Sean C C Bailey

List of Publications by Year
in descending order

55	1,792	23	42
papers	citations	h-index	g-index

279798 265206

63	63	63	1220
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Turbulence measurements using a nanoscale thermal anemometry probe. Journal of Fluid Mechanics, 2010, 663, 160-179.	3.4	129
2	Logarithmic scaling of turbulence in smooth- and rough-wall pipe flow. Journal of Fluid Mechanics, 2013, 728, 376-395.	3.4	108
3	Spatial resolution correction for wall-bounded turbulence measurements. Journal of Fluid Mechanics, 2011, 676, 41-53.	3.4	95
4	Intercomparison of Small Unmanned Aircraft System (sUAS) Measurements for Atmospheric Science during the LAPSE-RATE Campaign. Sensors, 2019, 19, 2179.	3.8	88
5	Turbulence spectra in smooth- and rough-wall pipe flow at extreme Reynolds numbers. Journal of Fluid Mechanics, 2013, 731, 46-63.	3.4	86
6	Estimating the value of von KÃ¡rmÃ¡nâ€™s constant in turbulent pipe flow. Journal of Fluid Mechanics, 2014, 749, 79-98.	3.4	84
7	Turbulence measurements in pipe flow using a nano-scale thermal anemometry probe. Experiments in Fluids, 2011, 51, 1521-1527.	2.4	82
8	Measurements of the velocity field of a wing-tip vortex, wandering in grid turbulence. Journal of Fluid Mechanics, 2008, 601, 281-315.	3.4	79
9	Influence of wall proximity on vortex shedding from a square cylinder. Experiments in Fluids, 2003, 34, 585-596.	2.4	78
10	Scaling of near-wall turbulence in pipe flow. Journal of Fluid Mechanics, 2010, 649, 103-113.	3.4	74
11	Obtaining accurate mean velocity measurements in high Reynolds number turbulent boundary layers using Pitot tubes. Journal of Fluid Mechanics, 2013, 715, 642-670.	3.4	71
12	Numerical study of iso-Q sample geometric effects on charring ablative materials. International Journal of Heat and Mass Transfer, 2015, 80, 570-596.	4.8	68
13	Experimental investigation of the structure of large- and very-large-scale motions in turbulent pipe flow. Journal of Fluid Mechanics, 2010, 651, 339-356.	3.4	67
14	Azimuthal structure of turbulence in high Reynolds number pipe flow. Journal of Fluid Mechanics, 2008, 615, 121-138.	3.4	63
15	A data-driven adaptive Reynolds-averaged Navierâ€“Stokes kâ€“Ï‰ model for turbulent flow. Journal of Computational Physics, 2017, 345, 111-131.	3.8	55
16	Development of an Unmanned Aerial Vehicle for the Measurement of Turbulence in the Atmospheric Boundary Layer. Atmosphere, 2017, 8, 195.	2.3	51
17	Coordinated Unmanned Aircraft System (UAS) and Ground-Based Weather Measurements to Predict Lagrangian Coherent Structures (LCSs). Sensors, 2018, 18, 4448.	3.8	43
18	Measurements of frequencies and spatial correlations of coherent structures in rod bundle flows. Nuclear Engineering and Design, 2006, 236, 1830-1837.	1.7	42

