

Roberto Verzicco

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217
papers

6,885
citations

41
h-index

76
g-index

238
ext. papers

8,128
ext. citations

3.7
avg. IF

6.28
L-index

#	Paper	IF	Citations
217	Combined Immersed-Boundary Finite-Difference Methods for Three-Dimensional Complex Flow Simulations. <i>Journal of Computational Physics</i> , 2000 , 161, 35-60	4.1	1228
216	A Finite-Difference Scheme for Three-Dimensional Incompressible Flows in Cylindrical Coordinates. <i>Journal of Computational Physics</i> , 1996 , 123, 402-414	4.1	438
215	Immersed boundary technique for turbulent flow simulations. <i>Applied Mechanics Reviews</i> , 2003 , 56, 331-347	4.7	268
214	Numerical experiments on strongly turbulent thermal convection in a slender cylindrical cell. <i>Journal of Fluid Mechanics</i> , 2003 , 477,	3.7	207
213	Radial boundary layer structure and Nusselt number in Rayleigh-B�ard convection. <i>Journal of Fluid Mechanics</i> , 2010 , 643, 495-507	3.7	174
212	Vortex rings impinging on walls: axisymmetric and three-dimensional simulations. <i>Journal of Fluid Mechanics</i> , 1993 , 256, 615-646	3.7	132
211	Large Eddy Simulation in Complex Geometric Configurations Using Boundary Body Forces. <i>AIAA Journal</i> , 2000 , 38, 427-433	2.1	127
210	Prandtl number effects in convective turbulence. <i>Journal of Fluid Mechanics</i> , 1999 , 383, 55-73	3.7	123
209	Direct simulation of transition in an oscillatory boundary layer. <i>Journal of Fluid Mechanics</i> , 1998 , 371, 207-232	3.7	106
208	Prandtl and Rayleigh number dependence of heat transport in high Rayleigh number thermal convection. <i>Journal of Fluid Mechanics</i> , 2011 , 688, 31-43	3.7	98
207	Direct numerical simulation of the pulsatile flow through an aortic bileaflet mechanical heart valve. <i>Journal of Fluid Mechanics</i> , 2009 , 622, 259-290	3.7	97
206	A pencil distributed finite difference code for strongly turbulent wall-bounded flows. <i>Computers and Fluids</i> , 2015 , 116, 10-16	2.8	96
205	Modeling of vortex dynamics in the wake of a marine propeller. <i>Computers and Fluids</i> , 2013 , 73, 65-79	2.8	92
204	Prandtl-, Rayleigh-, and Rossby-number dependence of heat transport in turbulent rotating Rayleigh-B�ard convection. <i>Physical Review Letters</i> , 2009 , 102, 044502	7.4	90
203	Effects of nonperfect thermal sources in turbulent thermal convection. <i>Physics of Fluids</i> , 2004 , 16, 1965-1979	7.9	89
202	Numerical experiments on flapping foils mimicking fish-like locomotion. <i>Physics of Fluids</i> , 2005 , 17, 11360-11	7.1	86
201	Logarithmic temperature profiles in turbulent Rayleigh-B�ard convection. <i>Physical Review Letters</i> , 2012 , 109, 114501	7.4	81

