Bruno Eckhardt

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9120426/publications.pdf

Version: 2024-02-01

227 papers	9,778 citations	38660 50 h-index	43802 91 g-index
229 all docs	229 docs citations	229 times ranked	4280 citing authors

#	Article	IF	Citations
1	Crowd synchrony on the Millennium Bridge. Nature, 2005, 438, 43-44.	13.7	474
2	Turbulence Transition in Pipe Flow. Annual Review of Fluid Mechanics, 2007, 39, 447-468.	10.8	448
3	Experimental Observation of Nonlinear Traveling Waves in Turbulent Pipe Flow. Science, 2004, 305, 1594-1598.	6.0	386
4	Quantum mechanics of classically non-integrable systems. Physics Reports, 1988, 163, 205-297.	10.3	351
5	Traveling Waves in Pipe Flow. Physical Review Letters, 2003, 91, 224502.	2.9	336
6	Periodic-orbit quantization of chaotic systems. Physical Review Letters, 1989, 63, 823-826.	2.9	324
7	Finite lifetime of turbulence in shear flows. Nature, 2006, 443, 59-62.	13.7	248
8	Edge of Chaos in a Parallel Shear Flow. Physical Review Letters, 2006, 96, 174101.	2.9	243
9	Turbulence Transition and the Edge of Chaos in Pipe Flow. Physical Review Letters, 2007, 99, 034502.	2.9	186
10	Synchronization, phase locking, and metachronal wave formation in ciliary chains. Chaos, 2008, 18, 037128.	1.0	185
11	Torque scaling in turbulent Taylorâ€“Couette flow between independently rotating cylinders. Journal of Fluid Mechanics, 2007, 581, 221-250.	1.4	184
12	Fractal properties of scattering singularities. Journal of Physics A, 1987, 20, 5971-5979.	1.6	152
13	Irregular scattering. Physica D: Nonlinear Phenomena, 1988, 33, 89-98.	1.3	152
14	Sensitive dependence on initial conditions in transition to turbulence in pipe flow. Journal of Fluid Mechanics, 2004, 504, 343-352.	1.4	149
15	Quantum mechanics of a classically chaotic system: Observations on scars, periodic orbits, and vibrational adiabaticity. Physical Review A, 1989, 39, 3776-3793.	1.0	140
16	Numerical Bifurcation Methods and their Application to Fluid Dynamics: Analysis beyond Simulation. Communications in Computational Physics, 2014, 15, 1-45.	0.7	136
17	Modeling walker synchronization on the Millennium Bridge. Physical Review E, 2007, 75, 021110.	0.8	134
18	Theoretical mechanics: Crowd synchrony on the Millennium Bridge. Nature, 2005, 438, 43-44.	13.7	129

