

Eberhard Bodenschatz

List of Publications by Year in Descending Order

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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	Generation of intense dissipation in high Reynolds number turbulence.. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022 , 380, 20210088	3	1
218	Universal scaling of temperature variance in Rayleigh-B�ard convection near the transition to the ultimate state. <i>Journal of Fluid Mechanics</i> , 2022 , 931,	3.7	3
217	Aspect Ratio Dependence of Heat Transfer in a Cylindrical Rayleigh-B�ard Cell.. <i>Physical Review Letters</i> , 2022 , 128, 084501	7.4	2
216	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
215	Pulsed low-energy stimulation initiates electric turbulence in cardiac tissue. <i>PLoS Computational Biology</i> , 2021 , 17, e1009476	5	0
214	Light-Powered Reactivation of Flagella and Contraction of Microtubule Networks: Toward Building an Artificial Cell. <i>ACS Synthetic Biology</i> , 2021 , 10, 1490-1504	5.7	2
213	Fabrication of freestanding Pt nanowires for use as thermal anemometry probes in turbulence measurements. <i>Microsystems and Nanoengineering</i> , 2021 , 7, 28	7.7	1
212	Risk assessment for airborne disease transmission by poly-pathogen aerosols. <i>PLoS ONE</i> , 2021 , 16, e0248004	3.9	7
211	Electrophysiological Characterization of Human Atria: The Understated Role of Temperature. <i>Frontiers in Physiology</i> , 2021 , 12, 639149	4.6	1
210	A model for universal spatial variations of temperature fluctuations in turbulent Rayleigh-B�ard convection. <i>Theoretical and Applied Mechanics Letters</i> , 2021 , 11, 100237	1.8	4
209	Rotating turbulent thermal convection at very large Rayleigh numbers. <i>Journal of Fluid Mechanics</i> , 2021 , 912,	3.7	8
208	EUREC<sup>4</sup>A. <i>Earth System Science Data</i> , 2021 , 13, 4067-4119	10.5	26
207	In situ cloud particle tracking experiment.. <i>Review of Scientific Instruments</i> , 2021 , 92, 125105	1.7	0
206	Population Distribution in the Wake of a Sphere. <i>Symmetry</i> , 2020 , 12, 1498	2.7	2
205	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
204	The inter-scale energy budget in a von K�rm� mixing flow. <i>Journal of Fluid Mechanics</i> , 2020 , 895,	3.7	4
203	He et'al. Reply. <i>Physical Review Letters</i> , 2020 , 124, 229402	7.4	4

202	Structure Tensors for Dispersed Fibers in Soft Materials. <i>Physical Review Applied</i> , 2020 , 13,	4.3	2
201	Boundary Zonal Flow in Rotating Turbulent Rayleigh-B�ard Convection. <i>Physical Review Letters</i> , 2020 , 124, 084505	7.4	21
200	Vortex stretching and enstrophy production in high Reynolds number turbulence. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	15
199	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
198	Supersaturation in the Wake of a Precipitating Hydrometeor and Its Impact on Aerosol Activation. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL091179	4.9	0
197	Self-attenuation of extreme events in Navier-Stokes turbulence. <i>Nature Communications</i> , 2020 , 11, 585217.4	17.4	10
196	Plasmonic and Semiconductor Nanoparticles Interfere with Stereolithographic 3D Printing. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 50834-50843	9.5	4
195	Cellular velocity, electrical persistence and sensing in developed and vegetative cells during electrotaxis. <i>PLoS ONE</i> , 2020 , 15, e0239379	3.7	3
194	One-Step Generation of Core-Shell Microcapsules for Stimuli-Responsive Biomolecular Sensing. <i>Advanced Functional Materials</i> , 2020 , 30, 2006019	15.6	7
193	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
192	Turbulence-induced cloud voids: observation and interpretation. <i>Atmospheric Chemistry and Physics</i> , 2019 , 19, 4991-5003	6.8	5
191	Experimental Study of the Bottleneck in Fully Developed Turbulence. <i>Journal of Statistical Physics</i> , 2019 , 175, 617-639	1.5	17
190	Extreme velocity gradients in turbulent flows. <i>New Journal of Physics</i> , 2019 , 21, 043004	2.9	39
189	Control of long-range correlations in turbulence. <i>Experiments in Fluids</i> , 2019 , 60, 1	2.5	9
188	Leidenfrost Pattern Formation and Boiling. <i>Journal of Statistical Physics</i> , 2019 , 175, 598-616	1.5	1
187	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
186	Direct assessment of Kolmogorov's first refined similarity hypothesis. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	5
185	Measuring vorticity vector from the spinning of micro-sized mirror-encapsulated spherical particles in the flow. <i>Review of Scientific Instruments</i> , 2019 , 90, 115111	1.7	2

