

# Bert Blocken

## List of Publications by Citations

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219  
papers

13,803  
citations

66  
h-index

110  
g-index

233  
ext. papers

16,327  
ext. citations

5.1  
avg, IF

7.52  
L-index

#	Paper	IF	Citations
219	CFD simulation of the atmospheric boundary layer: wall function problems. <i>Atmospheric Environment</i> , <b>2007</b> , 41, 238-252	5.3	815
218	Computational Fluid Dynamics for urban physics: Importance, scales, possibilities, limitations and ten tips and tricks towards accurate and reliable simulations. <i>Building and Environment</i> , <b>2015</b> , 91, 219-245	6.5	460
217	50 years of Computational Wind Engineering: Past, present and future. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2014</b> , 129, 69-102	3.7	410
216	CFD simulation of cross-ventilation for a generic isolated building: Impact of computational parameters. <i>Building and Environment</i> , <b>2012</b> , 53, 34-48	6.5	315
215	CFD evaluation of wind speed conditions in passages between parallel buildings: Effect of wall-function roughness modifications for the atmospheric boundary layer flow. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2007</b> , 95, 941-962	3.7	290
214	A review of wind-driven rain research in building science. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2004</b> , 92, 1079-1130	3.7	283
213	Coupled urban wind flow and indoor natural ventilation modelling on a high-resolution grid: A case study for the Amsterdam ArenA stadium. <i>Environmental Modelling and Software</i> , <b>2010</b> , 25, 51-65	5.2	249
212	A review on the CFD analysis of urban microclimate. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 80, 1613-1640	16.2	243
211	CFD simulation for pedestrian wind comfort and wind safety in urban areas: General decision framework and case study for the Eindhoven University campus. <i>Environmental Modelling and Software</i> , <b>2012</b> , 30, 15-34	5.2	240
210	CFD simulation of near-field pollutant dispersion on a high-resolution grid: A case study by LES and RANS for a building group in downtown Montreal. <i>Atmospheric Environment</i> , <b>2011</b> , 45, 428-438	5.3	219
209	Urban Physics: Effect of the micro-climate on comfort, health and energy demand. <i>Frontiers of Architectural Research</i> , <b>2012</b> , 1, 197-228	2.3	205
208	Application of computational fluid dynamics in building performance simulation for the outdoor environment: an overview. <i>Journal of Building Performance Simulation</i> , <b>2011</b> , 4, 157-184	2.8	199
207	CFD simulation of outdoor ventilation of generic urban configurations with different urban densities and equal and unequal street widths. <i>Building and Environment</i> , <b>2015</b> , 92, 152-166	6.5	185
206	Conservative modelling of the moisture and heat transfer in building components under atmospheric excitation. <i>International Journal of Heat and Mass Transfer</i> , <b>2007</b> , 50, 1128-1140	4.9	184
205	Review of external convective heat transfer coefficient models in building energy simulation programs: Implementation and uncertainty. <i>Applied Thermal Engineering</i> , <b>2013</b> , 56, 134-151	5.8	181
204	Pedestrian-level wind conditions around buildings: Review of wind-tunnel and CFD techniques and their accuracy for wind comfort assessment. <i>Building and Environment</i> , <b>2016</b> , 100, 50-81	6.5	177
203	Effect of pitch angle on power performance and aerodynamics of a vertical axis wind turbine. <i>Applied Energy</i> , <b>2017</b> , 197, 132-150	10.7	173