#	Article	IF	Citations
19	Periodic orbit expansions for classical smooth flows. Journal of Physics A, 1991, 24, L237-L241.	1.6	127
20	Integrable and chaotic motions of four vortices II. Collision dynamics of vortex pairs. Philosophical Transactions of the Royal Society A, 1988, 326, 655-696.	1.3	124
21	Bacteria exploit a polymorphic instability of the flagellar filament to escape from traps. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6340-6345.	3.3	123
22	A low-dimensional model for turbulent shear flows. New Journal of Physics, 2004, 6, 56-56.	1.2	109
23	Fractal Stability Border in Plane Couette Flow. Physical Review Letters, 1997, 79, 5250-5253.	2.9	101
24	Local Lyapunov exponents in chaotic systems. Physica D: Nonlinear Phenomena, 1993, 65, 100-108.	1.3	97
25	Symmetry decomposition of chaotic dynamics. Nonlinearity, 1993, 6, 277-311.	0.6	93
26	Approach to ergodicity in quantum wave functions. Physical Review E, 1995, 52, 5893-5903.	0.8	93
27	Periodic orbits near onset of chaos in plane Couette flow. Chaos, 2012, 22, 047505.	1.0	91
28	Quantum eigenvalues from classical periodic orbits. Physical Review Letters, 1991, 67, 2410-2413.	2.9	89
29	Effective variables in ecosystem models with an application to phytoplankton succession. Ecological Modelling, 1996, 92, 33-53.	1.2	89
30	Laminar-turbulent boundary in plane Couette flow. Physical Review E, 2008, 78, 037301.	0.8	88
31	Regular and irregular potential scattering. Journal of Physics A, 1986, 19, L829-L833.	1.6	87
32	Learning the space-time phase diagram of bacterial swarm expansion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1489-1494.	3.3	86
33	Localized edge states nucleate turbulence in extended plane Couette cells. Journal of Fluid Mechanics, 2010, 646, 441-451.	1.4	82
34	Transition in Localized Pipe Flow Turbulence. Physical Review Letters, 2009, 103, 054502.	2.9	72
35	Semiclassical matrix elements from periodic orbits. Physical Review A, 1992, 45, 3531-3539.	1.0	71
36	Onset of Fast Magnetic Reconnection. Physical Review Letters, 2007, 98, 215001.	2.9	69

#	Article	IF	Citations
37	Direct numerical simulations of local and global torque in Taylorâ€“Couette flow up to Re = 30 000. Journal of Fluid Mechanics, 2013, 718, 398-427.	1.4	68
38	Convergence of the Semi-Classical Periodic Orbit Expansion. Europhysics Letters, 1989, 9, 509-512.	0.7	65
39	Geometry of particle paths in turbulent flows. Journal of Turbulence, 2006, 7, N62.	0.5	62
40	Statistical analysis of coherent structures in transitional pipe flow. Physical Review E, 2007, 75, 066313.	0.8	62
41	Pathways to double ionization of atoms in strong fields. Physical Review A, 2001, 63, .	1.0	60
42	Time-Resolved Quantum Dynamics of Double Ionization in Strong Laser Fields. Physical Review Letters, 2007, 98, 203002.	2.9	60
43	Dynamical systems and the transition to turbulence in linearly stable shear flows. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 1297-1315.	1.6	60
44	Transition to turbulence in a shear flow. Physical Review E, 1999, 60, 509-517.	0.8	59
45	Turbulence transition in pipe flow: some open questions. Nonlinearity, 2008, 21, T1-T11.	0.6	59
46	Integrable four vortex motion. Physics of Fluids, 1988, 31, 2796.	1.4	58
47	Transition from the Couette-Taylor system to the plane Couette system. Physical Review E, 2000, 61, 7227-7230.	0.8	58
48	Preparation of water-stable submicron fibers from aqueous latex dispersion of water-insoluble polymers by electrospinning. Polymer, 2007, 48, 3974-3981.	1.8	57
49	Birkhoff-Gustavson normal form in classical and quantum mechanics. Journal of Physics A, 1986, 19, 2961-2972.	1.6	56
50	Symbolic description of periodic orbits for the quadratic Zeeman effect. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 355-363.	0.6	52
51	Analytically solvable dynamical systems which are not integrable. Physica D: Nonlinear Phenomena, 1984, 13, 339-356.	1.3	51
52	Spatial arrangement of several flagellins within bacterial flagella improves motility in different environments. Nature Communications, 2018, 9, 5369.	5.8	51
53	Self-Sustained Localized Structures in a Boundary-Layer Flow. Physical Review Letters, 2012, 108, 044501.	2.9	50
54	Evolution of turbulent spots in a parallel shear flow. Physical Review E, 2001, 63, 046307.	0.8	49