200	Turbulent thermal superstructures in Rayleigh-Bénard convection. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	66
199	Extended Lifetime of Respiratory Droplets in a Turbulent Vapor Puff and Its Implications on Airborne Disease Transmission. <i>Physical Review Letters</i> , 2021 , 126, 034502	7.4	66
198	Optimal Taylor-Couette flow: direct numerical simulations. <i>Journal of Fluid Mechanics</i> , 2013 , 719, 14-46	3.7	65
197	Exploring the phase diagram of fully turbulent Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2014 , 761, 1-26	3.7	65
196	Transition to the Ultimate Regime in Two-Dimensional Rayleigh-Bénard Convection. <i>Physical Review Letters</i> , 2018 , 120, 144502	7.4	64
195	A comparison of turbulent thermal convection between conditions of constant temperature and constant heat flux. <i>Journal of Fluid Mechanics</i> , 2008 , 595, 203-219	3.7	64
194	Turbulent thermal convection at high Rayleigh numbers for a Boussinesq fluid of constant Prandtl number. <i>Physics of Fluids</i> , 2005 , 17, 121701	4.4	63
193	Large-eddy simulations in mixed-flow pumps using an immersed-boundary method. <i>Computers and Fluids</i> , 2011 , 47, 33-43	2.8	58
192	A numerical study of three-dimensional vortex ring instabilities: viscous corrections and early nonlinear stage. <i>Journal of Fluid Mechanics</i> , 1994 , 279, 351-375	3.7	58
191	Large Eddy Simulation of a Road Vehicle with Drag-Reduction Devices. <i>AIAA Journal</i> , 2002 , 40, 2447-2455	5.1	57
190	Transitional regimes of low-Prandtl thermal convection in a cylindrical cell. <i>Physics of Fluids</i> , 1997 , 9, 1287-1295	5.6	
189	Numerical and experimental investigation of structure-function scaling in turbulent Rayleigh-Bénard convection. <i>Physical Review E</i> , 2008 , 77, 016302	2.4	54
188	Roughness-Facilitated Local 1/2 Scaling Does Not Imply the Onset of the Ultimate Regime of Thermal Convection. <i>Physical Review Letters</i> , 2017 , 119, 154501	7.4	53
187	Numerical simulations of Rayleigh-Bénard convection for Prandtl numbers between 10 ³ and 10 ⁴ and Rayleigh numbers between 10 ⁵ and 10 ⁹ . <i>Journal of Fluid Mechanics</i> , 2010 , 662, 409-446	3.7	53
186	Physical mechanisms governing drag reduction in turbulent Taylor-Couette flow with finite-size deformable bubbles. <i>Journal of Fluid Mechanics</i> , 2018 , 849,	3.7	53
185	Combined Immersed Boundary/Large-Eddy-Simulations of Incompressible Three Dimensional Complex Flows. <i>Flow, Turbulence and Combustion</i> , 2006 , 77, 3-26	2.5	52
184	Sidewall finite-conductivity effects in confined turbulent thermal convection. <i>Journal of Fluid Mechanics</i> , 2002 , 473, 201-210	3.7	50
183	Optimal Taylor-Couette flow: radius ratio dependence. <i>Journal of Fluid Mechanics</i> , 2014 , 747, 1-29	3.7	49

182	Boundary layer dynamics at the transition between the classical and the ultimate regime of Taylor-Couette flow. <i>Physics of Fluids</i> , 2014 , 26, 015114	4.4	48
181	Direct numerical simulation of turbulent particle dispersion in an unbaffled stirred-tank reactor. <i>Chemical Engineering Science</i> , 2006 , 61, 2843-2851	4.4	48
180	Flow in an impeller-stirred tank using an immersed-boundary method. <i>AIChE Journal</i> , 2004 , 50, 1109-1118	3.6	48
179	Turbulent thermal convection over grooved plates. <i>Journal of Fluid Mechanics</i> , 2006 , 557, 307	3.7	47
178	Three-dimensional structure and decay properties of vortices in shallow fluid layers. <i>Physics of Fluids</i> , 2001 , 13, 1932-1945	4.4	42
177	Diffusive interaction of multiple surface nanobubbles: shrinkage, growth, and coarsening. <i>Soft Matter</i> , 2018 , 14, 2006-2014	3.6	41
176	AFiD-GPU: A versatile Navier-Stokes solver for wall-bounded turbulent flows on GPU clusters. <i>Computer Physics Communications</i> , 2018 , 229, 199-210	4.2	40
175	A multiple-resolution strategy for Direct Numerical Simulation of scalar turbulence. <i>Journal of Computational Physics</i> , 2015 , 301, 308-321	4.1	38
174	Confined Rayleigh-Bénard, Rotating Rayleigh-Bénard, and Double Diffusive Convection: A Unifying View on Turbulent Transport Enhancement through Coherent Structure Manipulation. <i>Physical Review Letters</i> , 2017 , 119, 064501	7.4	38
173	Heat transport in bubbling turbulent convection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 9237-42	11.5	38
172	Transition to geostrophic convection: the role of the boundary conditions. <i>Journal of Fluid Mechanics</i> , 2016 , 799, 413-432	3.7	37
171	Mixed convection in turbulent channels with unstable stratification. <i>Journal of Fluid Mechanics</i> , 2017 , 821, 482-516	3.7	36
170	Comparison of computational codes for direct numerical simulations of turbulent Rayleigh-Bénard convection. <i>Computers and Fluids</i> , 2018 , 166, 1-8	2.8	36
169	A parallel interaction potential approach coupled with the immersed boundary method for fully resolved simulations of deformable interfaces and membranes. <i>Journal of Computational Physics</i> , 2017 , 348, 567-590	4.1	36
168	Mechanisms for selective radial dispersion of microparticles in the transitional region of a confined turbulent round jet. <i>International Journal of Multiphase Flow</i> , 2004 , 30, 1389-1417	3.6	36
167	Mean flow structure in thermal convection in a cylindrical cell of aspect ratio one half. <i>Journal of Fluid Mechanics</i> , 2006 , 548, 1	3.7	35
166	Thermal boundary layer profiles in turbulent Rayleigh-Bénard convection in a cylindrical sample. <i>Physical Review E</i> , 2012 , 85, 027301	2.4	34
165	The near-wall region of highly turbulent Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2016 , 788, 95-117	3.7	34

