Lance R Collins

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Non-continuum tangential lubrication gas flow between two spheres. Journal of Fluid Mechanics, 2021, 920, .	3.4	6
2	Particle-pair relative velocity measurement in high-Reynolds-number homogeneous and isotropic turbulence using 4-frame particle tracking velocimetry. Experiments in Fluids, 2018, 59, 1.	2.4	17
3	Effects of Reynolds number and Stokes number on particle-pair relative velocity in isotropic turbulence: a systematic experimental study. Journal of Fluid Mechanics, 2018, 839, 271-292.	3.4	22
4	The effect of Reynolds number on inertial particle dynamics in isotropic turbulence. PartÂ2. Simulations with gravitational effects. Journal of Fluid Mechanics, 2016, 796, 659-711.	3.4	89
5	The effect of Reynolds number on inertial particle dynamics in isotropic turbulence. Part 1. Simulations without gravitational effects. Journal of Fluid Mechanics, 2016, 796, 617-658.	3.4	107
6	Forward and backward in time dispersion of fluid and inertial particles in isotropic turbulence. Physics of Fluids, 2016, 28, .	4.0	33
7	On the relationship between the non-local clustering mechanism and preferential concentration. Journal of Fluid Mechanics, 2015, 780, 327-343.	3.4	40
8	Mechanisms for the clustering of inertial particles in the inertial range of isotropic turbulence. Physical Review E, 2015, 92, 023029.	2.1	44
9	A subgrid model for clustering of high-inertia particles in large-eddy simulations of turbulence. Journal of Turbulence, 2014, 15, 366-385.	1.4	29
10	Simulation of homogeneous turbulent shear flows at higher Reynolds numbers: numerical challenges and a remedy. Journal of Turbulence, 2013, 14, 60-97.	1.4	7
11	Investigation of sub-Kolmogorov inertial particle pair dynamics in turbulence using novel satellite particle simulations. Journal of Fluid Mechanics, 2013, 720, 192-211.	3.4	16
12	Inertial particle acceleration statistics in turbulence: Effects of filtering, biased sampling, and flow topology. Physics of Fluids, 2012, 24, .	4.0	20
13	Direct numerical simulation of inertial particle entrainment in a shearless mixing layer. Journal of Fluid Mechanics, 2012, 704, 301-332.	3.4	26
14	Inertial particle relative velocity statistics in homogeneous isotropic turbulence. Journal of Fluid Mechanics, 2012, 696, 45-66.	3.4	52
15	Preferential concentration and relative velocity statistics of inertial particles in Navier–Stokes turbulence with and without filtering. Journal of Fluid Mechanics, 2011, 680, 488-510.	3.4	49
16	Effect of the shear parameter on velocity-gradient statistics in homogeneous turbulent shear flow. Journal of Fluid Mechanics, 2011, 678, 14-40.	3.4	10
17	Bounded stochastic shell mixing model for turbulent mixing of multiple scalars with arbitrary diffusivities. Physics of Fluids, 2011, 23, 065107.	4.0	0
18	Polymer-laden homogeneous shear-driven turbulent flow: a model for polymer drag reduction. Journal of Fluid Mechanics, 2010, 657, 189-226.	3.4	13

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19	Stochastic Shell Model for Turbulent Mixing of Multiple Scalars with Mean Gradients and Differential Diffusion. Flow, Turbulence and Combustion, 2010, 85, 689-709.	2.6	1
20	Eddy damped quasinormal Markovian theory for chemically reactive scalars in isotropic turbulence. Physics of Fluids, 2010, 22, 045103.	4.0	6
21	Two-Particle Dispersion in Isotropic Turbulent Flows. Annual Review of Fluid Mechanics, 2009, 41, 405-432.	25.0	188
22	Experimental investigation of the large-scale velocity statistics in homogeneous turbulent shear flow. Physics of Fluids, 2009, 21, .	4.0	11
23	Comparison of Turbulence Modeling Strategies for Indoor Flows. Journal of Fluids Engineering, Transactions of the ASME, 2009, 131, .	1.5	22
24	On the asymptotic behaviour of large-scale turbulence in homogeneous shear flow. Journal of Fluid Mechanics, 2009, 637, 213-239.	3.4	29
25	Experimental and numerical investigation of inertial particle clustering in isotropic turbulence. Journal of Fluid Mechanics, 2008, 600, 245-256.	3.4	144
26	Polymer mixing in shear-driven turbulence. Journal of Fluid Mechanics, 2007, 585, 487-497.	3.4	9
27	Clustering of aerosol particles in isotropic turbulence. Journal of Fluid Mechanics, 2005, 536, 219-251.	3.4	227
28	Breakup in stochastic Stokes flows: sub-Kolmogorov drops in isotropic turbulence. Journal of Fluid Mechanics, 2003, 492, 231-250.	3.4	41
29	Relationship between the intrinsic radial distribution function for an isotropic field of particles and lower-dimensional measurements. Journal of Fluid Mechanics, 2002, 459, 93-102.	3.4	36