202	CFD simulation of wind-induced pressure coefficients on buildings with and without balconies: Validation and sensitivity analysis. <i>Building and Environment</i> , <b>2013</b> , 60, 137-149	6.5	169
201	LES over RANS in building simulation for outdoor and indoor applications: A foregone conclusion?. <i>Building Simulation</i> , <b>2018</b> , 11, 821-870	3.9	168
200	CFD simulation and validation of urban microclimate: A case study for Bergpolder Zuid, Rotterdam. <i>Building and Environment</i> , <b>2015</b> , 83, 79-90	6.5	165
199	Ten iterative steps for model development and evaluation applied to Computational Fluid Dynamics for Environmental Fluid Mechanics. <i>Environmental Modelling and Software</i> , <b>2012</b> , 33, 1-22	5.2	161
198	Convective heat transfer coefficients for exterior building surfaces: Existing correlations and CFD modelling. <i>Energy Conversion and Management</i> , <b>2011</b> , 52, 512-522	10.6	156
197	On the accuracy of CFD simulations of cross-ventilation flows for a generic isolated building: Comparison of RANS, LES and experiments. <i>Building and Environment</i> , <b>2017</b> , 114, 148-165	6.5	150
196	Numerical evaluation of pollutant dispersion in the built environment: Comparisons between models and experiments. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2008</b> , 96, 1817-1831	3.7	148
195	Overview of pressure coefficient data in building energy simulation and airflow network programs. <i>Building and Environment</i> , <b>2009</b> , 44, 2027-2036	6.5	134
194	CFD simulation of a vertical axis wind turbine operating at a moderate tip speed ratio: Guidelines for minimum domain size and azimuthal increment. <i>Renewable Energy</i> , <b>2017</b> , 107, 373-385	8.1	132
193	Pedestrian Wind Environment around Buildings: Literature Review and Practical Examples. <i>Journal of Thermal Envelope and Building Science</i> , <b>2004</b> , 28, 107-159		130
192	CFD analysis of convective heat transfer at the surfaces of a cube immersed in a turbulent boundary layer. <i>International Journal of Heat and Mass Transfer</i> , <b>2010</b> , 53, 297-308	4.9	129
191	High-resolution CFD simulations for forced convective heat transfer coefficients at the facade of a low-rise building. <i>Building and Environment</i> , <b>2009</b> , 44, 2396-2412	6.5	126
190	On the effect of wind direction and urban surroundings on natural ventilation of a large semi-enclosed stadium. <i>Computers and Fluids</i> , <b>2010</b> , 39, 1146-1155	2.8	122
189	Pedestrian wind comfort around buildings: Comparison of wind comfort criteria based on whole-flow field data for a complex case study. <i>Building and Environment</i> , <b>2013</b> , 59, 547-562	6.5	119
188	Pedestrian wind comfort around a large football stadium in an urban environment: CFD simulation, validation and application of the new Dutch wind nuisance standard. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2009</b> , 97, 255-270	3.7	119
187	CFD analysis of transpirational cooling by vegetation: Case study for specific meteorological conditions during a heat wave in Arnhem, Netherlands. <i>Building and Environment</i> , <b>2015</b> , 83, 11-26	6.5	118
186	On the accuracy of turbulence models for CFD simulations of vertical axis wind turbines. <i>Energy</i> , <b>2019</b> , 180, 838-857	7.9	116
185	Quality assessment of Large-Eddy Simulation of wind flow around a high-rise building: Validation and solution verification. <i>Computers and Fluids</i> , <b>2013</b> , 79, 120-133	2.8	112

184	CFD analysis of cross-ventilation of a generic isolated building with asymmetric opening positions: Impact of roof angle and opening location. <i>Building and Environment</i> , <b>2015</b> , 85, 263-276	6.5	105
183	Evaporative cooling by water spray systems: CFD simulation, experimental validation and sensitivity analysis. <i>Building and Environment</i> , <b>2015</b> , 83, 129-141	6.5	105
182	The influence of the wind-blocking effect by a building on its wind-driven rain exposure. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2006</b> , 94, 101-127	3.7	103
181	CFD simulation of pollutant dispersion around isolated buildings: on the role of convective and turbulent mass fluxes in the prediction accuracy. <i>Journal of Hazardous Materials</i> , <b>2011</b> , 194, 422-34	12.8	102
180	Spatial and temporal distribution of driving rain on a low-rise building. <i>Wind and Structures, an International Journal</i> , <b>2002</b> , 5, 441-462		101
179	CFD simulation of stratified indoor environment in displacement ventilation: Validation and sensitivity analysis. <i>Building and Environment</i> , <b>2016</b> , 95, 299-313	6.5	100
178	Aerodynamic study of different cyclist positions: CFD analysis and full-scale wind-tunnel tests. <i>Journal of Biomechanics</i> , <b>2010</b> , 43, 1262-8	2.9	100
177	Towards accurate CFD simulations of vertical axis wind turbines at different tip speed ratios and solidities: Guidelines for azimuthal increment, domain size and convergence. <i>Energy Conversion and Management</i> , <b>2018</b> , 156, 301-316	10.6	100
176	CFD evaluation of natural ventilation of indoor environments by the concentration decay method: CO <sub>2</sub> gas dispersion from a semi-enclosed stadium. <i>Building and Environment</i> , <b>2013</b> , 61, 1-17	6.5	97
175	Rainwater runoff from building facades: A review. <i>Building and Environment</i> , <b>2013</b> , 60, 339-361	6.5	96
174	Validation of CFD simulations of wind-driven rain on a low-rise building facade. <i>Building and Environment</i> , <b>2007</b> , 42, 2530-2548	6.5	90
173	Overview of three state-of-the-art wind-driven rain assessment models and comparison based on model theory. <i>Building and Environment</i> , <b>2010</b> , 45, 691-703	6.5	89
172	Influence of avenue-trees on air quality at the urban neighborhood scale. Part I: quality assurance studies and turbulent Schmidt number analysis for RANS CFD simulations. <i>Environmental Pollution</i> , <b>2015</b> , 196, 214-23	9.3	88
171	A venturi-shaped roof for wind-induced natural ventilation of buildings: Wind tunnel and CFD evaluation of different design configurations. <i>Building and Environment</i> , <b>2011</b> , 46, 1797-1807	6.5	88
170	Characterization of aerodynamic performance of vertical axis wind turbines: Impact of operational parameters. <i>Energy Conversion and Management</i> , <b>2018</b> , 169, 45-77	10.6	88
169	CFD simulation of cross-ventilation flow for different isolated building configurations: Validation with wind tunnel measurements and analysis of physical and numerical diffusion effects. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2012</b> , 104-106, 408-418	3.7	87
168	CFD simulations of the aerodynamic drag of two drafting cyclists. <i>Computers and Fluids</i> , <b>2013</b> , 71, 435-445	4.5	83
167	Numerical Study on the Existence of the Venturi Effect in Passages between Perpendicular Buildings. <i>Journal of Engineering Mechanics - ASCE</i> , <b>2008</b> , 134, 1021-1028	2.4	83