164	Heat transfer mechanisms in bubbly Rayleigh-Bénard convection. <i>Physical Review E</i> , 2009 , 80, 026304	2.4	32
163	Dynamics of pancake-like vortices in a stratified fluid: experiments, model and numerical simulations. <i>Journal of Fluid Mechanics</i> , 2001 , 433, 1-27	3.7	32
162	Effects of the computational domain size on direct numerical simulations of Taylor-Couette turbulence with stationary outer cylinder. <i>Physics of Fluids</i> , 2015 , 27, 025110	4.4	31
161	On steady columnar vortices under local compression. <i>Journal of Fluid Mechanics</i> , 1995 , 299, 367-388	3.7	31
160	Transitional regimes and rotation effects in Rayleigh-Bénard convection in a slender cylindrical cell. <i>European Journal of Mechanics, B/Fluids</i> , 2007 , 26, 1-14	2.4	30
159	Flow structure in healthy and pathological left ventricles with natural and prosthetic mitral valves. <i>Journal of Fluid Mechanics</i> , 2018 , 834, 271-307	3.7	30
158	Numerical and experimental study of the interaction between a vortex dipole and a circular cylinder. <i>Experiments in Fluids</i> , 1995 , 18, 153-163	2.5	29
157	Normal and oblique collisions of a vortex ring with a wall. <i>Meccanica</i> , 1994 , 29, 383-391	2.1	29
156	Wall roughness induces asymptotic ultimate turbulence. <i>Nature Physics</i> , 2018 , 14, 417-423	16.2	28
155	Numerical simulation of the non-Newtonian blood flow through a mechanical aortic valve. <i>Theoretical and Computational Fluid Dynamics</i> , 2016 , 30, 129-138	2.3	27
154	Deformation statistics of sub-Kolmogorov-scale ellipsoidal neutrally buoyant drops in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2014 , 754, 184-207	3.7	27
153	A numerical model for the analysis of unsteady train braking and releasing manoeuvres. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2009 , 223, 305-317	1.4	27
152	scaling enabled by multiscale wall roughness in Rayleigh-Bénard turbulence. <i>Journal of Fluid Mechanics</i> , 2019 , 869,	3.7	26
151	Controlling Heat Transport and Flow Structures in Thermal Turbulence Using Ratchet Surfaces. <i>Physical Review Letters</i> , 2018 , 120, 044501	7.4	26
150	On the effect of aortic root geometry on the coronary entry-flow after a bileaflet mechanical heart valve implant: a numerical study. <i>Acta Mechanica</i> , 2011 , 216, 147-163	2.1	26
149	Dynamics of baroclinic vortices in a rotating, stratified fluid: A numerical study. <i>Physics of Fluids</i> , 1997 , 9, 419-432	4.4	25
148	Direct numerical simulation of Taylor-Couette flow with grooved walls: torque scaling and flow structure. <i>Journal of Fluid Mechanics</i> , 2016 , 794, 746-774	3.7	24
147	Effect of velocity boundary conditions on the heat transfer and flow topology in two-dimensional Rayleigh-Bénard convection. <i>Physical Review E</i> , 2014 , 90, 013017	2.4	23