184	Interplay between myosin II and actin dynamics in chemotactic amoeba. <i>New Journal of Physics</i> , 2019 , 21, 113055	2.9	0
183	Wave Propagation in Inhomogeneous Excitable Media. <i>Annual Review of Condensed Matter Physics</i> , 2018 , 9, 435-461	19.7	5
182	Periodic sequence of stabilized wave segments in an excitable medium. <i>Physical Review E</i> , 2018 , 97, 030201	20.1	2
181	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
180	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. <i>Nature Materials</i> , 2018 , 17, 89-96	27	211
179	Initiation of Rotors by Fast Propagation Regions in Excitable Media: A Theoretical Study. <i>Frontiers in Physics</i> , 2018 , 6,	3.9	3
178	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
177	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13382-13392	16.4	155
176	Influence of fast advective flows on pattern formation of Dictyostelium discoideum. <i>PLoS ONE</i> , 2018 , 13, e0194859	3.7	5
175	Bias in particle tracking acceleration measurement. <i>Experiments in Fluids</i> , 2018 , 59, 1	2.5	8
174	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
173	Dissipative Effects on Inertial-Range Statistics at High Reynolds Numbers. <i>Physical Review Letters</i> , 2017 , 119, 134502	7.4	16
172	Variability and Order in Cytoskeletal Dynamics of Motile Amoeboid Cells. <i>Physical Review Letters</i> , 2017 , 119, 148101	7.4	4
171	Geometrical factors in propagation block and spiral wave initiation. <i>Chaos</i> , 2017 , 27, 093923	3.3	5
170	Can Hail and Rain Nucleate Cloud Droplets?. <i>Physical Review Letters</i> , 2017 , 119, 128701	7.4	7
169	Effects of developmental variability on the dynamics and self-organization of cell populations. <i>New Journal of Physics</i> , 2017 , 19, 113024	2.9	1
168	Convective instability and boundary driven oscillations in a reaction-diffusion-advection model. <i>Chaos</i> , 2017 , 27, 103110	3.3	20
167	Ultimate-state transition of turbulent Rayleigh-B�ard convection. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	8

