Kapil A Chauhan

List of Publications by Year
in descending order

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26 papers	1,765 citations	516215 16 h-index	794141 19 g-index
26 all docs	26 docs citations	26 times ranked	965 citing authors

#	Article	IF	Citations
1	Variations of von KÃ¡rmÃ¡n coefficient in canonical flows. Physics of Fluids, 2008, 20, .	1.6	287
2	Criteria for assessing experiments in zero pressure gradient boundary layers. Fluid Dynamics Research, 2009, 41, 021404.	0.6	229
3	Towards Reconciling the Large-Scale Structure of Turbulent Boundary Layers in the Atmosphere and Laboratory. Boundary-Layer Meteorology, 2012, 145, 273-306.	1.2	212
4	Approach to an asymptotic state for zero pressure gradient turbulent boundary layers. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 755-770.	1.6	208
5	Self-consistent high-Reynolds-number asymptotics for zero-pressure-gradient turbulent boundary layers. Physics of Fluids, 2007, 19, .	1.6	162
6	The turbulent/non-turbulent interface and entrainment in a boundary layer. Journal of Fluid Mechanics, 2014, 742, 119-151.	1.4	151
7	Multiscale Geometry and Scaling of the Turbulent-Nonturbulent Interface in High Reynolds Number Boundary Layers. Physical Review Letters, 2013, 111, 044501.	2.9	79
8	Comparison of mean flow similarity laws in zero pressure gradient turbulent boundary layers. Physics of Fluids, 2008, 20, .	1.6	62
9	Structure Inclination Angles in the Convective Atmospheric Surface Layer. Boundary-Layer Meteorology, 2013, 147, 41-50.	1.2	55
10	Study on localised wind pressure development in gable roof buildings having different roof pitches with experiments, RANS and LES simulation models. Building and Environment, 2018, 143, 240-257.	3.0	45
11	Experimental study on convective heat transfer coefficients for the human body exposed to turbulent wind conditions. Building and Environment, 2020, 169, 106533.	3.0	42
12	Scaling of the turbulent/non-turbulent interface in boundary layers. Journal of Fluid Mechanics, 2014, 751, 298-328.	1.4	38
13	Field measurement of the urban pedestrian level wind turbulence. Building and Environment, 2021, 194, 107713.	3.0	31
14	Can We Ever Rely on Results from Wall-Bounded Turbulent Flows Without Direct Measurements of Wall Shear Stress?. , 2004, , .		28
15	Experimental and numerical study on mean pressure distributions around an isolated gable roof building with and without openings. Building and Environment, 2018, 132, 30-44.	3.0	27
16	Application of through-building openings for wind energy harvesting in built environment. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 184, 445-455.	1.7	27
17	On the Composite Logarithmic Profile in Zero Pressure Gradient Turbulent Boundary Layers. , 2007, , .		20
18	Empirical mode decomposition and Hilbert transforms for analysis of oil-film interferograms. Measurement Science and Technology, 2010, 21, 105405.	1.4	17

#	Article	IF	Citations
19	Numerical investigation of scale resolved turbulence models (LES, ELES and DDES) in the assessment of wind effects on supertall structures. Journal of Building Engineering, 2019, 25, 100842.	1.6	16
20	Scaling of High Reynolds Number Turbulent Boundary Layers Revisited (invited). , 2005, , .		9
21	Impact of wind turbulence on thermal perception in the urban microclimate. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 216, 104714.	1.7	7
22	Evidence on Non-Universality of KÃ¡rmÃ¡n Constant. , 2007, , 159-163.		7
23	On the Development of Wall-Bounded Turbulent Flows. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 183-189.	0.1	4
24	Flow Development in Boundary Layers with Pressure Gradient. , 2007, , 239-241.		2
25	Organised motions in turbulent boundary layers over a wide range of Reynolds number. , 2011, , .		0
26	Structural inclination angle of near-field scalar fluctuations in a turbulent boundary layer. International Journal of Heat and Fluid Flow, 2020, 81, 108521.	1.1	0