

# Lance R Collins

## List of Publications by Year in descending order

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29  
papers

1,294  
citations

430754

18  
h-index

501076

28  
g-index

29  
all docs

29  
docs citations

29  
times ranked

822  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-continuum tangential lubrication gas flow between two spheres. <i>Journal of Fluid Mechanics</i> , 2021, 920, .	1.4	6
2	Particle-pair relative velocity measurement in high-Reynolds-number homogeneous and isotropic turbulence using 4-frame particle tracking velocimetry. <i>Experiments in Fluids</i> , 2018, 59, 1.	1.1	17
3	Effects of Reynolds number and Stokes number on particle-pair relative velocity in isotropic turbulence: a systematic experimental study. <i>Journal of Fluid Mechanics</i> , 2018, 839, 271-292.	1.4	22
4	The effect of Reynolds number on inertial particle dynamics in isotropic turbulence. Part 2. Simulations with gravitational effects. <i>Journal of Fluid Mechanics</i> , 2016, 796, 659-711.	1.4	89
5	The effect of Reynolds number on inertial particle dynamics in isotropic turbulence. Part 1. Simulations without gravitational effects. <i>Journal of Fluid Mechanics</i> , 2016, 796, 617-658.	1.4	107
6	Forward and backward in time dispersion of fluid and inertial particles in isotropic turbulence. <i>Physics of Fluids</i> , 2016, 28, .	1.6	33
7	On the relationship between the non-local clustering mechanism and preferential concentration. <i>Journal of Fluid Mechanics</i> , 2015, 780, 327-343.	1.4	40
8	Mechanisms for the clustering of inertial particles in the inertial range of isotropic turbulence. <i>Physical Review E</i> , 2015, 92, 023029.	0.8	44
9	A subgrid model for clustering of high-inertia particles in large-eddy simulations of turbulence. <i>Journal of Turbulence</i> , 2014, 15, 366-385.	0.5	29
10	Simulation of homogeneous turbulent shear flows at higher Reynolds numbers: numerical challenges and a remedy. <i>Journal of Turbulence</i> , 2013, 14, 60-97.	0.5	7
11	Investigation of sub-Kolmogorov inertial particle pair dynamics in turbulence using novel satellite particle simulations. <i>Journal of Fluid Mechanics</i> , 2013, 720, 192-211.	1.4	16
12	Inertial particle acceleration statistics in turbulence: Effects of filtering, biased sampling, and flow topology. <i>Physics of Fluids</i> , 2012, 24, .	1.6	20
13	Direct numerical simulation of inertial particle entrainment in a shearless mixing layer. <i>Journal of Fluid Mechanics</i> , 2012, 704, 301-332.	1.4	26
14	Inertial particle relative velocity statistics in homogeneous isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2012, 696, 45-66.	1.4	52
15	Preferential concentration and relative velocity statistics of inertial particles in Navier–Stokes turbulence with and without filtering. <i>Journal of Fluid Mechanics</i> , 2011, 680, 488-510.	1.4	49
16	Effect of the shear parameter on velocity-gradient statistics in homogeneous turbulent shear flow. <i>Journal of Fluid Mechanics</i> , 2011, 678, 14-40.	1.4	10
17	Bounded stochastic shell mixing model for turbulent mixing of multiple scalars with arbitrary diffusivities. <i>Physics of Fluids</i> , 2011, 23, 065107.	1.6	0
18	Polymer-laden homogeneous shear-driven turbulent flow: a model for polymer drag reduction. <i>Journal of Fluid Mechanics</i> , 2010, 657, 189-226.	1.4	13

#	ARTICLE	IF	CITATIONS
19	Stochastic Shell Model for Turbulent Mixing of Multiple Scalars with Mean Gradients and Differential Diffusion. <i>Flow, Turbulence and Combustion</i> , 2010, 85, 689-709.	1.4	1
20	Eddy damped quasynormal Markovian theory for chemically reactive scalars in isotropic turbulence. <i>Physics of Fluids</i> , 2010, 22, 045103.	1.6	6
21	Two-Particle Dispersion in Isotropic Turbulent Flows. <i>Annual Review of Fluid Mechanics</i> , 2009, 41, 405-432.	10.8	188
22	Experimental investigation of the large-scale velocity statistics in homogeneous turbulent shear flow. <i>Physics of Fluids</i> , 2009, 21, .	1.6	11
23	Comparison of Turbulence Modeling Strategies for Indoor Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2009, 131, .	0.8	22
24	On the asymptotic behaviour of large-scale turbulence in homogeneous shear flow. <i>Journal of Fluid Mechanics</i> , 2009, 637, 213-239.	1.4	29
25	Experimental and numerical investigation of inertial particle clustering in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2008, 600, 245-256.	1.4	144
26	Polymer mixing in shear-driven turbulence. <i>Journal of Fluid Mechanics</i> , 2007, 585, 487-497.	1.4	9
27	Clustering of aerosol particles in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2005, 536, 219-251.	1.4	227
28	Breakup in stochastic Stokes flows: sub-Kolmogorov drops in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2003, 492, 231-250.	1.4	41
29	Relationship between the intrinsic radial distribution function for an isotropic field of particles and lower-dimensional measurements. <i>Journal of Fluid Mechanics</i> , 2002, 459, 93-102.	1.4	36