

Tobias M Schneider

List of Publications by Year in descending order

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58
papers

2,804
citations

257101

24
h-index

168136

53
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59
all docs

59
docs citations

59
times ranked

1969
citing authors

#	ARTICLE	IF	CITATIONS
1	From Rolling Ball to Complete Wetting: The Dynamic Tuning of Liquids on Nanostructured Surfaces. <i>Langmuir</i> , 2004, 20, 3824-3827.	1.6	477
2	Turbulence Transition in Pipe Flow. <i>Annual Review of Fluid Mechanics</i> , 2007, 39, 447-468.	10.8	448
3	Finite lifetime of turbulence in shear flows. <i>Nature</i> , 2006, 443, 59-62.	13.7	248
4	Turbulence Transition and the Edge of Chaos in Pipe Flow. <i>Physical Review Letters</i> , 2007, 99, 034502.	2.9	186
5	Snakes and Ladders: Localized Solutions of Plane Couette Flow. <i>Physical Review Letters</i> , 2010, 104, 104501.	2.9	128
6	Eliminating Turbulence in Spatially Intermittent Flows. <i>Science</i> , 2010, 327, 1491-1494.	6.0	98
7	Laminar-turbulent boundary in plane Couette flow. <i>Physical Review E</i> , 2008, 78, 037301.	0.8	88
8	Localized edge states nucleate turbulence in extended plane Couette cells. <i>Journal of Fluid Mechanics</i> , 2010, 646, 441-451.	1.4	82
9	Stability Landscape of Shell Buckling. <i>Physical Review Letters</i> , 2017, 119, 224101.	2.9	78
10	Transition in Localized Pipe Flow Turbulence. <i>Physical Review Letters</i> , 2009, 103, 054502.	2.9	72
11	Statistical analysis of coherent structures in transitional pipe flow. <i>Physical Review E</i> , 2007, 75, 066313.	0.8	62
12	Dynamical systems and the transition to turbulence in linearly stable shear flows. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 1297-1315.	1.6	60
13	Turbulent-laminar patterns in plane Poiseuille flow. <i>Physics of Fluids</i> , 2014, 26, .	1.6	59
14	On the measured current in electrospinning. <i>Journal of Applied Physics</i> , 2010, 107, 044306.	1.1	46
15	Edge states for the turbulence transition in the asymptotic suction boundary layer. <i>Journal of Fluid Mechanics</i> , 2013, 726, 100-122.	1.4	44
16	Basin boundary, edge of chaos and edge state in a two-dimensional model. <i>New Journal of Physics</i> , 2009, 11, 013040.	1.2	39
17	Algorithm for a Microfluidic Assembly Line. <i>Physical Review Letters</i> , 2011, 106, 094503.	2.9	38
18	Fully localized post-buckling states of cylindrical shells under axial compression. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2017, 473, 20170177.	1.0	33

#	ARTICLE	IF	CITATIONS
19	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
20	Transient turbulence in plane Couette flow. Physical Review E, 2010, 81, 015301.	0.8	29
21	Exact invariant solution reveals the origin of self-organized oblique turbulent-laminar stripes. Nature Communications, 2019, 10, 2277.	5.8	28
22	Lifetime statistics in transitional pipe flow. Physical Review E, 2008, 78, 046310.	0.8	27
23	Infinite geometric frustration in a cubic dipole cluster. Physical Review B, 2015, 91, .	1.1	26
24	Edge of chaos in pipe flow. Chaos, 2006, 16, 041103.	1.0	25
25	Elastocapillary coalescence of plates and pillars. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140593.	1.0	24
26	Femtosecond-laser hyperdoping silicon in an SF ₆ atmosphere: Dopant incorporation mechanism. Journal of Applied Physics, 2015, 117, 125301.	1.1	24
27	Rational design of a high-throughput droplet sorter. Lab on A Chip, 2019, 19, 2220-2232.	3.1	24
28	Increasing Lifetimes and the Growing Saddles of Shear Flow Turbulence. Physical Review Letters, 2014, 112, 044503.	2.9	23
29	Buckling instabilities and spatio-temporal dynamics of active elastic filaments. Journal of the Royal Society Interface, 2020, 17, 20190794.	1.5	22
30	Creating femtosecond-laser-hyperdoped silicon with a homogeneous doping profile. Applied Physics Letters, 2015, 106, .	1.5	19
31	Spatio-temporal patterns in inclined layer convection. Journal of Fluid Mechanics, 2016, 794, 719-745.	1.4	19
32	Distinct transition in flow statistics and vortex dynamics between low- and high-extent turbulent drag reduction in polymer fluids. Journal of Non-Newtonian Fluid Mechanics, 2018, 262, 115-130.	1.0	18
33	Nondestructive Prediction of the Buckling Load of Imperfect Shells. Physical Review Letters, 2020, 125, 225504.	2.9	18
34	Superspreading events suggest aerosol transmission of SARS-CoV-2 by accumulation in enclosed spaces. Physical Review E, 2021, 103, 033109.	0.8	17
35	Folded Edge of Turbulence in a Pipe. Physical Review Letters, 2010, 105, 174502.	2.9	13
36	Studying edge geometry in transiently turbulent shear flows. Journal of Fluid Mechanics, 2014, 747, 506-517.	1.4	13

