

Eberhard Bodenschatz

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

219 papers	9,455 citations	50 h-index	90 g-index
238 ext. papers	10,783 ext. citations	6.3 avg, IF	6.26 L-index

#	Paper	IF	Citations
219	Recent Developments in Rayleigh-Bénard Convection. <i>Annual Review of Fluid Mechanics</i> , 2000 , 32, 709-778	22	674
218	Lagrangian Properties of Particles in Turbulence. <i>Annual Review of Fluid Mechanics</i> , 2009 , 41, 375-404	22	482
217	Fluid particle accelerations in fully developed turbulence. <i>Nature</i> , 2001 , 409, 1017-9	50.4	451
216	Measurement of particle accelerations in fully developed turbulence. <i>Journal of Fluid Mechanics</i> , 2002 , 469, 121-160	3.7	332
215	A quantitative study of three-dimensional Lagrangian particle tracking algorithms. <i>Experiments in Fluids</i> , 2006 , 40, 301-313	2.5	288
214	Spiral defect chaos in large aspect ratio Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 1993 , 71, 2026-2029	7.4	225
213	Low-energy control of electrical turbulence in the heart. <i>Nature</i> , 2011 , 475, 235-9	50.4	216
212	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , 2018 , 17, 89-96	27	211
211	Experimental Lagrangian acceleration probability density function measurement. <i>Physica D: Nonlinear Phenomena</i> , 2004 , 193, 245-251	3.3	179
210	Transition to the ultimate state of turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2012 , 108, 024502	7.4	166
209	The role of pair dispersion in turbulent flow. <i>Science</i> , 2006 , 311, 835-8	33.3	156
208	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13382-13392	16.4	155
207	Dictyostelium discoideum chemotaxis: threshold for directed motion. <i>European Journal of Cell Biology</i> , 2006 , 85, 981-9	6.1	155
206	Transitions between patterns in thermal convection. <i>Physical Review Letters</i> , 1991 , 67, 3078-3081	7.4	149
205	Cilia-based flow network in the brain ventricles. <i>Science</i> , 2016 , 353, 176-8	33.3	145
204	Lagrangian acceleration measurements at large Reynolds numbers. <i>Physics of Fluids</i> , 1998 , 10, 2268-2280	4.4	136
203	Universal intermittent properties of particle trajectories in highly turbulent flows. <i>Physical Review Letters</i> , 2008 , 100, 254504	7.4	123

202	Apparatus for the study of Rayleigh-Bénard convection in gases under pressure. <i>Review of Scientific Instruments</i> , 1996 , 67, 2043-2067	1.7	122
201	Termination of atrial fibrillation using pulsed low-energy far-field stimulation. <i>Circulation</i> , 2009 , 120, 467-76	16.7	113
200	Atmospheric science. Can we understand clouds without turbulence?. <i>Science</i> , 2010 , 327, 970-1	33.3	110
199	Spatiotemporal transition to conduction block in canine ventricle. <i>Circulation Research</i> , 2002 , 90, 289-96	15.7	110
198	Reducing Substrate Pinning of Block Copolymer Microdomains with a Buffer Layer of Polymer Brushes. <i>Macromolecules</i> , 2000 , 33, 857-865	5.5	102
197	Lagrangian measurements of inertial particle accelerations in grid generated wind tunnel turbulence. <i>Physical Review Letters</i> , 2006 , 97, 144507	7.4	100
196	Period-doubling instability and memory in cardiac tissue. <i>Physical Review Letters</i> , 2002 , 89, 138101	7.4	99
195	Limitations of accuracy in PIV due to individual variations of particle image intensities. <i>Experiments in Fluids</i> , 2009 , 47, 27-38	2.5	94
194	Motion of inertial particles with size larger than Kolmogorov scale in turbulent flows. <i>Physica D: Nonlinear Phenomena</i> , 2008 , 237, 2095-2100	3.3	90
193	Defect turbulence and generalized statistical mechanics. <i>Physica D: Nonlinear Phenomena</i> , 2004 , 193, 208-217	3.3	82
192	Logarithmic temperature profiles in turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2012 , 109, 114501	7.4	81
191	Structure and dynamics of dislocations in an anisotropic pattern-forming systems. <i>Physica D: Nonlinear Phenomena</i> , 1988 , 32, 135-145	3.3	78
190	Importance of Local Pattern Properties in Spiral Defect Chaos. <i>Physical Review Letters</i> , 1998 , 80, 3228-3231	7.4	77
189	Three-dimensional structure of the Lagrangian acceleration in turbulent flows. <i>Physical Review Letters</i> , 2004 , 93, 214501	7.4	76
188	Invited Lecture. New results on the electrohydrodynamic instability in nematics. <i>Liquid Crystals</i> , 1989 , 5, 699-715	2.3	73
187	Small-scale anisotropy in Lagrangian turbulence. <i>New Journal of Physics</i> , 2006 , 8, 102-102	2.9	72
186	Settling regimes of inertial particles in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2014 , 759,	3.7	70
185	An experimental study of turbulent relative dispersion models. <i>New Journal of Physics</i> , 2006 , 8, 109-109	2.9	69