#	Article	IF	Citations
55	Indices in classical mechanics. Journal of Physics A, 1991, 24, 4335-4348.	1.6	48
56	Localized edge states in the asymptotic suction boundary layer. Journal of Fluid Mechanics, 2013, 717, .	1.4	48
57	Point vortex dynamics: recent results and open problems. Fluid Dynamics Research, 1988, 3, 63-74.	0.6	47
58	Introduction. Turbulence transition in pipe flow: 125th anniversary of the publication of Reynolds' paper. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 449-455.	1.6	47
59	Phase-space structure of a thermoreceptor. Physical Review E, 2000, 62, 6352-6360.	0.8	46
60	Lagrangian Tracers on a Surface Flow: The Role of Time Correlations. Physical Review Letters, 2004, 93, 134501.	2.9	46
61	Microdomain formation is a general property of bacterial membrane proteins and induces heterogeneity of diffusion patterns. BMC Biology, 2018, 16, 97.	1.7	45
62	Periodic orbit analysis of the Lorenz attractor. European Physical Journal B, 1994, 93, 259-266.	0.6	44
63	Edge states for the turbulence transition in the asymptotic suction boundary layer. Journal of Fluid Mechanics, 2013, 726, 100-122.	1.4	44
64	Super Resolution Fluorescence Microscopy and Tracking of Bacterial Flotillin (Reggie) Paralogs Provide Evidence for Defined-Sized Protein Microdomains within the Bacterial Membrane but Absence of Clusters Containing Detergent-Resistant Proteins. PLoS Genetics, 2016, 12, e1006116.	1.5	44
65	Streamwise and doubly-localised periodic orbits in plane Poiseuille flow. Journal of Fluid Mechanics, 2014, 761, 348-359.	1.4	41
66	On statistically stationary homogeneous shear turbulence. Europhysics Letters, 2000, 52, 627-632.	0.7	40
67	Periodic Orbits and Chaotic Sets in a Low-Dimensional Model for Shear Flows. SIAM Journal on Applied Dynamical Systems, 2005, 4, 352-376.	0.7	39
68	Basin boundary, edge of chaos and edge state in a two-dimensional model. New Journal of Physics, 2009, 11, 013040.	1.2	39
69	Coupling between diffusion and orientation of pentacene molecules on an organic surface. Nature Materials, 2016, 15, 397-400.	13.3	37
70	Correlations in quantum time delay. Chaos, 1993, 3, 613-617.	1.0	36
71	Phase Transition to Large Scale Coherent Structures in Two-Dimensional Active Matter Turbulence. Physical Review Letters, 2019, 122, 214503.	2.9	36
72	Failure of energy stability in Oldroyd-B fluids at arbitrarily low Reynolds numbers. Journal of Non-Newtonian Fluid Mechanics, 2006, 135, 92-96.	1.0	34

#	Article	IF	Citations
73	Momentum transport in Taylorâ€“Couette flow with vanishing curvature. Journal of Fluid Mechanics, 2016, 790, 419-452.	1.4	34
74	Extended localized structures and the onset of turbulence in channel flow. Physical Review Fluids, 2018, 3, .	1.0	33
75	Quantum effects of periodic orbits for the kicked top. European Physical Journal B, 1993, 92, 221-233.	0.6	32
76	Nonsequential triple ionization in strong fields. Physical Review A, 2001, 64, .	1.0	32
77	Echoes in classical dynamical systems. Journal of Physics A, 2003, 36, 371-380.	1.6	32
78	From travelling waves to mild chaos: a supercritical bifurcation cascade in pipe flow. Journal of Fluid Mechanics, 2012, 709, 149-190.	1.4	32
79	Exact eigenfunctions for a quantised map. Journal of Physics A, 1986, 19, 1823-1831.	1.6	30
80	Irregular Scattering of Vortex Pairs. Europhysics Letters, 1988, 5, 107-111.	0.7	30
81	Correlations of electromagnetic fields in chaotic cavities. Europhysics Letters, 1999, 46, 134-140.	0.7	30
82	Scaling of global momentum transport in Taylor-Couette and pipe flow. European Physical Journal B, 2000, 18, 541-544.	0.6	30
83	Stretching of polymers in a turbulent environment. Computer Physics Communications, 2002, 147, 538-543.	3.0	30
84	Edge states intermediate between laminar and turbulent dynamics in pipe flow. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 577-587.	1.6	30
85	Extreme vorticity growth in Navierâ€“Stokes turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 861-865.	0.9	30
86	Power law distribution of discharge in ideal networks. Water Resources Research, 1994, 30, 3541-3543.	1.7	29
87	Fluxes and energy dissipation in thermal convection and shear flows. Europhysics Letters, 2007, 78, 24001.	0.7	29
88	Transient turbulence in plane Couette flow. Physical Review E, 2010, 81, 015301.	0.8	29
89	Bypass transition and spot nucleation in boundary layers. Physical Review Fluids, 2016, 1, .	1.0	29
90	Turbulence and passive scalar transport in a free-slip surface. Physical Review E, 2001, 64, 016314.	0.8	28