166	Single-Particle Motion and Vortex Stretching in Three-Dimensional Turbulent Flows. <i>Physical Review Letters</i> , 2016 , 116, 124502	7.4	17
165	Lagrangian view of time irreversibility of fluid turbulence. <i>Science China: Physics, Mechanics and Astronomy</i> , 2016 , 59, 1	3.6	12
164	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
163	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
162	Cilia-based flow network in the brain ventricles. <i>Science</i> , 2016 , 353, 176-8	33.3	145
161	Two-particle dispersion in weakly turbulent thermal convection. <i>New Journal of Physics</i> , 2016 , 18, 065007.9	2.9	4
160	Spatio-temporal patterns in inclined layer convection. <i>Journal of Fluid Mechanics</i> , 2016 , 794, 719-745	3.7	11
159	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
158	Noisy Oscillations in the Actin Cytoskeleton of Chemotactic Amoeba. <i>Physical Review Letters</i> , 2016 , 117, 148102	7.4	6
157	Flow-driven waves and phase-locked self-organization in quasi-one-dimensional colonies of Dictyostelium discoideum. <i>Physical Review Letters</i> , 2015 , 114, 018103	7.4	8
156	Schneefernerhaus as a mountain research station for clouds and turbulence [Part 2: Cloud microphysics and fine-scale turbulence 2015 ,		1
155	Turbulence attenuation by large neutrally buoyant particles. <i>Physics of Fluids</i> , 2015 , 27, 061702	4.4	15
154	Reynolds numbers and the elliptic approximation near the ultimate state of turbulent Rayleigh-B�ard convection. <i>New Journal of Physics</i> , 2015 , 17, 063028	2.9	18
153	ATMOSPHERIC SCIENCE. Clouds resolved. <i>Science</i> , 2015 , 350, 40-1	33.3	4
152	Flow-driven instabilities during pattern formation of Dictyostelium discoideum. <i>New Journal of Physics</i> , 2015 , 17, 063007	2.9	8
151	Crosstalk of cardiomyocytes and fibroblasts in co-cultures. <i>Open Biology</i> , 2015 , 5, 150038	7	39
150	Unusual spiral wave dynamics in the Kessler-Levine model of an excitable medium. <i>Chaos</i> , 2015 , 25, 053115	3.5	2
149	Flow-driven two-dimensional waves in colonies of Dictyostelium discoideum. <i>New Journal of Physics</i> , 2015 , 17, 093040	2.9	5

148	High-resolution measurement of cloud microphysics and turbulence at a mountaintop station. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 3219-3228	4	22
147	Schneefernerhaus as a mountain research station for clouds and turbulence. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 3209-3218	4	14
146	Decay of turbulence at high reynolds numbers. <i>Physical Review Letters</i> , 2015 , 114, 034501	7.4	46
145	Continuous transition between two limits of spiral wave dynamics in an excitable medium. <i>Physical Review Letters</i> , 2014 , 112, 054101	7.4	6
144	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
143	Time-reversal-symmetry breaking in turbulence. <i>Physical Review Letters</i> , 2014 , 113, 054501	7.4	48
142	Logarithmic spatial variations and universal f-1 power spectra of temperature fluctuations in turbulent Rayleigh-B�ard convection. <i>Physical Review Letters</i> , 2014 , 112, 174501	7.4	20
141	Cell substratum adhesion during early development of Dictyostelium discoideum. <i>PLoS ONE</i> , 2014 , 9, e106574	3.7	16
140	Modeling self-organized spatio-temporal patterns of PIP� and PTEN during spontaneous cell polarization. <i>Physical Biology</i> , 2014 , 11, 046002	3	19
139	Stationary propagation of a wave segment along an inhomogeneous excitable stripe. <i>New Journal of Physics</i> , 2014 , 16, 033012	2.9	5
138	Scanning x-ray nanodiffraction on Dictyostelium discoideum. <i>Biophysical Journal</i> , 2014 , 107, 2662-73	2.9	26
137	Extreme fluctuations of the relative velocities between droplets in turbulent airflow. <i>Physics of Fluids</i> , 2014 , 26, 111702	4.4	31
136	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
135	Redistribution of Kinetic Energy in Turbulent Flows. <i>Physical Review X</i> , 2014 , 4,	9.1	10
134	Variable density turbulence tunnel facility. <i>Review of Scientific Instruments</i> , 2014 , 85, 093908	1.7	32
133	Resonance patterns in spatially forced Rayleigh-B�ard convection. <i>Journal of Fluid Mechanics</i> , 2014 , 756, 293-308	3.7	12
132	Logarithmic temperature profiles of turbulent Rayleigh-B�ard 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
131	Settling regimes of inertial particles in isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2014 , 759,	3.7	70