184	Wave emission from heterogeneities opens a way to controlling chaos in the heart. <i>Physical Review Letters</i> , 2007 , 99, 208101	7.4	68
183	High order Lagrangian velocity statistics in turbulence. <i>Physical Review Letters</i> , 2006 , 96, 024503	7.4	67
182	Conditional and unconditional acceleration statistics in turbulence. <i>Physics of Fluids</i> , 2003 , 15, 3478-3489	4.4	67
181	Defect turbulence in inclined layer convection. <i>Physical Review Letters</i> , 2002 , 88, 034501	7.4	61
180	Lagrangian structure functions in turbulence: A quantitative comparison between experiment and direct numerical simulation. <i>Physics of Fluids</i> , 2008 , 20, 065103	4.4	60
179	The pirouette effect in turbulent flows. <i>Nature Physics</i> , 2011 , 7, 709-712	16.2	59
178	Alternating tip splitting in directional solidification. <i>Physical Review Letters</i> , 2001 , 86, 4604-7	7.4	58
177	Flight-crash events in turbulence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 7558-63	11.5	56
176	Transitions in heat transport by turbulent convection at Rayleigh numbers up to 1015. <i>New Journal of Physics</i> , 2009 , 11, 123001	2.9	56
175	Quantitative analysis of random ameboid motion. <i>Europhysics Letters</i> , 2010 , 90, 28005	1.6	53
174	Observation of the sling effect. <i>New Journal of Physics</i> , 2013 , 15, 083051	2.9	52
173	Flow photolysis for spatiotemporal stimulation of single cells. <i>Analytical Chemistry</i> , 2007 , 79, 3940-4	7.8	52
172	Dynamics and Selection of Giant Spirals in Rayleigh-Bénard Convection. <i>Physical Review Letters</i> , 1998 , 81, 5334-5337	7.4	51
171	Experiments on three systems with non-variational aspects. <i>Physica D: Nonlinear Phenomena</i> , 1992 , 61, 77-93	3.3	51
170	Heat transport by turbulent Rayleigh-Bénard convection for $Pr = 0.8$ and $3 \leq Ra \leq 1012$: aspect ratio $\Gamma = 0.50$. <i>New Journal of Physics</i> , 2012 , 14, 103012	2.9	50
169	Bistability and Competition of Spatiotemporal Chaotic and Fixed Point Attractors in Rayleigh-Bénard Convection. <i>Physical Review Letters</i> , 1997 , 79, 1853-1856	7.4	50
168	Time-reversal-symmetry breaking in turbulence. <i>Physical Review Letters</i> , 2014 , 113, 054501	7.4	48
167	Decay of turbulence at high reynolds numbers. <i>Physical Review Letters</i> , 2015 , 114, 034501	7.4	46

