boundary-Layer Meteorology, 2010, 137, 187-204.	1.2	88
10	Physical Modeling of Flow Field inside Urban Street Canyons. Journal of Applied Meteorology and Climatology, 2008, 47, 2058-2067.	0.6	85
11	Large-Eddy Simulation of Flow and Pollutant Transport in Street Canyons of Different Building-Height-to-Street-Width Ratios. Journal of Applied Meteorology and Climatology, 2004, 43, 1410-1424.	1.7	84
12	On the correlation of air and pollutant exchange for street canyons in combined wind-buoyancy-driven flow. Atmospheric Environment, 2009, 43, 3682-3690.	1.9	82
13	Large-eddy simulation of turbulent transports in urban street canyons in different thermal stabilities. Journal of Wind Engineering and Industrial Aerodynamics, 2011, 99, 434-442.	1.7	81
14	Computational formulation for the evaluation of street canyon ventilation and pollutant removal performance. Atmospheric Environment, 2008, 42, 9041-9051.	1.9	76
15	Large-Eddy Simulation of Flow and Pollutant Transports in and Above Two-Dimensional Idealized Street Canyons. Boundary-Layer Meteorology, 2011, 139, 411-437.	1.2	71
16	Effects of Urban Vegetation on Urban Air Quality. Landscape Research, 2011, 36, 173-188.	0.7	69
17	A Review on Ozone Evolution and Its Relationship with Boundary Layer Characteristics in Urban Environments. Water, Air, and Soil Pollution, 2011, 214, 13-36.	1.1	51
18	A theory of ventilation estimate over hypothetical urban areas. Journal of Hazardous Materials, 2015, 296, 9-16.	6.5	50

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19	On the mechanism of air pollutant re-entrainment in two-dimensional idealized street canyons. Atmospheric Environment, 2011, 45, 4763-4769.	1.9	36
20	On the pollutant removal, dispersion, and entrainment over two-dimensional idealized street canyons. Atmospheric Research, 2014, 135-136, 128-142.	1.8	34
21	Turbulence and Dispersion Studies Using a Three-Dimensional Second-Order Closure Eulerian Model. Journal of Applied Meteorology and Climatology, 2001, 40, 92-113.	1.7	33
22	On the Mechanism of Air Pollutant Removal in Two-Dimensional Idealized Street Canyons: A Large-Eddy Simulation Approach. Boundary-Layer Meteorology, 2013, 148, 241-253.	1.2	29
23	Wind tunnel measurements of pollutant plume dispersion over hypothetical urban areas. Building and Environment, 2018, 132, 357-366.	3.0	28
24	Urban heat island and its effect on the cooling and heating demands in urban and suburban areas of Hong Kong. Theoretical and Applied Climatology, 2011, 103, 441-450.	1.3	27
25	Preliminary study of the parameterisation of street-level ventilation in idealised two-dimensional simulations. Building and Environment, 2015, 89, 345-355.	3.0	27
26	Optimizing Lift-up Design to Maximize Pedestrian Wind and Thermal Comfort in â€˜Hot-Calmâ€™ and â€˜Cold-Windyâ€™ Climates. Sustainable Cities and Society, 2020, 58, 102146.	5.1	27
27	Performance evaluation of population-based metaheuristic algorithms and decision-making for multi-objective optimization of building design. Building and Environment, 2021, 198, 107855.	3.0	26
28	Roughness sublayer flows over real urban morphology: A wind tunnel study. Building and Environment, 2021, 188, 107463.	3.0	25
29	Development of a finite element solution for the unsteady Navierâ€“Stokes equations using projection method and fractional-Î¸-scheme. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 4301-4317.	3.4	24
30	On the study of ventilation and pollutant removal over idealized two-dimensional urban street canyons. Building Simulation, 2012, 5, 359-369.	3.0	24
31	Pedestrian wind comfort near a super-tall building with various configurations in an urban-like setting. Building Simulation, 2020, 13, 1385-1408.	3.0	24
32	Forced convective heat transfer over ribs at various separation. International Journal of Heat and Mass Transfer, 2012, 55, 5111-5119.	2.5	23
33	Turbulent Plane Couette Flow and Scalar Transport at Low Reynolds Number. Journal of Heat Transfer, 2003, 125, 988-998.	1.2	22
34	Numerical study on the ozone formation inside street canyons using a chemistry box model. Journal of Environmental Sciences, 2008, 20, 832-837.	3.2	21
35	A wind tunnel study of flows over idealised urban surfaces with roughness sublayer corrections. Theoretical and Applied Climatology, 2017, 130, 305-320.	1.3	21
36	Computational fluid dynamics simulation of the wind flow over an airport terminal building. Journal of Zhejiang University: Science A, 2010, 11, 389-401.	1.3	19