130	Effects of Polymer Additive on Turbulent Bulk Flow: The Polymer Concentration Dependence. <i>Lecture Notes in Mechanical Engineering</i> , 2014 , 57-62	0.4	1
129	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
128	Generation of Lagrangian intermittency in turbulence by a self-similar mechanism. <i>New Journal of Physics</i> , 2013 , 15, 055015	2.9	9
127	Observation of the sling effect. <i>New Journal of Physics</i> , 2013 , 15, 083051	2.9	52
126	Collective behavior of Dictyostelium discoideum monitored by impedance analysis. <i>Communicative and Integrative Biology</i> , 2013 , 6, e23894	1.7	
125	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
124	Publisher's Note: Elastic Energy Flux by Flexible Polymers in Fluid Turbulence [Phys. Rev. Lett. 111, 024501 (2013)]. <i>Physical Review Letters</i> , 2013 , 111,	7.4	2
123	Tetrahedron deformation and alignment of perceived vorticity and strain in a turbulent flow. <i>Physics of Fluids</i> , 2013 , 25, 035101	4.4	28
122	Elastic energy flux by flexible polymers in fluid turbulence. <i>Physical Review Letters</i> , 2013 , 111, 024501	7.4	21
121	Comment on "Effect of boundary layers asymmetry on heat transfer efficiency in turbulent Rayleigh-Bénard convection at very high Rayleigh numbers". <i>Physical Review Letters</i> , 2013 , 110, 199401	7.4	15
120	Chemotaxis of Dictyostelium discoideum: collective oscillation of cellular contacts. <i>PLoS ONE</i> , 2013 , 8, e54172	3.7	10
119	Logarithmic temperature profiles in turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2012 , 109, 114501	7.4	81
118	On Lagrangian single-particle statistics. <i>Physics of Fluids</i> , 2012 , 24, 055102	4.4	35
117	Where do small, weakly inertial particles go in a turbulent flow?. <i>Journal of Fluid Mechanics</i> , 2012 , 698, 160-167	3.7	35
116	Transition to the ultimate state of turbulent Rayleigh-Bénard convection. <i>Physical Review Letters</i> , 2012 , 108, 024502	7.4	166
115	Heat transport by turbulent Rayleigh-Bénard convection for $Pr = 0.8$ and $3 \leq Ra \leq 1015$: aspect ratio $\Gamma = 0.50$. <i>New Journal of Physics</i> , 2012 , 14, 103012	2.9	50
114	On integral length scales in anisotropic turbulence. <i>Physics of Fluids</i> , 2012 , 24, 061702	4.4	21
113	Pattern formation in spatially forced thermal convection. <i>New Journal of Physics</i> , 2012 , 14, 053010	2.9	21

112	Heat transport by turbulent Rayleigh-Bénard convection for $Pr \approx 0.8$ and $4 \times 10^{11} \leq Ra \leq 2 \times 10^{14}$: ultimate-state transition for aspect ratio $\Gamma \approx 1.00$. <i>New Journal of Physics</i> , 2012 , 14, 063030	2.9	43
111	Control parameter description of eukaryotic chemotaxis. <i>Physical Review Letters</i> , 2012 , 109, 108103	7.4	26
110	An investigation of the hydrodynamics of hypersonic jets in astrophysical conditions. <i>EAS Publications Series</i> , 2012 , 58, 137-141	0.2	
109	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
108	A stochastic description of Dictyostelium chemotaxis. <i>PLoS ONE</i> , 2012 , 7, e37213	3.7	44
107	Low-energy control of electrical turbulence in the heart. <i>Nature</i> , 2011 , 475, 235-9	50.4	216
106	The pirouette effect in turbulent flows. <i>Nature Physics</i> , 2011 , 7, 709-712	16.2	59
105	Heat transport in turbulent Rayleigh-Bénard convection for $Pr \approx 0.8$ and $Ra \approx 10^{15}$. <i>Journal of Physics: Conference Series</i> , 2011 , 318, 082001	0.3	6
104	Microfluidic tools for quantitative studies of eukaryotic chemotaxis. <i>European Journal of Cell Biology</i> , 2011 , 90, 811-6	6.1	26
103	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
102	Path Lengths in Turbulence. <i>Journal of Statistical Physics</i> , 2011 , 145, 93-101	1.5	1
101	Hydrodynamics of hypersonic jets: experiments and numerical simulations. <i>Astrophysics and Space Science</i> , 2011 , 336, 9-14	1.6	4
100	Shape oscillations of Dictyostelium discoideum cells on ultramicroelectrodes monitored by impedance analysis. <i>Small</i> , 2011 , 7, 723-6	11	8
99	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
98	Astrophysical jets: insights into long-term hydrodynamics. <i>New Journal of Physics</i> , 2011 , 13, 043011	2.9	12
97	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
96	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
95	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