166	Search for the "ultimate state" in turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2009 , 103, 014503	7.4	46
165	Curvature of lagrangian trajectories in turbulence. <i>Physical Review Letters</i> , 2007 , 98, 050201	7.4	46
164	Pattern formation in inclined layer convection. <i>Physical Review Letters</i> , 2000 , 84, 5320-3	7.4	46
163	Caustics, multiply reconstructed by Talbot interference. <i>Journal of Modern Optics</i> , 1999 , 46, 349-365	1.1	46
162	Actin cytoskeleton of chemotactic amoebae operates close to the onset of oscillations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 3853-8	11.5	44
161	The spatio-temporal structure of spiral-defect chaos. <i>Physica D: Nonlinear Phenomena</i> , 1996 , 97, 164-179	3.3	44
160	Transient localized states in 2D binary liquid convection. <i>Physical Review Letters</i> , 1993 , 70, 3572-3575	7.4	44
159	A stochastic description of Dictyostelium chemotaxis. <i>PLoS ONE</i> , 2012 , 7, e37213	3.7	44
158	Heat transport by turbulent Rayleigh-Bénard convection for $Pr = 0.8$ and $4 \leq Ra \leq 1014$: ultimate-state transition for aspect ratio $\Gamma = 1.00$. <i>New Journal of Physics</i> , 2012 , 14, 063030	2.9	43
157	On the distribution of Lagrangian accelerations in turbulent flows. <i>New Journal of Physics</i> , 2005 , 7, 58-58	2.9	43
156	Bulk turbulence in dilute polymer solutions. <i>Journal of Fluid Mechanics</i> , 2009 , 629, 375-385	3.7	42
155	Dynamics of low anisotropy morphologies in directional solidification. <i>Physical Review E</i> , 2002 , 66, 051604	4.4	42
154	Conduction block in one-dimensional heart fibers. <i>Physical Review Letters</i> , 2002 , 89, 198101	7.4	40
153	Forced phase diffusion in a convection experiment. <i>Physical Review Letters</i> , 1987 , 59, 282-284	7.4	40
152	Extreme velocity gradients in turbulent flows. <i>New Journal of Physics</i> , 2019 , 21, 043004	2.9	39
151	Crosstalk of cardiomyocytes and fibroblasts in co-cultures. <i>Open Biology</i> , 2015 , 5, 150038	7	39
150	Logarithmic temperature profiles of turbulent Rayleigh-Bénard convection in the classical and ultimate state for a Prandtl number of 0.8. <i>Journal of Fluid Mechanics</i> , 2014 , 758, 436-467	3.7	39
149	Using cavitation to measure statistics of low-pressure events in large-Reynolds-number turbulence. <i>Physics of Fluids</i> , 2000 , 12, 1485-1496	4.4	38