146	Logarithmic Mean Temperature Profiles and Their Connection to Plume Emissions in Turbulent Rayleigh-BBard Convection. <i>Physical Review Letters</i> , 2015 , 115, 154501	7.4	23
145	Computational prediction of mechanical hemolysis in aortic valved prostheses. <i>European Journal of Mechanics, B/Fluids</i> , 2012 , 35, 47-53	2.4	23
144	Temporal statistics in high Rayleigh number convective turbulence. <i>European Journal of Mechanics, B/Fluids</i> , 2004 , 23, 427-442	2.4	23
143	Sidewall effects in RayleighBBard convection. <i>Journal of Fluid Mechanics</i> , 2014 , 741, 1-27	3.7	21
142	Turbulent thermal convection in a closed domain: viscous boundary layer and mean flow effects. <i>European Physical Journal B</i> , 2003 , 35, 133-141	1.2	21
141	Multiple States in Turbulent Large-Aspect-Ratio Thermal Convection: What Determines the Number of Convection Rolls?. <i>Physical Review Letters</i> , 2020 , 125, 074501	7.4	21
140	Plume emission statistics in turbulent RayleighBBard convection. <i>Journal of Fluid Mechanics</i> , 2015 , 772, 5-15	3.7	20
139	Pulsating pipe flow with large-amplitude oscillations in the very high frequency regime. Part 1. Time-averaged analysis. <i>Journal of Fluid Mechanics</i> , 2012 , 700, 246-282	3.7	20
138	Axially homogeneous RayleighBBard convection in a cylindrical cell. <i>Journal of Fluid Mechanics</i> , 2012 , 691, 52-68	3.7	20
137	Numerical simulations of transitional axisymmetric coaxial jets. <i>AIAA Journal</i> , 1996 , 34, 736-743	2.1	20
136	Growth of respiratory droplets in cold and humid air. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	20
135	From convection rolls to finger convection in double-diffusive turbulence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 69-73	11.5	19
134	Mixed insulating and conducting thermal boundary conditions in RayleighBBard convection. <i>Journal of Fluid Mechanics</i> , 2018 , 835, 491-511	3.7	18
133	Fluid-structure interaction of deformable aortic prostheses with a bileaflet mechanical valve. <i>Journal of Biomechanics</i> , 2011 , 44, 1684-90	2.9	18
132	FluidBstructure-Electrophysiology interaction (FSEI) in the left-heart: A multi-way coupled computational model. <i>European Journal of Mechanics, B/Fluids</i> , 2020 , 79, 212-232	2.4	18
131	From zonal flow to convection rolls in RayleighBBard convection with free-slip plates. <i>Journal of Fluid Mechanics</i> , 2020 , 905,	3.7	17
130	On the suitability of second-order accurate discretizations for turbulent flow simulations. <i>European Journal of Mechanics, B/Fluids</i> , 2016 , 55, 242-245	2.4	17
129	Experimental investigation of heat transport in homogeneous bubbly flow. <i>Journal of Fluid Mechanics</i> , 2018 , 845, 226-244	3.7	17

