

# Hiroyuki Abe

## List of Publications by Year in descending order

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Version: 2024-02-01

19  
papers

1,608  
citations

623188

14  
h-index

839053

18  
g-index

19  
all docs

19  
docs citations

19  
times ranked

816  
citing authors

#	ARTICLE	IF	CITATIONS
1	DNS of turbulent heat transfer in channel flow with low to medium-high Prandtl number fluid. International Journal of Heat and Fluid Flow, 1998, 19, 482-491.	1.1	297
2	DNS of turbulent heat transfer in channel flow with respect to Reynolds and Prandtl number effects. International Journal of Heat and Fluid Flow, 1999, 20, 196-207.	1.1	285
3	Surface heat-flux fluctuations in a turbulent channel flow up to $Re_{\tau}^+ = 1020$ with $Pr = 0.025$ and $0.71$ . International Journal of Heat and Fluid Flow, 2004, 25, 404-419.	1.1	270
4	Direct Numerical Simulation of a Fully Developed Turbulent Channel Flow With Respect to the Reynolds Number Dependence. Journal of Fluids Engineering, Transactions of the ASME, 2001, 123, 382-393.	0.8	224
5	Very Large-Scale Structures and Their Effects on the Wall Shear-Stress Fluctuations in a Turbulent Channel Flow up to $Re_{\tau}^+ = 640$ . Journal of Fluids Engineering, Transactions of the ASME, 2004, 126, 835-843.	0.8	149
6	Analogy between velocity and scalar fields in a turbulent channel flow. Journal of Fluid Mechanics, 2009, 628, 241-268.	1.4	80
7	Correlation between small-scale velocity and scalar fluctuations in a turbulent channel flow. Journal of Fluid Mechanics, 2009, 627, 1-32.	1.4	74
8	Reynolds-number dependence of wall-pressure fluctuations in a pressure-induced turbulent separation bubble. Journal of Fluid Mechanics, 2017, 833, 563-598.	1.4	40
9	Near-wall similarity between velocity and scalar fluctuations in a turbulent channel flow. Physics of Fluids, 2009, 21, .	1.6	32
10	Relationship between the energy dissipation function and the skin friction law in a turbulent channel flow. Journal of Fluid Mechanics, 2016, 798, 140-164.	1.4	32
11	Relationship between the heat transfer law and the scalar dissipation function in a turbulent channel flow. Journal of Fluid Mechanics, 2017, 830, 300-325.	1.4	27
12	Large-scale structures in a turbulent channel flow with a minimal streamwise flow unit. Journal of Fluid Mechanics, 2018, 850, 733-768.	1.4	26
13	Scaling of normalized mean energy and scalar dissipation rates in a turbulent channel flow. Physics of Fluids, 2011, 23, .	1.6	17
14	Mean temperature calculations in a turbulent channel flow for air and mercury. International Journal of Heat and Mass Transfer, 2019, 132, 1152-1165.	2.5	16
15	Direct numerical simulation of a turbulent boundary layer with separation and reattachment over a range of Reynolds numbers. Fluid Dynamics Research, 2019, 51, 011409.	0.6	10
16	Direct numerical simulation of a non-equilibrium three-dimensional turbulent boundary layer over a flat plate. Journal of Fluid Mechanics, 2020, 902, .	1.4	10
17	Effect of a Quadratic Constitutive Relation on Juncture Flow Computations. , 2020, , .		8
18	Empirical scaling laws for wall-bounded turbulence deduced from direct numerical simulations. Physical Review Fluids, 2021, 6, .	1.0	8

#	ARTICLE	IF	CITATIONS
19	Effects of the Streamwise Computational Domain Size on DNS of a Turbulent Channel Flow at High Reynolds Number. Springer Proceedings in Physics, 2007, , 233-235.	0.1	3