148	Simultaneous 3D measurement of the translation and rotation of finite-size particles and the flow field in a fully developed turbulent water flow. <i>Measurement Science and Technology</i> , 2013 , 24, 024006	2	36
147	On Lagrangian single-particle statistics. <i>Physics of Fluids</i> , 2012 , 24, 055102	4.4	35
146	Where do small, weakly inertial particles go in a turbulent flow?. <i>Journal of Fluid Mechanics</i> , 2012 , 698, 160-167	3.7	35
145	Evolution of geometric structures in intense turbulence. <i>New Journal of Physics</i> , 2008 , 10, 013012	2.9	34
144	The Lagrangian exploration module: an apparatus for the study of statistically homogeneous and isotropic turbulence. <i>Review of Scientific Instruments</i> , 2010 , 81, 055112	1.7	33
143	A bistable mechanism for directional sensing. <i>New Journal of Physics</i> , 2008 , 10, 083015	2.9	33
142	Variable density turbulence tunnel facility. <i>Review of Scientific Instruments</i> , 2014 , 85, 093908	1.7	32
141	Extreme fluctuations of the relative velocities between droplets in turbulent airflow. <i>Physics of Fluids</i> , 2014 , 26, 111702	4.4	31
140	Phase-resolved analysis of the susceptibility of pinned spiral waves to far-field pacing in a two-dimensional model of excitable media. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 2221-36	3	31
139	A random synthetic jet array driven turbulence tank. <i>Experiments in Fluids</i> , 2004 , 37, 613-615	2.5	31
138	Chemotaxis in microfluidic devices--a study of flow effects. <i>Lab on A Chip</i> , 2008 , 8, 1087-96	7.2	30
137	Tectonic microplates in a wax model of sea-floor spreading. <i>New Journal of Physics</i> , 2005 , 7, 37-37	2.9	29
136	Tetrahedron deformation and alignment of perceived vorticity and strain in a turbulent flow. <i>Physics of Fluids</i> , 2013 , 25, 035101	4.4	28
135	Pattern forming system in the presence of different symmetry-breaking mechanisms. <i>Physical Review Letters</i> , 2008 , 101, 214503	7.4	28
134	Joint statistics of the Lagrangian acceleration and velocity in fully developed turbulence. <i>Physical Review Letters</i> , 2005 , 94, 024501	7.4	27
133	Fast propagation regions cause self-sustained reentry in excitable media. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 1281-1286	11.5	26
132	Scanning x-ray nanodiffraction on Dictyostelium discoideum. <i>Biophysical Journal</i> , 2014 , 107, 2662-73	2.9	26
131	Microfluidic tools for quantitative studies of eukaryotic chemotaxis. <i>European Journal of Cell Biology</i> , 2011 , 90, 811-6	6.1	26

130	Control parameter description of eukaryotic chemotaxis. <i>Physical Review Letters</i> , 2012 , 109, 108103	7.4	26
129	Double dendrite growth in solidification. <i>Physical Review E</i> , 2005 , 72, 011601	2.4	26
128	EUREC4A. <i>Earth System Science Data</i> , 2021 , 13, 4067-4119	10.5	26
127	On the swimming of Dictyostelium amoebae. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, E165-6	11.5	25
126	Experimental study of the influence of anisotropy on the inertial scales of turbulence. <i>Journal of Fluid Mechanics</i> , 2012 , 692, 464-481	3.7	25
125	Far field pacing supersedes anti-tachycardia pacing in a generic model of excitable media. <i>New Journal of Physics</i> , 2008 , 10, 103012	2.9	25
124	Acceleration correlations and pressure structure functions in high-reynolds number turbulence. <i>Physical Review Letters</i> , 2007 , 99, 204501	7.4	25
123	Turbulent Rayleigh-B�ard convection for a Prandtl number of 0.67. <i>Journal of Fluid Mechanics</i> , 2009 , 641, 157-167	3.7	24
122	Inertial effects on two-particle relative dispersion in turbulent flows. <i>Europhysics Letters</i> , 2010 , 90, 64005.6	5.6	23
121	Fluid acceleration in the bulk of turbulent dilute polymer solutions. <i>New Journal of Physics</i> , 2008 , 10, 123015	2.9	23
120	Rifts in spreading wax layers. <i>Physical Review Letters</i> , 1996 , 76, 3456-3459	7.4	23
119	High-resolution measurement of cloud microphysics and turbulence at a mountaintop station. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 3219-3228	4	22
118	Rapid switching of chemical signals in microfluidic devices. <i>Lab on A Chip</i> , 2009 , 9, 3059-65	7.2	22
117	Defects in Continuous Media. <i>Advanced Materials</i> , 1991 , 3, 191-197	2.4	22
116	An upper bound on one-to-one exposure to infectious human respiratory particles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	22
115	Boundary Zonal Flow in Rotating Turbulent Rayleigh-B�ard Convection. <i>Physical Review Letters</i> , 2020 , 124, 084505	7.4	21
114	Bulk temperature and heat transport in turbulent Rayleigh-B�ard convection of fluids with temperature-dependent properties. <i>Journal of Fluid Mechanics</i> , 2018 , 851, 374-390	3.7	21
113	Elastic energy flux by flexible polymers in fluid turbulence. <i>Physical Review Letters</i> , 2013 , 111, 024501	7.4	21