94	Inertial effects on two-particle relative dispersion in turbulent flows. <i>Europhysics Letters</i> , 2010 , 90, 64005.6	23
93	Quantitative analysis of random ameboid motion. <i>Europhysics Letters</i> , 2010 , 90, 28005	1.6 53
92	Atmospheric science. Can we understand clouds without turbulence?. <i>Science</i> , 2010 , 327, 970-1	33.3 110
91	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
90	Live cell flattening - traditional and novel approaches. <i>PMC Biophysics</i> , 2010 , 3, 9	6
89	Measurement of Particle Accelerations with the Laser Doppler Technique. <i>Notes on Numerical Fluid Mechanics and Multidisciplinary Design</i> , 2010 , 271-278	0.3 1
88	Superlattice patterns in forced thermal convection. <i>Chaos</i> , 2009 , 19, 041102	3.3 1
87	Search for the "ultimate state" in turbulent Rayleigh-B�ard convection. <i>Physical Review Letters</i> , 2009 , 103, 014503	7.4 46
86	Termination of atrial fibrillation using pulsed low-energy far-field stimulation. <i>Circulation</i> , 2009 , 120, 467-76	16.7 113
85	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
84	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
83	Lagrangian Properties of Particles in Turbulence. <i>Annual Review of Fluid Mechanics</i> , 2009 , 41, 375-404	22 482
82	Bulk turbulence in dilute polymer solutions. <i>Journal of Fluid Mechanics</i> , 2009 , 629, 375-385	3.7 42
81	Rapid switching of chemical signals in microfluidic devices. <i>Lab on A Chip</i> , 2009 , 9, 3059-65	7.2 22
80	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
79	Chemotaxis in microfluidic devices--a study of flow effects. <i>Lab on A Chip</i> , 2008 , 8, 1087-96	7.2 30
78	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
77	Evolution of geometric structures in intense turbulence. <i>New Journal of Physics</i> , 2008 , 10, 013012	2.9 34

76	Fluid acceleration in the bulk of turbulent dilute polymer solutions. <i>New Journal of Physics</i> , 2008 , 10, 123015	2.9	23
75	A bistable mechanism for directional sensing. <i>New Journal of Physics</i> , 2008 , 10, 083015	2.9	33
74	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
73	Universal intermittent properties of particle trajectories in highly turbulent flows. <i>Physical Review Letters</i> , 2008 , 100, 254504	7.4	123
72	Pattern forming system in the presence of different symmetry-breaking mechanisms. <i>Physical Review Letters</i> , 2008 , 101, 214503	7.4	28
71	Self-organization of topological defects due to applied constraints. <i>Physical Review Letters</i> , 2008 , 101, 254102	7.4	14
70	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
69	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
68	Flow photolysis for spatiotemporal stimulation of single cells. <i>Analytical Chemistry</i> , 2007 , 79, 3940-4	7.8	52
67	Curvature of lagrangian trajectories in turbulence. <i>Physical Review Letters</i> , 2007 , 98, 050201	7.4	46
66	Wave emission from heterogeneities opens a way to controlling chaos in the heart. <i>Physical Review Letters</i> , 2007 , 99, 208101	7.4	68
65	Stretching of polymers in isotropic turbulence: a statistical closure. <i>Physical Review Letters</i> , 2007 , 98, 024503	7.4	14
64	Acceleration correlations and pressure structure functions in high-reynolds number turbulence. <i>Physical Review Letters</i> , 2007 , 99, 204501	7.4	25
63	Lagrangian particle tracking in high Reynolds number turbulence 2007 , 299-311		
62	Measurements of Turbulent Flows 2007 , 745-855		1
61	Experimental Measurements of Lagrangian Statistics in Intense Turbulence 2007 , 1-10		1
60	Dictyostelium discoideum chemotaxis: threshold for directed motion. <i>European Journal of Cell Biology</i> , 2006 , 85, 981-9	6.1	155
59	Small-scale anisotropy in Lagrangian turbulence. <i>New Journal of Physics</i> , 2006 , 8, 102-102	2.9	72

