

Hideki Kikumoto

List of Publications by Year in descending order

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Version: 2024-02-01

79
papers

1,142
citations

361296

20
h-index

477173

29
g-index

87
all docs

87
docs citations

87
times ranked

751
citing authors

#	ARTICLE	IF	CITATIONS
1	Comprehensive validation of experimental and numerical natural ventilation predictions based on field measurement with experimental house. <i>Building and Environment</i> , 2022, 207, 108433.	3.0	13
2	Numerical modeling of cough airflow: Establishment of spatial-temporal experimental dataset and CFD simulation method. <i>Building and Environment</i> , 2022, 207, 108531.	3.0	8
3	Spectral Proper Orthogonal Decomposition Analysis of Turbulent Flow in a Two-Dimensional Street Canyon and Its Role in Pollutant Removal. <i>Boundary-Layer Meteorology</i> , 2022, 183, 97-123.	1.2	6
4	Sensor configuration optimization based on the entropy of adjoint concentration distribution for stochastic source term estimation in urban environment. <i>Sustainable Cities and Society</i> , 2022, 79, 103726.	5.1	10
5	Single-sided natural ventilation in buildings: a critical literature review. <i>Building and Environment</i> , 2022, 212, 108797.	3.0	51
6	Wind tunnel experiments on pumping ventilation through a three-story reduce-scaled building with two openings affected by upwind and downwind buildings. <i>Building and Environment</i> , 2022, 219, 109188.	3.0	4
7	Probabilistic uncertainty quantification of borehole thermal resistance in real-world scenarios. <i>Energy</i> , 2022, , 124400.	4.5	5
8	An investigation into heat storage by adopting local climate zones and nocturnal-diurnal urban heat island differences in the Tokyo Prefecture. <i>Sustainable Cities and Society</i> , 2022, 83, 103959.	5.1	12
9	Estimation of airflow distribution in cubic building group model using POD-LSE and limited sensors. <i>Building and Environment</i> , 2022, 221, 109324.	3.0	6
10	Construction of urban turbulent flow database with wavelet-based compression: A study with large-eddy simulation of flow and dispersion in block-arrayed building group model. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021, 208, 104433.	1.7	8
11	Development of probabilistic assessment framework for pedestrian wind environment using Bayesian technique. <i>Building and Environment</i> , 2021, 187, 107419.	3.0	10
12	CFD simulations on high-buoyancy gas dispersion in the wake of an isolated cubic building using steady RANS model and LES. <i>Building and Environment</i> , 2021, 188, 107478.	3.0	15
13	10.1063/5.0041395.1. , 2021, , .		0
14	Identification of three-dimensional flow features around a square-section building model via spectral proper orthogonal decomposition. <i>Physics of Fluids</i> , 2021, 33, .	1.6	15
15	Extended standard effective temperature index for water-misting environment. <i>Building and Environment</i> , 2021, 190, 107573.	3.0	11
16	Winter air infiltration induced by combined buoyancy and wind forces in large-space buildings. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021, 210, 104501.	1.7	6
17	10.1063/5.0041395.8. , 2021, , .		0
18	Line source estimation of environmental pollutants using super-Gaussian geometry model and bayesian inference. <i>Environmental Research</i> , 2021, 194, 110706.	3.7	12