112	On integral length scales in anisotropic turbulence. <i>Physics of Fluids</i> , 2012 , 24, 061702	4.4	21
111	Pattern formation in spatially forced thermal convection. <i>New Journal of Physics</i> , 2012 , 14, 053010	2.9	21
110	Multifractal dimension of Lagrangian turbulence. <i>Physical Review Letters</i> , 2006 , 96, 114503	7.4	21
109	Logarithmic spatial variations and universal f-1 power spectra of temperature fluctuations in turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2014 , 112, 174501	7.4	20
108	Convective instability and boundary driven oscillations in a reaction-diffusion-advection model. <i>Chaos</i> , 2017 , 27, 103110	3.3	20
107	A silicon strip detector system for high resolution particle tracking in turbulence. <i>Review of Scientific Instruments</i> , 2001 , 72, 4348-4353	1.7	20
106	Modeling self-organized spatio-temporal patterns of PI3K and PTEN during spontaneous cell polarization. <i>Physical Biology</i> , 2014 , 11, 046002	3	19
105	Statistics of defect motion in spatiotemporal chaos in inclined layer convection. <i>Chaos</i> , 2003 , 13, 55-63	3.3	19
104	Reynolds numbers and the elliptic approximation near the ultimate state of turbulent Rayleigh-Bénard convection. <i>New Journal of Physics</i> , 2015 , 17, 063028	2.9	18
103	Spontaneous concentrations of solids through two-way drag forces between gas and sedimenting particles. <i>Astronomy and Astrophysics</i> , 2016 , 591, A133	5.1	18
102	Azimuthal diffusion of the large-scale-circulation plane, and absence of significant non-Boussinesq effects, in turbulent convection near the ultimate-state transition. <i>Journal of Fluid Mechanics</i> , 2016 , 791,	3.7	18
101	Experimental Study of the Bottleneck in Fully Developed Turbulence. <i>Journal of Statistical Physics</i> , 2019 , 175, 617-639	1.5	17
100	Single-Particle Motion and Vortex Stretching in Three-Dimensional Turbulent Flows. <i>Physical Review Letters</i> , 2016 , 116, 124502	7.4	17
99	Competition and bistability of ordered undulations and undulation chaos in inclined layer convection. <i>Journal of Fluid Mechanics</i> , 2008 , 597, 261-282	3.7	17
98	Dissipative Effects on Inertial-Range Statistics at High Reynolds Numbers. <i>Physical Review Letters</i> , 2017 , 119, 134502	7.4	16
97	Cell substratum adhesion during early development of Dictyostelium discoideum. <i>PLoS ONE</i> , 2014 , 9, e106574	3.7	16
96	Prandtl and the Göttingen school		16
95	Turbulence attenuation by large neutrally buoyant particles. <i>Physics of Fluids</i> , 2015 , 27, 061702	4.4	15