58	High order Lagrangian velocity statistics in turbulence. <i>Physical Review Letters</i> , 2006 , 96, 024503	7.4	67
57	Lagrangian measurements of inertial particle accelerations in grid generated wind tunnel turbulence. <i>Physical Review Letters</i> , 2006 , 97, 144507	7.4	100
56	Multifractal dimension of Lagrangian turbulence. <i>Physical Review Letters</i> , 2006 , 96, 114503	7.4	21
55	The role of pair dispersion in turbulent flow. <i>Science</i> , 2006 , 311, 835-8	33.3	156
54	An experimental study of turbulent relative dispersion models. <i>New Journal of Physics</i> , 2006 , 8, 109-109	2.9	69
53	A quantitative study of three-dimensional Lagrangian particle tracking algorithms. <i>Experiments in Fluids</i> , 2006 , 40, 301-313	2.5	288
52	Double dendrite growth in solidification. <i>Physical Review E</i> , 2005 , 72, 011601	2.4	26
51	Using microfluidic channel networks to generate gradients for studying cell migration. <i>Methods in Molecular Biology</i> , 2005 , 294, 347-57	1.4	11
50	Experimental apparatus and sample preparation techniques for directional solidification. <i>Review of Scientific Instruments</i> , 2005 , 76, 013906	1.7	2
49	On the distribution of Lagrangian accelerations in turbulent flows. <i>New Journal of Physics</i> , 2005 , 7, 58-58	2.9	43
48	Tectonic microplates in a wax model of sea-floor spreading. <i>New Journal of Physics</i> , 2005 , 7, 37-37	2.9	29
47	Joint statistics of the Lagrangian acceleration and velocity in fully developed turbulence. <i>Physical Review Letters</i> , 2005 , 94, 024501	7.4	27
46	Three-dimensional structure of the Lagrangian acceleration in turbulent flows. <i>Physical Review Letters</i> , 2004 , 93, 214501	7.4	76
45	Dislocation dynamics in Rayleigh-Bénard convection. <i>Chaos</i> , 2004 , 14, 933-9	3.3	5
44	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
43	Experimental Lagrangian acceleration probability density function measurement. <i>Physica D: Nonlinear Phenomena</i> , 2004 , 193, 245-251	3.3	179
42	A random synthetic jet array driven turbulence tank. <i>Experiments in Fluids</i> , 2004 , 37, 613-615	2.5	31
41	Defect turbulence and generalized statistical mechanics. <i>Physica D: Nonlinear Phenomena</i> , 2004 , 193, 208-217	3.3	82

40	EXPERIMENTS WITH DICTYOSTELIUM DISCOIDEUM AMOEBAE IN DIFFERENT GEOMETRIES. <i>World Scientific Series on Nonlinear Science, Series B</i> , 2004 , 373-385	0.3	
39	Conditional and unconditional acceleration statistics in turbulence. <i>Physics of Fluids</i> , 2003 , 15, 3478-3489	4.4	67
38	Statistics of defect motion in spatiotemporal chaos in inclined layer convection. <i>Chaos</i> , 2003 , 13, 55-63	3.3	19
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6	Exhaled particles from nanometre to millimetre and their origin in the human respiratory tract		2
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