166	Influence of avenue-trees on air quality at the urban neighborhood scale. Part II: traffic pollutant concentrations at pedestrian level. <i>Environmental Pollution</i> , <b>2015</b> , 196, 176-84	9.3	82
165	CFD simulation of wind flow over natural complex terrain: Case study with validation by field measurements for Ria de Ferrol, Galicia, Spain. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2015</b> , 147, 43-57	3.7	79
164	CFD and wind-tunnel analysis of outdoor ventilation in a real compact heterogeneous urban area: Evaluation using Bir delay. <i>Building and Environment</i> , <b>2017</b> , 126, 355-372	6.5	78
163	On natural ventilation and thermal comfort in compact urban environments [the Old Havana case. <i>Building and Environment</i> , <b>2009</b> , 44, 1943-1958	6.5	77
162	CFD analysis of the impact of physical parameters on evaporative cooling by a mist spray system. <i>Applied Thermal Engineering</i> , <b>2015</b> , 75, 608-622	5.8	76
161	Towards optimal aerodynamic design of vertical axis wind turbines: Impact of solidity and number of blades. <i>Energy</i> , <b>2018</b> , 165, 1129-1148	7.9	76
160	Urban wind energy: Some views on potential and challenges. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2018</b> , 179, 146-157	3.7	75
159	Wind tunnel experiments on cross-ventilation flow of a generic building with contaminant dispersion in unsheltered and sheltered conditions. <i>Building and Environment</i> , <b>2015</b> , 92, 452-461	6.5	74
158	Analysis of the predicted effect of passive climate adaptation measures on energy demand for cooling and heating in a residential building. <i>Energy</i> , <b>2016</b> , 94, 811-820	7.9	74
157	CFD simulation and validation of wind-driven rain on a building facade with an Eulerian multiphase model. <i>Building and Environment</i> , <b>2013</b> , 61, 69-81	6.5	74
156	Wind Environmental Conditions in Passages between Two Long Narrow Perpendicular Buildings. <i>Journal of Aerospace Engineering</i> , <b>2008</b> , 21, 280-287	1.4	74
155	CFD simulation of train aerodynamics: Train-induced wind conditions at an underground railroad passenger platform. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2015</b> , 139, 100-110	3.7	71
154	High-resolution wind-driven rain measurements on a low-rise building—experimental data for model development and model validation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2005</b> , 93, 905-928	3.7	70
153	Aerodynamic drag in cycling pelotons: New insights by CFD simulation and wind tunnel testing. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2018</b> , 179, 319-337	3.7	66
152	Wind-driven rain on the facade of a monumental tower: Numerical simulation, full-scale validation and sensitivity analysis. <i>Building and Environment</i> , <b>2009</b> , 44, 1675-1690	6.5	65
151	CFD simulation of urban microclimate: Validation using high-resolution field measurements. <i>Science of the Total Environment</i> , <b>2019</b> , 695, 133743	10.2	64
150	Energy saving potential of night ventilation: Sensitivity to pressure coefficients for different European climates. <i>Applied Energy</i> , <b>2014</b> , 123, 185-195	10.7	64
149	3D CFD simulations of wind flow and wind-driven rain shelter in sports stadia: Influence of stadium geometry. <i>Building and Environment</i> , <b>2011</b> , 46, 22-37	6.5	61