#	Article	IF	Citations
19	Effects of Free-Stream Turbulence on Wing-Tip Vortex Formation and Near Field. Journal of Aircraft, 2006, 43, 1282-1291.	2.4	39
20	Development of Community, Capabilities, and Understanding through Unmanned Aircraft-Based Atmospheric Research: The LAPSE-RATE Campaign. Bulletin of the American Meteorological Society, 2020, 101, E684-E699.	3.3	38
21	Hot-wire spatial resolution effects in measurements of grid-generated turbulence. Experiments in Fluids, 2012, 53, 1713-1722.	2.4	31
22	Scaling of global properties of turbulence and skin friction in pipe and channel flows. Journal of Fluid Mechanics, 2010, 652, 65-73.	3.4	30
23	Numerical and experimental analysis of spallation phenomena. CEAS Space Journal, 2016, 8, 229-236.	2.3	30
24	Experimental analysis of spallation particle trajectories in an arc-jet environment. Experimental Thermal and Fluid Science, 2018, 93, 319-325.	2.7	23
25	An experimental investigation of wing-tip vortex decay in turbulence. Physics of Fluids, 2017, 29, .	4.0	18
26	Data generated during the 2018 LAPSE-RATE campaign: an introduction and overview. Earth System Science Data, 2020, 12, 3357-3366.	9.9	18
27	Effects of hot-wire length on the measurement of turbulent spectra in anisotropic flows. Measurement Science and Technology, 2010, 21, 105407.	2.6	16
28	Monitoring Tropospheric Gases with Small Unmanned Aerial Systems (sUAS) during the Second CLOUDMAP Flight Campaign. Atmosphere, 2019, 10, 434.	2.3	16
29	Filtered dynamic inversion for altitude control of fixed-wing unmanned air vehicles. Aerospace Science and Technology, 2016, 54, 241-252.	4.8	15
30	Experimental investigation of the scaling of vortex wandering in turbulent surroundings. Journal of Fluid Mechanics, 2018, 843, 722-747.	3.4	14
31	University of Kentucky measurements of wind, temperature, pressure and humidity in support of LAPSE-RATE using multisite fixed-wing and rotorcraft unmanned aerial systems. Earth System Science Data, 2020, 12, 1759-1773.	9.9	14
32	Arc-jet measurements of low-density ablator spallation. Experimental Thermal and Fluid Science, 2022, 133, 110544.	2.7	14
33	Investigation of the scaling of roughness and blowing effects on turbulent channel flow. Experiments in Fluids, 2014, 55, 1.	2.4	12
34	A drag coefficient model for Lagrangian particle dynamics relevant to high-speed flows. International Journal of Heat and Fluid Flow, 2021, 87, 108706.	2.4	12
35	Retrospective cost adaptive Reynolds-averaged Navierâ€“Stokes kâ€“Ï‰ model for data-driven unsteady turbulent simulations. Journal of Computational Physics, 2018, 357, 353-374.	3.8	11
36	Evaluation of hot-wire spatial filtering corrections for wall turbulence and correction for end-conduction effects. Experiments in Fluids, 2014, 55, 1.	2.4	9

#	Article	IF	Citations
37	Universality of local dissipation scales in turbulent boundary layer flows with and without free-stream turbulence. Physics of Fluids, 2017, 29, .	4.0	9
38	On the universality of local dissipation scales in turbulent channel flow. Journal of Fluid Mechanics, 2016, 786, 234-252.	3.4	8
39	Unmanned aerial vehicles reveal the impact of a total solar eclipse on the atmospheric surface layer. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190212.	2.1	7
40	Numerical reconstruction of spalled particle trajectories in an arc-jet environment. , 2021, , .		7
41	An approach to minimize aircraft motion bias in multi-hole probe wind measurements made by small unmanned aerial systems. Atmospheric Measurement Techniques, 2021, 14, 173-184.	3.1	6
42	Amplitude and wavelength scaling of sinusoidal roughness effects in turbulent channel flow at fixed. Journal of Fluid Mechanics, 2022, 937, .	3.4	5
43	Fundamental Turbulence Measurement with Unmanned Aerial Vehicles (Invited). , 2016, , .		4
44	Characterization of Ablation Product Radiation Signatures of PICA and FiberForm. , 2016, , .		4
45	Experimental examination of vorticity stripping from a wing-tip vortex in free-stream turbulence. Physical Review Fluids, 2018, 3, .	2.5	3
46	External intermittency compensation of dissipation scale distributions in a turbulent boundary layer. Physical Review Fluids, 2018, 3, .	2.5	3
47	Introducing Perturbations into Turbulent Wall-Bounded Flow With Arrays of Long TiO2 Nanowires. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	1.5	2
48	Modeling and flight testing of wing shaping for roll control of an unmanned aerial vehicle. Journal of Unmanned Vehicle Systems, 2015, 3, 192-204.	1.2	2
49	Structure of Large- and Very Large-Scale Motions in Turbulent Pipe Flow. , 2009, , .		1
50	An Aircraft Design Competition for High School STEM Improvement. , 2014, , .		1
51	Spallation particle size analysis resulting from arc-jet experiments. , 2020, , .		1
52	Modeling of spalled particles for arc-jet test planning. , 2022, , .		1
53	Modeling Dissipation Scale Distributions at High Reynolds Number. , 2022, , .		1
54	Investigation of Turbulent Structure Modification by Momentum Injection Into Turbulent Flow Over a Rough Surface. , 2013, , .		0

#	Article	IF	Citations
55	Turbulence in Pipe Flows with Small Relative Roughness. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 33-42.	0.2	0