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19	Large eddy simulation of the effect of unstable thermal stratification on airflow and pollutant dispersion around a rectangular building. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021, 211, 104526.	1.7	22
20	Source term estimation in complex urban environments based on Bayesian inference and unsteady adjoint equations simulated via large eddy simulation. <i>Building and Environment</i> , 2021, 193, 107669.	3.0	23
21	Effects of wall function model in lattice Boltzmann method-based large-eddy simulation on built environment flows. <i>Building and Environment</i> , 2021, 195, 107764.	3.0	18
22	An investigation into the relationship between remotely sensed land surface temperatures and heat stroke incident rates in the Tokyo Prefecture 2010–2019. <i>Sustainable Cities and Society</i> , 2021, 71, 102988.	5.1	5
23	A wall function approach in lattice Boltzmann method: algorithm and validation using turbulent channel flow. <i>Fluid Dynamics Research</i> , 2021, 53, 045506.	0.6	10
24	Boundary layer wind tunnel modeling experiments on pumping ventilation through a three-story reduce-scaled building with two openings. <i>Building and Environment</i> , 2021, 202, 108043.	3.0	16
25	Eulerian RANS simulations of near-field pollutant dispersion around buildings using concentration diffusivity limiter with travel time. <i>Building and Environment</i> , 2021, 202, 108047.	3.0	7
26	Large-eddy simulation of flow around an isolated building: A step-by-step analysis of influencing factors on turbulent statistics. <i>Building and Environment</i> , 2021, 202, 108021.	3.0	52
27	Measurements of exhaled airflow velocity through human coughs using particle image velocimetry. <i>Building and Environment</i> , 2021, 202, 108020.	3.0	25
28	Experimental measurements of airflow features and velocity distribution exhaled from sneeze and speech using particle image velocimetry. <i>Building and Environment</i> , 2021, 205, 108293.	3.0	23
29	Evaluation of mist-spraying environment on thermal sensations, thermal environment, and skin temperature under different operation modes. <i>Building and Environment</i> , 2020, 168, 106484.	3.0	30
30	Validation of lattice Boltzmann method-based large-eddy simulation applied to wind flow around single 1:1:2 building model. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2020, 206, 104277.	1.7	17
31	Observational assessment of applicability of Pasquill stability class in urban areas for detection of neutrally stratified wind profiles. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2020, 206, 104337.	1.7	8
32	Analysis of turbulent structures around a rectangular prism building model using spectral proper orthogonal decomposition. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2020, 206, 104213.	1.7	15
33	Comparison of winter air infiltration and its influences between large-space and normal-space buildings. <i>Building and Environment</i> , 2020, 184, 107183.	3.0	14
34	Wind-driven pumping flow ventilation of highrise buildings: Effects of upstream building arrangements and opening area ratios. <i>Science of the Total Environment</i> , 2020, 722, 137924.	3.9	13
35	BENCHMARK TEST OF FLOW FIELD AROUND A 1:1:2 SHAPED BUILDING MODEL USING LES. <i>AIJ Journal of Technology and Design</i> , 2020, 26, 179-184.	0.1	6
36	Development of physiological human model considering mist wettedness for mist-spraying environments. <i>Building and Environment</i> , 2020, 180, 106706.	3.0	10