128	Salinity transfer in bounded double diffusive convection. <i>Journal of Fluid Mechanics</i> , 2015 , 768, 476-491	3.7	17
127	Spatial distribution of heat flux and fluctuations in turbulent Rayleigh-Bénard convection. <i>Physical Review E</i> , 2012 , 86, 056315	2.4	17
126	Numerical simulations of flow reversal in Rayleigh-Bénard convection. <i>Europhysics Letters</i> , 2008 , 81, 64008.6		17
125	A fast moving least squares approximation with adaptive Lagrangian mesh refinement for large scale immersed boundary simulations. <i>Journal of Computational Physics</i> , 2018 , 375, 228-239	4.1	17
124	Effect of vapor bubbles on velocity fluctuations and dissipation rates in bubbly Rayleigh-Bénard convection. <i>Physical Review E</i> , 2011 , 84, 036312	2.4	16
123	Evolution and instability of monopolar vortices in a stratified fluid. <i>Physics of Fluids</i> , 2003 , 15, 1033-1045	4.4	16
122	Dynamics of a vortex ring in a rotating fluid. <i>Journal of Fluid Mechanics</i> , 1996 , 317, 215-239	3.7	16
121	Periodically Modulated Thermal Convection. <i>Physical Review Letters</i> , 2020 , 125, 154502	7.4	16
120	Scaling laws and flow structures of double diffusive convection in the finger regime. <i>Journal of Fluid Mechanics</i> , 2016 , 802, 667-689	3.7	16
119	A numerical study on gas-liquid mass transfer in the rotor-stator spinning disc reactor. <i>Chemical Engineering Science</i> , 2015 , 129, 14-24	4.4	15
118	Growth dynamics of microbubbles on microcavity arrays by solvent exchange: Experiments and numerical simulations. <i>Journal of Colloid and Interface Science</i> , 2018 , 532, 103-111	9.3	15
117	Turbulence decay towards the linearly stable regime of Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2014 , 748,	3.7	15
116	A Non-Adiabatic Flamelet Progress-Variable Approach for LES of Turbulent Premixed Flames. <i>Flow, Turbulence and Combustion</i> , 2011 , 86, 667-688	2.5	15
115	Dipole formation by two interacting shielded monopoles in a stratified fluid. <i>Physics of Fluids</i> , 2002 , 14, 704-720	4.4	15
114	Convective turbulence in mercury: Scaling laws and spectra. <i>Physics of Fluids</i> , 1998 , 10, 516-527	4.4	15
113	Flow organization and heat transfer in turbulent wall sheared thermal convection. <i>Journal of Fluid Mechanics</i> , 2020 , 897, A22	3.7	14
112	Convection-dominated dissolution for single and multiple immersed sessile droplets. <i>Journal of Fluid Mechanics</i> , 2020 , 892,	3.7	14
111	Modification of turbulence in Rayleigh-Bénard convection by phase change. <i>New Journal of Physics</i> , 2011 , 13, 025002	2.9	14

110	Wall/Vortex-Ring Interactions. <i>Applied Mechanics Reviews</i> , 1996 , 49, 447-461	8.6	14
109	Drag reduction in numerical two-phase Taylor-Couette turbulence using an Euler-Lagrange approach. <i>Journal of Fluid Mechanics</i> , 2016 , 798, 411-435	3.7	13
108	Pulsating pipe flow with large-amplitude oscillations in the very high frequency regime. Part 2. Phase-averaged analysis. <i>Journal of Fluid Mechanics</i> , 2015 , 766, 272-296	3.7	12
107	Flow-induced dissolution of femtoliter surface droplet arrays. <i>Lab on A Chip</i> , 2018 , 18, 1066-1074	7.2	12
106	Effect of sidewall on heat transfer and flow structure in Rayleigh-Bard convection. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 218-243	3.7	12
105	Turbulent Flow and Dispersion of Inertial Particles in a Confined Jet Issued by a Long Cylindrical Pipe. <i>Flow, Turbulence and Combustion</i> , 2009 , 82, 1-23	2.5	12
104	Effect of roll number on the statistics of turbulent Taylor-Couette flow. <i>Physical Review Fluids</i> , 2016 , 1, 014101	2.8	12
103	From Rayleigh-Bard convection to porous-media convection: how porosity affects heat transfer and flow structure. <i>Journal of Fluid Mechanics</i> , 2020 , 895, 1-23	3.7	11
102	Fluid-particle flow simulation by averaged continuous model. <i>Computers and Fluids</i> , 2005 , 34, 1040-1061	2.8	11
101	One-point statistics for turbulent pipe flow up to. <i>Journal of Fluid Mechanics</i> , 2021 , 926, 1-23	3.7	11
100	Statistics of turbulence in the energy-containing range of Taylor-Couette compared to canonical wall-bounded flows. <i>Journal of Fluid Mechanics</i> , 2017 , 830, 797-819	3.7	10
99	Deformation and orientation statistics of neutrally buoyant sub-Kolmogorov ellipsoidal droplets in turbulent Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2016 , 809, 480-501	3.7	10
98	Vertically Bounded Double Diffusive Convection in the Finger Regime: Comparing No-Slip versus Free-Slip Boundary Conditions. <i>Physical Review Letters</i> , 2016 , 117, 184501	7.4	9
97	Moving from momentum transfer to heat transfer - A comparative study of an advanced Graetz-Nusselt problem using immersed boundary methods. <i>Chemical Engineering Science</i> , 2019 , 198, 317-333	4.4	9
96	Direct numerical simulations of Taylor-Couette turbulence: the effects of sand grain roughness. <i>Journal of Fluid Mechanics</i> , 2019 , 873, 260-286	3.7	9
95	Evaluation of prosthetic-valved devices by means of numerical simulations. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011 , 369, 2502-9	3	9
94	Specific roles of fluid properties in non-Boussinesq thermal convection at the Rayleigh number of 2×10^8 . <i>Europhysics Letters</i> , 2009 , 86, 14006	1.6	9
93	Deformable ellipsoidal bubbles in Taylor-Couette flow with enhanced Euler-Lagrangian tracking. <i>Physical Review Fluids</i> , 2017 , 2, 024101	2.8	9