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37	Homoclinic snaking in plane Couette flow: bending, skewing and finite-size effects. <i>Journal of Fluid Mechanics</i> , 2016, 794, 530-551.	1.4	12
38	Edge states control droplet breakup in subcritical extensional flows. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	12
39	Secondary instability and tertiary states in rotating plane Couette flow. <i>Journal of Fluid Mechanics</i> , 2014, 761, 27-61.	1.4	11
40	Time-varying droplet configuration determines break-up probability of drops within a concentrated emulsion. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	9
41	Invariant states in inclined layer convection. Part 1. Temporal transitions along dynamical connections between invariant states. <i>Journal of Fluid Mechanics</i> , 2020, 898, .	1.4	9
42	Constructing periodic orbits of high-dimensional chaotic systems by an adjoint-based variational method. <i>Physical Review E</i> , 2022, 105, 014217.	0.8	9
43	How does flow in a pipe become turbulent?. <i>European Physical Journal B</i> , 2008, 64, 457-462.	0.6	8
44	Localized travelling waves in the asymptotic suction boundary layer. <i>Journal of Fluid Mechanics</i> , 2016, 795, .	1.4	8
45	Interaction and breakup of droplet pairs in a microchannel Y-junction. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	7
46	Sequencing by Hybridization of Long Targets. <i>PLoS ONE</i> , 2012, 7, e35819.	1.1	6
47	Variational methods for finding periodic orbits in the incompressible Navier–Stokes equations. <i>Journal of Fluid Mechanics</i> , 2022, 941, .	1.4	6
48	Origin of localized snakes-and-ladders solutions of plane Couette flow. <i>Physical Review E</i> , 2019, 100, 031102.	0.8	4
49	Invariant states in inclined layer convection. Part 2. Bifurcations and connections between branches of invariant states. <i>Journal of Fluid Mechanics</i> , 2020, 898, .	1.4	4
50	Self-similar invariant solution in the near-wall region of a turbulent boundary layer at asymptotically high Reynolds numbers. <i>Journal of Fluid Mechanics</i> , 2020, 888, .	1.4	3
51	Periodic orbits exhibit oblique stripe patterns in plane Couette flow. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	3
52	Modified snaking in plane Couette flow with wall-normal suction. <i>Journal of Fluid Mechanics</i> , 2021, 912, .	1.4	2
53	Localization in plane Couette edge dynamics. <i>Springer Proceedings in Physics</i> , 2009, , 83-84.	0.1	2
54	Localized edge states for the transition to turbulence in shear flows. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , 2010, , 253-258.	0.1	2

#	ARTICLE	IF	CITATIONS
55	A Hybrid Peer-to-Peer and Grid Job Scheduling System for Teaming Up Desktop Resources with Computer Clusters to Perform Turbulence Simulations. , 2008, , .		1
56	Turbulenz bÄndigen. Physik in Unserer Zeit, 2010, 41, 163-164.	0.0	1
57	Dynamics at the Edge of Chaos in Pipe Flow. , 2007, , 559-561.		0
58	Oscillatory Relaxation Towards Turbulent States. , 2007, , 31-35.		0