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37	Wind tunnel experiment on high-buoyancy gas dispersion around isolated cubic building. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2020, 202, 104226.	1.7	14
38	Critical comparison between thermal performance test (TPT) and thermal response test (TRT): Differences in heat transfer process and extractable information. <i>Energy Conversion and Management</i> , 2019, 199, 111967.	4.4	12
39	Environmental index for evaluating thermal sensations in a mist spraying environment. <i>Building and Environment</i> , 2019, 161, 106219.	3.0	20
40	Validation of thermoregulation human model considering mist wettedness on mist spraying environment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 609, 052034.	0.3	1
41	Lattice Boltzmann method-based large-eddy simulation of indoor isothermal airflow. <i>International Journal of Heat and Mass Transfer</i> , 2019, 130, 700-709.	2.5	25
42	Evaluation of $k\text{-}\mu$ Reynolds stress modeling in an idealized urban canyon using LES. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 175, 213-228.	1.7	23
43	Bayesian source term estimation of atmospheric releases in urban areas using LES approach. <i>Journal of Hazardous Materials</i> , 2018, 349, 68-78.	6.5	49
44	Performance verification of typical and design weather year by thermal load calculation targeting office building. <i>Building Services Engineering Research and Technology</i> , 2018, 39, 147-160.	0.9	1
45	Consistency of mean wind speed in pedestrian wind environment analyses: Mathematical consideration and a case study using large-eddy simulation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 173, 91-99.	1.7	29
46	Study of mobile measurements for detailed temperature distribution in a high-density urban area in Tokyo. <i>Urban Climate</i> , 2018, 24, 517-528.	2.4	12
47	Bayesian inference for thermal response test parameter estimation and uncertainty assessment. <i>Applied Energy</i> , 2018, 209, 306-321.	5.1	51
48	Large-eddy simulation of pollutant dispersion in a cavity at fine grid resolutions. <i>Building and Environment</i> , 2018, 127, 127-137.	3.0	33
49	Two thermal performance test (TPT) datasets of a single U-tube borehole heat exchanger with inlet setpoint temperatures of 30°C and 40°C. <i>Data in Brief</i> , 2018, 20, 1769-1774.	0.5	3
50	New perspectives in thermal performance test: Cost-effective apparatus and extended data analysis. <i>Energy and Buildings</i> , 2018, 180, 109-121.	3.1	16
51	Bayesian inference of structural error in inverse models of thermal response tests. <i>Applied Energy</i> , 2018, 228, 1473-1485.	5.1	16
52	Observational study of power-law approximation of wind profiles within an urban boundary layer for various wind conditions. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2017, 164, 13-21.	1.7	51
53	Proposal of typical and design weather year for building energy simulation. <i>Energy and Buildings</i> , 2017, 139, 517-524.	3.1	10
54	Turbulent Schmidt number for source term estimation using Bayesian inference. <i>Building and Environment</i> , 2017, 125, 414-422.	3.0	25

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55	A probabilistic approach to the energy-saving potential of natural ventilation: Effect of approximation method for approaching wind velocity. <i>Building and Environment</i> , 2017, 122, 94-104.	3.0	12
56	Evaluation of Prediction Accuracy of LES and Standard k - ϵ Model for Flow within and above Urban Canyon under Various Conditions of Thermal Stratification. <i>Journal of Wind Engineering</i> , 2017, 42, 9-21.	0.3	0
57	STUDY OF APPLICABILITY OF MOBILE MEASUREMENTS BASED ON AIR TEMPERATURE MEASUREMENTS. <i>Journal of Environmental Engineering (Japan)</i> , 2017, 82, 767-777.	0.1	1
58	ESTIMATION OF NATURAL VENTILATION PARAMETERS BY A BAYESIAN APPROACH. <i>Journal of Environmental Engineering (Japan)</i> , 2017, 82, 357-365.	0.1	0
59	VALIDITY EVALUATION OF TURBULENT FLUX MODELING IN STANDARD k - μ MODEL WITHIN AND ABOVE URBAN CANYON UNDER VARIOUS CONDITIONS OF THERMAL STRATIFICATION USING LES. <i>Journal of Environmental Engineering (Japan)</i> , 2017, 82, 893-903.	0.1	0
60	BIAS CORRECTION METHOD FOR SOLAR RADIATION BASED ON QUANTILE MAPPING TO PROVIDE WEATHER DATA FOR BUILDING ENERGY SIMULATIONS. <i>Journal of Environmental Engineering (Japan)</i> , 2016, 81, 1047-1054.	0.1	2
61	Effect of climate change on building cooling loads in Tokyo in the summers of the 2030s using dynamically downscaled GCM data. <i>Energy and Buildings</i> , 2016, 114, 123-129.	3.1	46
62	Impacts of inland water area changes on the local climate of Wuhan, China. <i>Indoor and Built Environment</i> , 2016, 25, 296-313.	1.5	16
63	Effect of diurnal variation in wind velocity profiles on ventilation performance estimates. <i>Energy and Buildings</i> , 2016, 130, 397-407.	3.1	9
64	SOURCE IDENTIFICATION OF ENVIRONMENTAL POLLUTANTS BASED ON TRACER DISPERSION IN REVERSED FLOW FIELD. <i>Journal of Environmental Engineering (Japan)</i> , 2016, 81, 607-614.	0.1	2
65	INFLUENCE OF VARIOUS COMPUTATIONAL CONDITIONS IN RANS MODEL ON THE PREDICTION ACCURACY OF CONCENTRATION DISTRIBUTIONS. <i>AJ Journal of Technology and Design</i> , 2016, 22, 609-614.	0.1	0
66	A study of urban thermal environment in Tokyo in summer of the 2030s under influence of global warming. <i>Energy and Buildings</i> , 2016, 114, 54-61.	3.1	27
67	FIELD MEASUREMENT OF PARTICLE-SIZE DEPENDENCY IN CONCENTRATION CHANGES OF INDOOR PARTICULATE MATTER DURING VENTILATION WITH OPENING WINDOW. <i>Journal of Environmental Engineering (Japan)</i> , 2016, 81, 1127-1136.	0.1	1
68	STUDY OF GRADIENT DIFFUSION APPROXIMATION OF REYNOLDS STRESS WITHIN AND ABOVE AN URBAN CANYON USING LES DATABASE. <i>Journal of Environmental Engineering (Japan)</i> , 2015, 80, 1083-1093.	0.1	1
69	Study on the future weather data considering the global and local climate change for building energy simulation. <i>Sustainable Cities and Society</i> , 2015, 14, 404-413.	5.1	46
70	A STUDY OF EVALUATION METHOD OF THE CONCENTRATION VARIANCE AT THE SUBGRID-SCALE IN LARGE-EDDY SIMULATION. <i>Journal of Environmental Engineering (Japan)</i> , 2013, 78, 579-588.	0.1	1
71	Large-Eddy Simulation of the Turbulent Boundary Layer Using Generated Inflow Turbulence with Estimated Statistics. , 2013, , .		0
72	Numerical Analysis of the Momentum Transport and Temporal and Spatial Scales of Turbulent Coherent Structures in the Urban Boundary Layer Using Large Eddy Simulation. , 2013, , .		0