148	Effect of the shaft on the aerodynamic performance of urban vertical axis wind turbines. <i>Energy Conversion and Management</i> , <b>2017</b> , 149, 616-630	10.6	60
147	Computational fluid dynamics analysis of cyclist aerodynamics: performance of different turbulence-modelling and boundary-layer modelling approaches. <i>Journal of Biomechanics</i> , <b>2010</b> , 43, 2281-9	7.9	58
146	CFD evaluation of new second-skin facade concept for wind comfort on building balconies: Case study for the Park Tower in Antwerp. <i>Building and Environment</i> , <b>2013</b> , 68, 179-192	6.5	56
145	Pedestrian wind conditions at outdoor platforms in a high-rise apartment building: generic sub-configuration validation, wind comfort assessment and uncertainty issues. <i>Wind and Structures, an International Journal</i> , <b>2008</b> , 11, 51-70		55
144	Simulating the cooling effects of water spray systems in urban landscapes: A computational fluid dynamics study in Rotterdam, The Netherlands. <i>Landscape and Urban Planning</i> , <b>2017</b> , 159, 85-100	7.7	54
143	Uncertainty in airflow rate calculations due to the use of surface-averaged pressure coefficients. <i>Energy and Buildings</i> , <b>2010</b> , 42, 881-888	7	54
142	Wind tunnel analysis of flow and dispersion in cross-ventilated isolated buildings: Impact of opening positions. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2016</b> , 155, 74-88	3.7	53
141	Modification of pedestrian wind comfort in the Silvertop Tower passages by an automatic control system. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2004</b> , 92, 849-873	3.7	53
140	Full-scale measurements of indoor environmental conditions and natural ventilation in a large semi-enclosed stadium: Possibilities and limitations for CFD validation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2012</b> , 104-106, 330-341	3.7	52
139	A following car influences cyclist drag: CFD simulations and wind tunnel measurements. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2015</b> , 145, 178-186	3.7	50
138	Numerical simulations of wind-driven rain on an array of low-rise cubic buildings and validation by field measurements. <i>Building and Environment</i> , <b>2014</b> , 81, 283-295	6.5	50
137	On the accuracy of wind-driven rain measurements on buildings. <i>Building and Environment</i> , <b>2006</b> , 41, 1798-1810	6.5	49
136	A dataset of wind-driven rain measurements on a low-rise test building in Norway. <i>Building and Environment</i> , <b>2007</b> , 42, 2150-2165	6.5	48
135	CFD simulations of wind flow and mean surface pressure for buildings with balconies: Comparison of RANS and LES. <i>Building and Environment</i> , <b>2020</b> , 173, 106747	6.5	47
134	Impact of urban microclimate on summertime building cooling demand: A parametric analysis for Antwerp, Belgium. <i>Applied Energy</i> , <b>2018</b> , 228, 852-872	10.7	47
133	CFD evaluation of building geometry modifications to reduce pedestrian-level wind speed. <i>Building and Environment</i> , <b>2019</b> , 163, 106293	6.5	47
132	Large-Eddy Simulation of pollutant dispersion around a cubical building: analysis of the turbulent mass transport mechanism by unsteady concentration and velocity statistics. <i>Environmental Pollution</i> , <b>2012</b> , 167, 47-57	9.3	47
131	On the validity of numerical wind-driven rain simulation on a rectangular low-rise building under various oblique winds. <i>Building and Environment</i> , <b>2009</b> , 44, 621-632	6.5	47