94	Comment on "Effect of boundary layers asymmetry on heat transfer efficiency in turbulent Rayleigh-BBard convection at very high Rayleigh numbers". <i>Physical Review Letters</i> , 2013 , 110, 199401	7.4	15
93	Signatures of non-universal large scales in conditional structure functions from various turbulent flows. <i>New Journal of Physics</i> , 2011 , 13, 113020	2.9	15
92	Vortex stretching and enstrophy production in high Reynolds number turbulence. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	15
91	Schneefernerhaus as a mountain research station for clouds and turbulence. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 3209-3218	4	14
90	Self-organization of topological defects due to applied constraints. <i>Physical Review Letters</i> , 2008 , 101, 254102	7.4	14
89	Stretching of polymers in isotropic turbulence: a statistical closure. <i>Physical Review Letters</i> , 2007 , 98, 024503	7.4	14
88	Statistics of defect trajectories in spatio-temporal chaos in inclined layer convection and the complex Ginzburg-Landau equation. <i>Chaos</i> , 2004 , 14, 864-74	3.3	14
87	Investigation of the small-scale statistics of turbulence in the Modane S1MA wind tunnel. <i>CEAS Aeronautical Journal</i> , 2018 , 9, 269-281	1.3	13
86	Selection of spiral waves in excitable media with a phase wave at the wave back. <i>Physical Review Letters</i> , 2011 , 107, 254101	7.4	13
85	Lagrangian view of time irreversibility of fluid turbulence. <i>Science China: Physics, Mechanics and Astronomy</i> , 2016 , 59, 1	3.6	12
84	Resonance patterns in spatially forced Rayleigh-BBard convection. <i>Journal of Fluid Mechanics</i> , 2014 , 756, 293-308	3.7	12
83	Transitions in heat transport by turbulent convection at Rayleigh numbers up to 1015. <i>New Journal of Physics</i> , 2011 , 13, 049401	2.9	12
82	Astrophysical jets: insights into long-term hydrodynamics. <i>New Journal of Physics</i> , 2011 , 13, 043011	2.9	12
81	Using microfluidic channel networks to generate gradients for studying cell migration. <i>Methods in Molecular Biology</i> , 2005 , 294, 347-57	1.4	11
80	Localized transverse bursts in inclined layer convection. <i>Physical Review Letters</i> , 2003 , 91, 114501	7.4	11
79	Spatio-temporal patterns in inclined layer convection. <i>Journal of Fluid Mechanics</i> , 2016 , 794, 719-745	3.7	11
78	Redistribution of Kinetic Energy in Turbulent Flows. <i>Physical Review X</i> , 2014 , 4,	9.1	10
77	Chemotaxis of Dictyostelium discoideum: collective oscillation of cellular contacts. <i>PLoS ONE</i> , 2013 , 8, e54172	3.7	10

76	Caustics, multiply reconstructed by Talbot interference		10
75	Self-attenuation of extreme events in Navier-Stokes turbulence. <i>Nature Communications</i> , 2020 , 11, 585217.4	17.4	10
74	Control of long-range correlations in turbulence. <i>Experiments in Fluids</i> , 2019 , 60, 1	2.5	9
73	Generation of Lagrangian intermittency in turbulence by a self-similar mechanism. <i>New Journal of Physics</i> , 2013 , 15, 055015	2.9	9
72	Stabilized wave segments in an excitable medium with a phase wave at the wave back. <i>New Journal of Physics</i> , 2014 , 16, 043030	2.9	9
71	Flow-driven waves and phase-locked self-organization in quasi-one-dimensional colonies of <i>Dictyostelium discoideum</i> . <i>Physical Review Letters</i> , 2015 , 114, 018103	7.4	8
70	Flow-driven instabilities during pattern formation of <i>Dictyostelium discoideum</i> . <i>New Journal of Physics</i> , 2015 , 17, 063007	2.9	8
69	Shape oscillations of <i>Dictyostelium discoideum</i> cells on ultramicroelectrodes monitored by impedance analysis. <i>Small</i> , 2011 , 7, 723-6	11	8
68	Conductive heat flux in measurements of the Nusselt number in turbulent Rayleigh-B�ard convection. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	8
67	Ultimate-state transition of turbulent Rayleigh-B�ard convection. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	8
66	Cilia-driven flows in the brain third ventricle. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020 , 375, 20190154	5.8	8
65	Rotating turbulent thermal convection at very large Rayleigh numbers. <i>Journal of Fluid Mechanics</i> , 2021 , 912,	3.7	8
64	Bias in particle tracking acceleration measurement. <i>Experiments in Fluids</i> , 2018 , 59, 1	2.5	8
63	Can Hail and Rain Nucleate Cloud Droplets?. <i>Physical Review Letters</i> , 2017 , 119, 128701	7.4	7
62	One-Step Generation of Core-Shell Microcapsules for Stimuli-Responsive Biomolecular Sensing. <i>Advanced Functional Materials</i> , 2020 , 30, 2006019	15.6	7
61	Risk assessment for airborne disease transmission by poly-pathogen aerosols. <i>PLoS ONE</i> , 2021 , 16, e0248904	9.04	7
60	Observation of aerodynamic instability in the flow of a particle stream in a dilute gas. <i>Astronomy and Astrophysics</i> , 2019 , 622, A151	5.1	6
59	Continuous transition between two limits of spiral wave dynamics in an excitable medium. <i>Physical Review Letters</i> , 2014 , 112, 054101	7.4	6