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37	Pollutant Plume Dispersion in the Atmospheric Boundary Layer over Idealized Urban Roughness. Boundary-Layer Meteorology, 2013, 147, 281-300.	1.2	18
38	Turbulent flows over real heterogeneous urban surfaces: Wind tunnel experiments and Reynolds-averaged Navier-Stokes simulations. Building Simulation, 2021, 14, 1345-1358.	3.0	18
39	A wind tunnel study of ventilation mechanism over hypothetical urban roughness: The role of intermittent motion scales. Building and Environment, 2018, 135, 94-103.	3.0	14
40	Large eddy simulation of vehicle emissions dispersion: Implications for on-road remote sensing measurements. Environmental Pollution, 2020, 259, 113974.	3.7	14
41	On the comparison of the ventilation performance of street canyons of different aspect ratios and Richardson number. Building Simulation, 2009, 2, 53-61.	3.0	12
42	Statistical analysis of the organized turbulence structure in the inertial and roughness sublayers over real urban area by building-resolved large-eddy simulation. Building and Environment, 2022, 207, 108464.	3.0	12
43	Street-Level Ventilation in Hypothetical Urban Areas. Atmosphere, 2017, 8, 124.	1.0	11
44	RANS simulation of near-field dispersion of reactive air pollutants. Building and Environment, 2022, 207, 108553.	3.0	11
45	Budget analysis for reactive plume transport over idealised urban areas. Geoscience Letters, 2018, 5, .	1.3	10
46	Computational study on the transmission of the SARS-CoV-2 virus through aerosol in an elevator cabin: Effect of the ventilation system. Physics of Fluids, 2021, 33, 103325.	1.6	9
47	NOx and CO Fluctuations in a Busy Street Canyon. Environments - MDPI, 2021, 8, 137.	1.5	9
48	Parallel computation of atmospheric pollutant dispersion under unstably stratified atmosphere. International Journal for Numerical Methods in Fluids, 1998, 26, 677-696.	0.9	8
49	Near-field dynamics and plume dispersion after an on-road truck: Implication to remote sensing. Science of the Total Environment, 2020, 748, 141211.	3.9	6
50	Parallel FEM LES with one-equation subgrid-scale model for incompressible flows. International Journal of Computational Fluid Dynamics, 2010, 24, 37-49.	0.5	5
51	Wake dynamics and pollutant dispersion behind a light-duty lorry. Physics of Fluids, 2021, 33, .	1.6	5
52	Finite element solution to passive scalar transport behind line sources under neutral and unstable stratification. International Journal for Numerical Methods in Fluids, 2006, 50, 623-648.	0.9	4
53	Wind tunnel measurements of turbulent boundary layer flows over arrays of ribs and cubes. Geoscience Letters, 2018, 5, .	1.3	4
54	Academic discipline as a moderating variable between seating location and academic performance: implications for teaching. Higher Education Research and Development, 2022, 41, 1436-1450.	1.9	4

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55	Roughness sublayer over vegetation canopy: A wind tunnel study. Agricultural and Forest Meteorology, 2022, 316, 108880.	1.9	4
56	Turbulent transport of passive scalar behind line sources in an unstably stratified open channel flow. International Journal of Heat and Mass Transfer, 2006, 49, 4305-4324.	2.5	3
57	Parameterization of vertical dispersion coefficient over idealized rough surfaces in isothermal conditions. Geoscience Letters, 2018, 5, .	1.3	3
58	Transport mechanism of urban plume dispersion. Building and Environment, 2019, 161, 106239.	3.0	3
59	On the Flow Response to an Abrupt Change in Surface Roughness. Flow, Turbulence and Combustion, 2022, 108, 387-409.	1.4	3
60	Source depletion analogy for reactive plume dispersion over schematic urban areas. Atmospheric Environment, 2018, 190, 226-231.	1.9	2
61	Study of Indoor Ventilation Based on Large-Scale [DNS by a Domain Decomposition Method. Symmetry, 2019, 11, 1416.	1.1	2
62	On plume meandering in unstable stratification. Atmospheric Environment, 2005, 39, 2995-2999.	1.9	1
63	Performance analysis of a parallel finite element solution to the direct numerical simulation of fluid turbulence on Linux PC clusters. Applied Mathematics and Computation, 2006, 172, 731-743.	1.4	1
64	Effect of sampling duration on the estimate of pollutant concentration behind a heavy-duty vehicle: A large-eddy simulation. Environmental Pollution, 2022, , 119132.	3.7	0