130	New generalized expressions for forced convective heat transfer coefficients at building facades and roofs. <i>Building and Environment</i> , <b>2017</b> , 119, 153-168	6.5	46
129	CFD analysis of forced convective heat transfer coefficients at windward building facades: Influence of building geometry. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2015</b> , 146, 102-116	3.7	46
128	Convective heat and mass transfer modelling at air-porous material interfaces: Overview of existing methods and relevance. <i>Chemical Engineering Science</i> , <b>2012</b> , 74, 49-58	4.4	46
127	Computational analysis of the performance of a venturi-shaped roof for natural ventilation: Venturi-effect versus wind-blocking effect. <i>Computers and Fluids</i> , <b>2011</b> , 48, 202-213	2.8	46
126	A combined CFD-FIAM approach for wind-driven rain on building facades. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2007</b> , 95, 585-607	3.7	46
125	On the errors associated with the use of hourly data in wind-driven rain calculations on building facades. <i>Atmospheric Environment</i> , <b>2007</b> , 41, 2335-2343	5.3	45
124	PIV measurements and analysis of transitional flow in a reduced-scale model: Ventilation by a free plane jet with Coanda effect. <i>Building and Environment</i> , <b>2012</b> , 56, 301-313	6.5	43
123	Ventilation and air cleaning to limit aerosol particle concentrations in a gym during the COVID-19 pandemic. <i>Building and Environment</i> , <b>2021</b> , 193, 107659	6.5	42
122	Reduction of outdoor particulate matter concentrations by local removal in semi-enclosed parking garages: A preliminary case study for Eindhoven city center. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2016</b> , 159, 80-98	3.7	42
121	Aerodynamic benefit for a cyclist by a following motorcycle. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2016</b> , 155, 1-10	3.7	42
120	A framework for preliminary large-scale urban wind energy potential assessment: Roof-mounted wind turbines. <i>Energy Conversion and Management</i> , <b>2020</b> , 214, 112770	10.6	41
119	High-resolution field measurements of wind-driven rain on an array of low-rise cubic buildings. <i>Building and Environment</i> , <b>2014</b> , 78, 1-13	6.5	40
118	Computational fluid dynamics analysis of drag and convective heat transfer of individual body segments for different cyclist positions. <i>Journal of Biomechanics</i> , <b>2011</b> , 44, 1695-701	2.9	40
117	Comparison of calculation models for wind-driven rain deposition on building facades. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 1714-1725	5.3	40
116	Impact of wind on the spatial distribution of rain over micro-scale topography: numerical modelling and experimental verification. <i>Hydrological Processes</i> , <b>2006</b> , 20, 345-368	3.3	40
115	Near-field pollutant dispersion in an actual urban area: Analysis of the mass transport mechanism by high-resolution Large Eddy Simulations. <i>Computers and Fluids</i> , <b>2015</b> , 114, 151-162	2.8	39
114	Overview of challenges and achievements in the climate adaptation of cities and in the Climate Proof Cities program. <i>Building and Environment</i> , <b>2015</b> , 83, 1-10	6.5	39
113	On the predicted effectiveness of climate adaptation measures for residential buildings. <i>Building and Environment</i> , <b>2014</b> , 82, 300-316	6.5	38