#	Article	IF	Citations
91	Clustering dynamics of Lagrangian tracers in free-surface flows. Physical Review E, 2002, 66, 017303.	0.8	28
92	Lifetime statistics in transitional pipe flow. Physical Review E, 2008, 78, 046310.	0.8	27
93	Takensâ€“Bogdanov bifurcation of travelling-wave solutions in pipe flow. Journal of Fluid Mechanics, 2011, 670, 96-129.	1.4	27
94	Transition state theory for ballistic electrons. Journal of Physics A, 1995, 28, 3469-3478.	1.6	26
95	Quantum model for double ionization of atoms in strong laser fields. Physical Review A, 2008, 78, .	1.0	26
96	Turbulent states in plane Couette flow with rotation. Physics of Fluids, 2015, 27, 045109.	1.6	26
97	Semiclassical canonical rate theory. Physical Review E, 1998, 58, 5436-5448.	0.8	25
98	Edge of chaos in pipe flow. Chaos, 2006, 16, 041103.	1.0	25
99	Resummation of classical and semiclassical periodic-orbit formulas. Physical Review E, 1993, 47, 1578-1588.	0.8	24
100	Periodic orbit analysis of billiard level dynamics. Physical Review E, 1994, 49, R1-R4.	0.8	23
101	Energy dissipation in body-forced plane shear flow. Journal of Fluid Mechanics, 2003, 494, 275-284.	1.4	23
102	Vortex formation by active agents as a model forDaphniaswarming. Physical Review E, 2006, 73, 061924.	0.8	23
103	Abnormal mixing of passive scalars in chaotic flows. Physical Review E, 2007, 75, 036308.	0.8	23
104	Directed percolation model for turbulence transition in shear flows. Fluid Dynamics Research, 2012, 44, 031201.	0.6	23
105	Intermittent boundary layers and torque maxima in Taylor-Couette flow. Physical Review E, 2013, 87, .	0.8	23
106	Increasing Lifetimes and the Growing Saddles of Shear Flow Turbulence. Physical Review Letters, 2014, 112, 044503.	2.9	23
107	Edge states as mediators of bypass transition in boundary-layer flows. Journal of Fluid Mechanics, 2016, 801, .	1.4	23
108	Semiclassical Form Factor of Matrix Element Fluctuations. Physical Review Letters, 1995, 75, 2300-2303.	2.9	22