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73	MODELING AND NUMERICAL VERIFICATION OF A REYNOLDS-AVERAGED MODEL FOR CORRELATION OF REACTIVE AIR POLLUTANTS CONCENTRATIONS. <i>Journal of Environmental Engineering (Japan)</i> , 2012, 77, 267-273.	0.1	0
74	A study on air pollutant dispersion with bimolecular reactions in urban street canyons using large-eddy simulations. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2012, 104-106, 516-522.	1.7	18
75	A numerical study of air pollutant dispersion with bimolecular chemical reactions in an urban street canyon using large-eddy simulation. <i>Atmospheric Environment</i> , 2012, 54, 456-464.	1.9	59
76	æ—¥æœ-éċ“â-¥â- ä¼šç”ç©ŕâ¥“âš±è³žā,â-è³žā-â- . <i>Wind Engineers JAWE</i> , 2012, 37, 329-329.	0.0	0
77	INFLUENCE OF THE CONFIGURATION OF CONSECUTIVE URBAN STREET CANYONS AND ATMOSPHERIC STABILITY ON FLOW AND CONCENTRATION FIELDS BY CFD ANALYSIS. <i>Journal of Environmental Engineering (Japan)</i> , 2011, 76, 185-193.	0.1	2
78	LES ON THE EFFECT OF BI-MOLECULAR REACTIONS ON THE AIR POLLUTANTS DISPERSION IN URBAN STREET CANYONS WITH VARIOUS ROOF-HEIGHTS. <i>Journal of Environmental Engineering (Japan)</i> , 2011, 76, 697-704.	0.1	0
79	NUMERICAL STUDY ON BI-MOLECULAR REACTION IN TURBULENT FLOW FIELD WITH TWO-DIMENSIONAL TEST ROOM USING LES. <i>Journal of Environmental Engineering (Japan)</i> , 2010, 75, 629-636.	0.1	1