112	Reprint of: On the predicted effectiveness of climate adaptation measures for residential buildings. <i>Building and Environment</i> , <b>2015</b> , 83, 142-158	6.5	37
111	Can indoor sports centers be allowed to re-open during the COVID-19 pandemic based on a certificate of equivalence?. <i>Building and Environment</i> , <b>2020</b> , 180, 107022	6.5	37
110	On the validity of the cosine projection in wind-driven rain calculations on buildings. <i>Building and Environment</i> , <b>2006</b> , 41, 1182-1189	6.5	37
109	Cross-ventilation in a generic isolated building equipped with louvers: Wind-tunnel experiments and CFD simulations. <i>Building and Environment</i> , <b>2019</b> , 154, 263-280	6.5	36
108	On the suitability of steady RANS CFD for forced mixing ventilation at transitional slot Reynolds numbers. <i>Indoor Air</i> , <b>2013</b> , 23, 236-49	5.4	35
107	Intercomparison of wind-driven rain deposition models based on two case studies with full-scale measurements. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2011</b> , 99, 448-459	3.7	35
106	On CFD simulation of wind-induced airflow in narrow ventilated facade cavities: Coupled and decoupled simulations and modelling limitations. <i>Building and Environment</i> , <b>2010</b> , 45, 1834-1846	6.5	35
105	Numerical modeling of the flow conditions in a closed-circuit low-speed wind tunnel. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2006</b> , 94, 699-723	3.7	35
104	CFD analysis of dynamic stall on vertical axis wind turbines using Scale-Adaptive Simulation (SAS): Comparison against URANS and hybrid RANS/LES. <i>Energy Conversion and Management</i> , <b>2019</b> , 196, 1282-1298	10.6	34
103	Influence of uncertainty in heat/moisture transport properties on convective drying of porous materials by numerical modelling. <i>Chemical Engineering Research and Design</i> , <b>2013</b> , 91, 36-42	5.5	34
102	Cyclist drag in team pursuit: influence of cyclist sequence, stature, and arm spacing. <i>Journal of Biomechanical Engineering</i> , <b>2014</b> , 136, 011005	2.1	34
101	A simplified numerical model for rainwater runoff on building facades: Possibilities and limitations. <i>Building and Environment</i> , <b>2012</b> , 53, 59-73	6.5	34
100	Wind-driven rain as a boundary condition for HAM simulations: Analysis of simplified modelling approaches. <i>Building and Environment</i> , <b>2007</b> , 42, 1555-1567	6.5	34
99	Numerical simulation of the wind-driven rainfall distribution over small-scale topography in space and time. <i>Journal of Hydrology</i> , <b>2005</b> , 315, 252-273	6	34
98	On the use of non-conformal grids for economic LES of wind flow and convective heat transfer for a wall-mounted cube. <i>Building and Environment</i> , <b>2017</b> , 119, 44-61	6.5	33
97	Local-scale forcing effects on wind flows in an urban environment: Impact of geometrical simplifications. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2017</b> , 170, 238-255	3.7	32
96	The effect of an urban park on the microclimate in its vicinity: a case study for Antwerp, Belgium. <i>International Journal of Climatology</i> , <b>2018</b> , 38, e303-e322	3.5	32
95	Large eddy simulation of the neutral atmospheric boundary layer: performance evaluation of three inflow methods for terrains with different roughness. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2018</b> , 173, 241-261	3.7	32



94	Impact of eaves on cross-ventilation of a generic isolated leeward sawtooth roof building: Windward eaves, leeward eaves and eaves inclination. <i>Building and Environment</i> , <b>2015</b> , 92, 578-590	6.5	31
93	A novel approach to simulate pollutant dispersion in the built environment: Transport-based recurrence CFD. <i>Building and Environment</i> , <b>2020</b> , 170, 106604	6.5	31
92	Active flow control for power enhancement of vertical axis wind turbines: Leading-edge slot suction. <i>Energy</i> , <b>2019</b> , 189, 116131	7.9	30
91	The mutual influence of two buildings on their wind-driven rain exposure and comments on the obstruction factor. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2009</b> , 97, 180-196	3.7	30
90	Moisture response of building facades to wind-driven rain: Field measurements compared with numerical simulations. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2009</b> , 97, 197-207	3.7	30
89	Guidelines for the required time resolution of meteorological input data for wind-driven rain calculations on buildings. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2008</b> , 96, 621-639	3.7	30
88	Wind-driven rain on two parallel wide buildings: Field measurements and CFD simulations. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2015</b> , 146, 11-28	3.7	29
87	Sensitivity analysis of airfoil aerodynamics during pitching motion at a Reynolds number of 1.35E05. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2018</b> , 183, 315-332	3.7	29
86	CFD simulation of wind-driven upward cross ventilation and its enhancement in long buildings: Impact of single-span versus double-span leeward sawtooth roof and opening ratio. <i>Building and Environment</i> , <b>2016</b> , 96, 142-156	6.5	28
85	Impact of turbulence models and roughness height in 3D steady RANS simulations of wind flow in an urban environment. <i>Building and Environment</i> , <b>2020</b> , 171, 106617	6.5	28
84	Aerodynamic analysis of different cyclist hill descent positions. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2018</b> , 181, 27-45	3.7	27
83	An adjusted temperature wall function for turbulent forced convective heat transfer for bluff bodies in the atmospheric boundary layer. <i>Building and Environment</i> , <b>2011</b> , 46, 2130-2141	6.5	27
82	Extension of generalized forced convective heat transfer coefficient expressions for isolated buildings taking into account oblique wind directions. <i>Building and Environment</i> , <b>2018</b> , 140, 194-208	6.5	27
81	Numerical modeling of turbulent dispersion for wind-driven rain on building facades. <i>Environmental Fluid Mechanics</i> , <b>2015</b> , 15, 109-133	2.2	26
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