#	Article	IF	Citations
109	Semiclassical photodissociation cross section for. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3191-3209.	0.6	22
110	Attached eddy model revisited using a minimal quasi-linear approximation. Journal of Fluid Mechanics, 2020, 894, .	1.4	22
111	Noise correlations in shear flows. European Physical Journal B, 2003, 33, 373-378.	0.6	21
112	A Critical Point for Turbulence. Science, 2011, 333, 165-166.	6.0	21
113	Crisis bifurcations in plane Poiseuille flow. Physical Review E, 2015, 91, 041003.	0.8	21
114	Using machine learning to predict extreme events in the HÃ©non map. Chaos, 2020, 30, 013113.	1.0	21
115	Phase space analysis of chaotic spectra in a conservative Hamiltonian system. Chemical Physics Letters, 1990, 174, 325-332.	1.2	20
116	Uniform semiclassical expansions for the direct part of Franck-Condon transitions. Physical Review A, 1998, 57, 1536-1547.	1.0	20
117	Uniform semiclassical calculation of the direct part of the photodissociation cross section of water. Journal of Chemical Physics, 1999, 110, 11749-11755.	1.2	20
118	Wannier threshold law for two-electron escape in the presence of an external electric field. Europhysics Letters, 2001, 56, 651-657.	0.7	20
119	Non-normal tracer diffusion from stirring by swimming microorganisms. European Physical Journal E, 2012, 35, 96.	0.7	20
120	Small scale exact coherent structures at large Reynolds numbers in plane Couette flow. Nonlinearity, 2018, 31, R66-R77.	0.6	20
121	Periodically bursting edge states in plane Poiseuille flow. Fluid Dynamics Research, 2014, 46, 041419.	0.6	19
122	Ab initio study of time-dependent dynamics in strong-field triple ionization. Physical Review A, 2018, 98, .	1.0	19
123	On the genesis of different regimes in canopy flows: a numerical investigation. Journal of Fluid Mechanics, 2020, 891, .	1.4	19
124	Persistent turbulence in annealed plane Couette flow. Europhysics Letters, 2000, 51, 395-400.	0.7	18
125	Turbulence in a free surface. Physical Review E, 2001, 63, 065303.	0.8	18
126	Nonsequential double ionization of molecules. Physical Review A, 2005, 71, .	1.0	18

#	Article	IF	Citations
127	Phase effects in double ionization by strong short pulses. Chemical Physics, 2010, 370, 168-174.	0.9	18
128	Transition to turbulence in shear flows. Physica A: Statistical Mechanics and Its Applications, 2018, 504, 121-129.	1.2	18
129	Quasilinear approximation for exact coherent states in parallel shear flows. Fluid Dynamics Research, 2019, 51, 011402.	0.6	18
130	Maslov-WKB theory for supersymmetric hamiltonians. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1986, 168, 245-247.	1.5	17
131	Local stability analysis along Lagrangian paths. Chaos, Solitons and Fractals, 1995, 5, 2073-2088.	2.5	17
132	Complexity of localised coherent structures in a boundary-layer flow. European Physical Journal E, 2014, 37, 32.	0.7	17
133	Classical threshold behaviour in a (1+1)-dimensional model for double ionization in strong fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 3865-3871.	0.6	16
134	Long-wavelength instability of coherent structures in plane Couette flow. Physical Review E, 2014, 89, 043008.	0.8	16
135	Links between dissipation, intermittency, and helicity in the GOY model revisited. Physica D: Nonlinear Phenomena, 2006, 218, 1-10.	1.3	15
136	Correlation functions in chaotic systems from periodic orbits. Physical Review E, 1994, 50, 4571-4576.	0.8	14
137	Restricted-space ab initio models for double ionization by strong laser pulses. Physical Review A, 2018, 98, .	1.0	14
138	Chromosome Segregation in Bacillus subtilis Follows an Overall Pattern of Linear Movement and Is Highly Robust against Cell Cycle Perturbations. MSphere, 2020, 5, .	1.3	13
139	Periodic orbits and diffusion in standard maps. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 172, 411-415.	0.9	12
140	Classical Analysis of Correlated Multiple Ionization in Strong Fields. Physica Scripta, 2001, T90, 185.	1.2	12
141	Doubly localized states in plane Couette flow. Journal of Fluid Mechanics, 2014, 758, 1-4.	1.4	12
142	Comoving frames and symmetry-related motions in parallel shear flows. Journal of Fluid Mechanics, 2014, 751, 685-697.	1.4	12
143	Lifetimes of noisy repellors. Physical Review E, 2003, 68, 026215.	0.8	11
144	Periodic orbit quantization of Baker's map. Journal of Physics A, 1994, 27, 4449-4455.	1.6	10