92	Disentangling the origins of torque enhancement through wall roughness in Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2017 , 812, 279-293	3.7	9
91	Turbulent Taylor-Couette flow with stationary inner cylinder. <i>Journal of Fluid Mechanics</i> , 2016 , 799,	3.7	9
90	Extended lifetime of respiratory droplets in a turbulent vapour puff and its implications on airborne disease transmission		8
89	Multiple states and transport properties of double-diffusive convection turbulence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14676-14681	11.5	7
88	Effects of mitral chordae tendineae on the flow in the left heart ventricle. <i>European Physical Journal E</i> , 2018 , 41, 27	1.5	7
87	Annular dilatation and loss of sino-tubular junction in aneurysmatic aorta: implications on leaflet quality at the time of surgery. A finite element study. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2013 , 17, 8-12	1.8	7
86	Non-Boussinesq convection at moderate Rayleigh numbers in low temperature gaseous helium. <i>Physica Scripta</i> , 2008 , T132, 014053	2.6	7
85	On the survival of strong vortex filaments in model turbulence. <i>Journal of Fluid Mechanics</i> , 1999 , 394, 261-279	3.7	7
84	Zhu et al. Reply. <i>Physical Review Letters</i> , 2019 , 123, 259402	7.4	7
83	Effects of the wind on the breaking of modulated wave trains. <i>European Journal of Mechanics, B/Fluids</i> , 2019 , 73, 6-23	2.4	7
82	Breaking of modulated wave groups: kinematics and energy dissipation processes. <i>Journal of Fluid Mechanics</i> , 2018 , 855, 267-298	3.7	7
81	Left Ventricular Hemodynamics with an Implanted Assist Device: An In Vitro Fluid Dynamics Study. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 1799-1814	4.7	6
80	Direct numerical simulations of spiral Taylor-Couette turbulence. <i>Journal of Fluid Mechanics</i> , 2020 , 887,	3.7	6
79	Ekman pumping and intermittent particle resuspension in a stirred tank reactor. <i>Chemical Engineering Research and Design</i> , 2009 , 87, 557-564	5.5	6
78	Vortex Structures Generated by a Finite-span Oscillating Foil 2005 ,		6
77	Modeling mitral valve stenosis: A parametric study on the stenosis severity level. <i>Journal of Biomechanics</i> , 2019 , 84, 218-226	2.9	5
76	Dynamics and evolution of turbulent Taylor rolls. <i>Journal of Fluid Mechanics</i> , 2019 , 870, 970-987	3.7	5
75	Two-scalar turbulent Rayleigh-Bard convection: numerical simulations and unifying theory. <i>Journal of Fluid Mechanics</i> , 2018 , 848, 648-659	3.7	5