58	Heat transport in turbulent Rayleigh-Bénard convection for $Pr \approx 0.8$ and $Ra \approx 1015$. <i>Journal of Physics: Conference Series</i> , 2011 , 318, 082001	0.3	6
57	Live cell flattening - traditional and novel approaches. <i>PMC Biophysics</i> , 2010 , 3, 9		6
56	Noisy Oscillations in the Actin Cytoskeleton of Chemotactic Amoeba. <i>Physical Review Letters</i> , 2016 , 117, 148102	7.4	6
55	Geometrical factors in propagation block and spiral wave initiation. <i>Chaos</i> , 2017 , 27, 093923	3.3	5
54	Turbulence-induced cloud voids: observation and interpretation. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 4991-5003	6.8	5
53	Wave Propagation in Inhomogeneous Excitable Media. <i>Annual Review of Condensed Matter Physics</i> , 2018 , 9, 435-461	19.7	5
52	Flow-driven two-dimensional waves in colonies of Dictyostelium discoideum. <i>New Journal of Physics</i> , 2015 , 17, 093040	2.9	5
51	Stationary propagation of a wave segment along an inhomogeneous excitable stripe. <i>New Journal of Physics</i> , 2014 , 16, 033012	2.9	5
50	Dislocation dynamics in Rayleigh-Bénard convection. <i>Chaos</i> , 2004 , 14, 933-9	3.3	5
49	Direct assessment of Kolmogorov's first refined similarity hypothesis. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	5
48	Influence of fast advective flows on pattern formation of Dictyostelium discoideum. <i>PLoS ONE</i> , 2018 , 13, e0194859	3.7	5
47	Variability and Order in Cytoskeletal Dynamics of Motile Amoeboid Cells. <i>Physical Review Letters</i> , 2017 , 119, 148101	7.4	4
46	ATMOSPHERIC SCIENCE. Clouds resolved. <i>Science</i> , 2015 , 350, 40-1	33.3	4
45	High Supersaturation in the Wake of Falling Hydrometeors: Implications for Cloud Invigoration and Ice Nucleation. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL088055	4.9	4
44	The inter-scale energy budget in a von Kármán mixing flow. <i>Journal of Fluid Mechanics</i> , 2020 , 895,	3.7	4
43	He et al. Reply. <i>Physical Review Letters</i> , 2020 , 124, 229402	7.4	4
42	Hydrodynamics of hypersonic jets: experiments and numerical simulations. <i>Astrophysics and Space Science</i> , 2011 , 336, 9-14	1.6	4
41	Plasmonic and Semiconductor Nanoparticles Interfere with Stereolithographic 3D Printing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 50834-50843	9.5	4

40	Aspect ratio dependence of the ultimate-state transition in turbulent thermal convection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 30022-30023	11.5	4
39	Two-particle dispersion in weakly turbulent thermal convection. <i>New Journal of Physics</i> , 2016 , 18, 065007	7.9	4
38	A model for universal spatial variations of temperature fluctuations in turbulent Rayleigh-Bénard convection. <i>Theoretical and Applied Mechanics Letters</i> , 2021 , 11, 100237	1.8	4
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