#	Article	IF	Citations
145	Eigenvalue density oscillations in separable microwave resonators. Physical Review E, 1996, 53, 4166-4175.	0.8	10
146	Amplitude equation and long-range interactions in underwater sand ripples in one dimension. Physical Review E, 2008, 78, 047301.	0.8	10
147	Vortex pairs in viscoelastic Couette-Taylor flow. Physical Review E, 2001, 64, 027301.	0.8	9
148	Fluctuations of energy injection rate in a shear flow. Physica D: Nonlinear Phenomena, 2004, 187, 370-376.	1.3	9
149	Suppression of correlated electron escape in double ionization in strong laser fields. Physical Review A, 2008, 77, .	1.0	9
150	Phase space localization and matrix element distributions in systems with mixed classical phase space. Physical Review E, 1999, 59, 5272-5277.	0.8	8
151	Fractal lifetimes in the transition to turbulence. Chaos, 2004, 14, S11-S11.	1.0	8
152	Shear turbulence on a sparse spectral grid. Physical Review E, 2007, 76, 016301.	0.8	8
153	How does flow in a pipe become turbulent?. European Physical Journal B, 2008, 64, 457-462.	0.6	8
154	Double ionization of a three-electron atom: Spin correlation effects. Physical Review A, 2019, 100, .	1.0	8
155	Linear feedback control of invariant solutions in channel flow. Journal of Fluid Mechanics, 2020, 900, .	1.4	8
156	Is there a Connection between Local and Global (In-)Stability?. Australian Journal of Physics, 1986, 39, 331.	0.6	7
157	Semiclassical cross section correlations. Physical Review E, 2000, 62, 7867-7871.	0.8	7
158	Dynamical Systems and the Transition to Turbulence. , 2005, , 35-50.		7
159	Direct and noisy transitions in a model shear flow. Theoretical and Applied Mechanics Letters, 2015, 5, 111-116.	1.3	7
160	Heat transport in Rayleighâ€“BÃ©nard convection and angular momentum transport in Taylorâ€“Couette flow: a comparative study. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160079.	1.6	7
161	Marginally stable and turbulent boundary layers in low-curvature Taylorâ€“Couette flow. Journal of Fluid Mechanics, 2017, 815, 149-168.	1.4	7
162	Harbingers and latecomers â€“ the order of appearance of exact coherent structures in plane Poiseuille flow. Journal of Turbulence, 2017, 18, 103-114.	0.5	7