74	Convective heat transfer along ratchet surfaces in vertical natural convection. <i>Journal of Fluid Mechanics</i> , 2019 , 873, 1055-1071	3-7	5
73	Fluid velocity fluctuations in a collision of a sphere with a wall. <i>Physics of Fluids</i> , 2011 , 23, 063301	4-4	5
72	Structure function exponents and probability density function of the velocity difference in turbulence. <i>Physics of Fluids</i> , 2002 , 14, 906-909	4-4	5
71	What rotation rate maximizes heat transport in rotating Rayleigh-B̄ard convection with Prandtl number larger than one?. <i>Physical Review Fluids</i> , 2020 , 5,	2-8	5
70	Large eddy simulation in complex geometric configurations using boundary body forces. <i>AIAA Journal</i> , 2000 , 38, 427-433	2-1	5
69	Transition to ultimate Rayleigh-B̄ard turbulence revealed through extended self-similarity scaling analysis of the temperature structure functions. <i>Journal of Fluid Mechanics</i> , 2018 , 851,	3-7	5
68	Anomalous scaling exponents and coherent structures in high Re fluid turbulence. <i>Physics of Fluids</i> , 2000 , 12, 676-687	4-4	4
67	Flow organisation in laterally unconfined Rayleigh-B̄ard turbulence. <i>Journal of Fluid Mechanics</i> , 2021 , 906,	3-7	4
66	Controlling secondary flow in Taylor-Couette turbulence through spanwise-varying roughness. <i>Journal of Fluid Mechanics</i> , 2020 , 883,	3-7	4
65	Instabilities driven by diffusiophoretic flow on catalytic surfaces. <i>Journal of Fluid Mechanics</i> , 2021 , 919,	3-7	4
64	Two-layer thermally driven turbulence: mechanisms for interface breakup. <i>Journal of Fluid Mechanics</i> , 2021 , 913,	3-7	4
63	Constructive interference in a network of elastically-bounded flapping plates. <i>Journal of Fluids and Structures</i> , 2019 , 90, 334-353	3-1	3
62	Numerical simulations of nonlinear thermally stratified spin-up in a circular cylinder. <i>Physics of Fluids</i> , 2010 , 22, 116602	4-4	3
61	Boundary layer structure in confined turbulent thermal convection. <i>Journal of Fluid Mechanics</i> , 2012 , 706, 1-4	3-7	3
60	Life stages of wall-bounded decay of Taylor-Couette turbulence. <i>Physical Review Fluids</i> , 2017 , 2,	2-8	3
59	Do increased flow rates in displacement ventilation always lead to better results?. <i>Journal of Fluid Mechanics</i> , 2022 , 932,	3-7	3
58	Heart rate effects on the ventricular hemodynamics and mitral valve kinematics. <i>Computers and Fluids</i> , 2020 , 197, 104359	2-8	3
57	Non-monotonic transport mechanisms in vertical natural convection with dispersed light droplets. <i>Journal of Fluid Mechanics</i> , 2020 , 900,	3-7	3

56	Regime transitions in thermally driven high-Rayleigh number vertical convection. <i>Journal of Fluid Mechanics</i> , 2021 , 917,	3.7	3
55	Identifying coherent structures and vortex clusters in Taylor-Couette turbulence. <i>Journal of Physics: Conference Series</i> , 2016 , 708, 012006	0.3	3
54	The effect of Prandtl number on turbulent sheared thermal convection. <i>Journal of Fluid Mechanics</i> , 2021 , 910,	3.7	3
53	Heat transport enhancement in confined Rayleigh-B�ard convection feels the shape of the container (a). <i>Europhysics Letters</i> , 2021 , 135, 24004	1.6	3
52	Biomechanical properties and histomorphometric features of aortic tissue in patients with or without bicuspid aortic valve. <i>Journal of Thoracic Disease</i> , 2020 , 12, 2304-2316	2.6	2
51	Formation of columnar baroclinic vortices in thermally stratified nonlinear spin-up. <i>Journal of Fluid Mechanics</i> , 2012 , 702, 265-285	3.7	2
50	Unsteady Conjugate Heat Transfer Analysis of an Immersed Particle Innovative Heat Exchanger. <i>Journal of Thermal Science and Engineering Applications</i> , 2012 , 4,	1.9	2
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