#	Article	IF	Citations
163	Dynamics of a stochastically driven running sandpile. Journal of Nonlinear Science, 1995, 5, 167-188.	1.0	6
164	Pathways to non-sequential multiple ionization in strong laser fields. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 3923-3935.	0.6	6
165	Asymmetry of temporal cross-correlations in turbulent shear flows. Journal of Fluid Mechanics, 2006, 547, 55.	1.4	6
166	Turbulence Transition in Shear Flows: Chaos in High-Dimensional Spaces. Procedia IUTAM, 2012, 5, 165-168.	1.2	6
167	Streamwise decay of localized states in channel flow. Physical Review E, 2016, 94, 041101.	0.8	6
168	Microstructural Analysis of Perfluoropentacene Films on Graphene and Graphite: Interface-Mediated Alignment and Island Formation. Crystal Growth and Design, 2016, 16, 6941-6950.	1.4	6
169	Quadrupolar flows around spots in internal shear flows. Journal of Fluid Mechanics, 2020, 892, .	1.4	6
170	Interpreted machine learning in fluid dynamics: explaining relaminarisation events in wall-bounded shear flows. Journal of Fluid Mechanics, 2022, 942, .	1.4	6
171	Continued-fraction expansion of eigenvalues of generalized evolution operators in terms of periodic orbits. European Physical Journal B, 1993, 92, 235-242.	0.6	5
172	Mean profiles for a passive scalar in wall-bounded flows from symmetry analysis. Journal of Turbulence, 2006, 7, N61.	0.5	5
173	Time-dependent effects in high viscosity fluid dynamics. European Physical Journal: Special Topics, 2008, 157, 135-148.	1.2	5
174	Mixing effectiveness depends on the sourceâ€“sink structure: simulation results. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P07018.	0.9	5
175	Gradient nanowires and nanotubes. Physica Status Solidi (B): Basic Research, 2010, 247, 2451-2457.	0.7	5
176	A spotlike edge state in plane Poiseuille flow. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 591-592.	0.2	5
177	Order-disorder transitions in a sheared many-body system. Physical Review E, 2015, 92, 062208.	0.8	5
178	Transition in the asymptotic suction boundary layer over a heated plate. Journal of Fluid Mechanics, 2016, 803, 175-199.	1.4	5
179	Non-universal transitions to two-dimensional turbulence. Journal of Fluid Mechanics, 2020, 892, .	1.4	5
180	Exact relations between Rayleighâ€“BÃ©nard and rotating plane Couette flow in two dimensions. Journal of Fluid Mechanics, 2020, 903, .	1.4	5

#	Article	IF	Citations
181	Analysis and modeling of localized invariant solutions in pipe flow. Physical Review Fluids, 2018, 3, .	1.0	5
182	Turbulence in a Maxwell fluid. Zeitschrift FÃ¼r Physik B-Condensed Matter, 1997, 101, 461-468.	1.1	4
183	Fluctuations and correlations in matrix elements. Physica D: Nonlinear Phenomena, 1997, 109, 53-58.	1.3	4
184	Breaking time reversal symmetry by viscous dephasing. Physical Review E, 2005, 72, 037301.	0.8	4
185	Front-propagation in bacterial inter-colony communication. Chaos, 2018, 28, 106316.	1.0	4
186	Transition to turbulence when the Tollmienâ€“Schlichting and bypass routesÂcoexist. Journal of Fluid Mechanics, 2019, 880, .	1.4	4
187	Order and chaos in quantum irregular scattering: Wigner's time delay. New Astronomy Reviews, 1993, 37, 43-55.	0.3	3
188	Structure function of passive scalars in two-dimensional turbulence. Physical Review E, 1999, 60, 4185-4192.	0.8	3
189	Magnetic field correlations in kinematic two-dimensional magnetohydrodynamic turbulence. Physics of Plasmas, 1999, 6, 3477-3483.	0.7	3
190	Classical Fluctuations and Semiclassical Matrix Elements. Progress of Theoretical Physics Supplement, 2000, 139, 59-69.	0.2	3
191	Stroboscopic Quantization of Autonomous Systems. Foundations of Physics, 2001, 31, 543-556.	0.6	3
192	Crowd synchrony on the London Millennium Bridge. Chaos, 2006, 16, 041104.	1.0	3
193	A Set-Oriented Path Following Method for the Approximation of Parameter Dependent Attractors. SIAM Journal on Applied Dynamical Systems, 2020, 19, 705-723.	0.7	3
194	Eigenvalue Statistics in Quantum Ideal Gases. The IMA Volumes in Mathematics and Its Applications, 1999, , 187-199.	0.5	3
195	Correlations and fluctuations of matrix elements and cross sections. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 9, 535-541.	1.3	2
196	STATISTICS OF SKIPPING EVENTS IN A NOISY THERMORECEPTOR. Fluctuation and Noise Letters, 2004, 04, L231-L236.	1.0	2
197	Energy and Dissipation Balances in Rotating Flows. , 2005, , 47-50.		2
198	Enstrophy amplification events in three-dimensional turbulence. Chaos, 2008, 18, 041103.	1.0	2

#	Article	IF	Citations
199	Chaos control applied to coherent states in transitional flows. Journal of Physics: Conference Series, 2011, 318, 032005.	0.3	2
200	Groebner Basis Methods for Stationary Solutions of a Low-Dimensional Model for a Shear Flow. Journal of Nonlinear Science, 2014, 24, 935-948.	1.0	2
201	Localization in plane Couette edge dynamics. Springer Proceedings in Physics, 2009, , 83-84.	0.1	2
202	Localized edge states for the transition to turbulence in shear flows. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 253-258.	0.1	2
203	Asymmetric Time Correlations In Turbulent Shear Flows. Fluid Mechanics and Its Applications, 2004, , 253-256.	0.1	2
204	Purely elastic linear instabilities in parallel shear flows with free-slip boundary conditions. Journal of Fluid Mechanics, 2021, 928, .	1.4	2
205	Transition to turbulence in shear flows. , 1998, , 327-338.		1
206	Reply [to â€œComment on â€˜Power Law Distribution of Discharge in Ideal Networksâ€™ by H. de Vries, T. Becker, and B. Eckhardtâ€]. Water Resources Research, 1996, 32, 2615-2615.	1.7	1
207	Phase transitions in Scheidegger and Eden networks. Journal of Physics A, 1997, 30, 6233-6244.	1.6	1
208	Scalar dissipation fronts in high-Schmidt number mixing. Chaos, 2005, 15, 041105.	1.0	1
209	A Hybrid Peer-to-Peer and Grid Job Scheduling System for Teaming Up Desktop Resources with Computer Clusters to Perform Turbulence Simulations. , 2008, , .		1
210	Dynamic feedback control through wall suction in shear flows. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900369.	0.2	1
211	Symmetries and Boundary Layer Profiles for Scalar Fields. , 2005, , 43-46.		1
212	Torque scaling in Taylor-Couette flow. , 2007, , 352-354.		1
213	Comment on â€˜â€˜Master equation for a damped nonlinear oscillatorâ€™â€™. Physical Review A, 1987, 35, 5291-5292.	1.0	0
214	Escape rates and Hausdorff dimension of Julia sets. Chaos, Solitons and Fractals, 1993, 3, 387-394.	2.5	0
215	Semiclassical cross sections. , 1997, , 63-82.		0
216	Spectra of filtered signals. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 229, 44-48.	0.9	0

#	Article	IF	Citations
217	Bifurcations and random matrix theory. Europhysics Letters, 2001, 53, 703-708.	0.7	0
218	Reply to â€œComment on â€˜Transition to turbulence in a shear flowâ€™â€‰â€•. Physical Review E, 2005, 72, .	0.8	0
219	Dynamics at the Edge of Chaos in Pipe Flow. , 2007, , 559-561.		0
220	Oscillatory Relaxation Towards Turbulent States. , 2007, , 31-35.		0
221	What Rayleigh-BÃ©nard, Taylor-Couette and Pipe Flows have in Common. , 2007, , 3-10.		0
222	(Semi-)Classical Double Ionization in Intense Laser Fields. Journal of Physics: Conference Series, 2012, 388, 032038.	0.3	0
223	Non-Sequential Double Ionization of Atoms in Strong Fields. , 2001, , 79-83.		0
224	Classical Analysis of Correlated Multiple Ionization in Strong Fields. , 2001, , .		0
225	Passive Fields and Particles in Chaotic Flows. Solid Mechanics and Its Applications, 2003, , 415-424.	0.1	0
226	Global Scaling Properties of Heat and Momentum Transport in Fluid Flow. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 11-18.	0.1	0
227	The Multispectral Method: Progress and Prospects. Springer Proceedings in Physics, 2009, , 791-794.	0.1	0