

# Edgar Knobloch

## List of Publications by Citations

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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.

89 papers	2,722 citations	28 h-index	50 g-index
92 ext. papers	3,049 ext. citations	3.1 avg, IF	5.41 L-index

#	Paper	IF	Citations
89	Localized states in the generalized Swift-Hohenberg equation. <i>Physical Review E</i> , <b>2006</b> , 73, 056211	2.4	227
88	Homoclinic snaking: structure and stability. <i>Chaos</i> , <b>2007</b> , 17, 037102	3.3	189
87	Snakes and ladders: Localized states in the Swift-Hohenberg equation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2007</b> , 360, 681-688	2.3	135
86	Numerical simulation of an asymptotically reduced system for rotationally constrained convection. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 551, 141	3.7	111
85	Spatially localized binary-fluid convection. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 560, 149	3.7	100
84	Transitions to chaos in two-dimensional double-diffusive convection. <i>Journal of Fluid Mechanics</i> , <b>1986</b> , 166, 409	3.7	94
83	Heat transport in low-Rossby-number Rayleigh-Bénard convection. <i>Physical Review Letters</i> , <b>2012</b> , 109, 254503	7.4	88
82	Thin liquid films on a slightly inclined heated plate. <i>Physica D: Nonlinear Phenomena</i> , <b>2004</b> , 190, 213-248	3.3	87
81	Multicluste and traveling chimera states in nonlocal phase-coupled oscillators. <i>Physical Review E</i> , <b>2014</b> , 90, 022919	2.4	83
80	Upscale energy transfer in three-dimensional rapidly rotating turbulent convection. <i>Physical Review Letters</i> , <b>2014</b> , 112, 144501	7.4	76
79	To Snake or Not to Snake in the Planar Swift-Hohenberg Equation. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2010</b> , 9, 704-733	2.8	74
78	Symmetry and instability in rotating hydrodynamic and magnetohydrodynamic flows. <i>Physics of Fluids</i> , <b>1996</b> , 8, 1446-1454	4.4	64
77	Driven drops on heterogeneous substrates: onset of sliding motion. <i>Physical Review Letters</i> , <b>2006</b> , 97, 204501	7.4	58
76	Localized states in the conserved Swift-Hohenberg equation with cubic nonlinearity. <i>Physical Review E</i> , <b>2013</b> , 87, 042915	2.4	56
75	On the depinning of a driven drop on a heterogeneous substrate. <i>New Journal of Physics</i> , <b>2006</b> , 8, 313-319	3.9	55
74	Front and back instability of a liquid film on a slightly inclined plate. <i>Physics of Fluids</i> , <b>2003</b> , 15, 892-907	4.4	54
73	Model of convective Taylor columns in rotating Rayleigh-Bénard convection. <i>Physical Review Letters</i> , <b>2010</b> , 104, 224501	7.4	52

72	Generalized quasi-geostrophy for spatially anisotropic rotationally constrained flows. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 555, 233	3.7	51
71	Strongly nonlinear convection cells in a rapidly rotating fluid layer: the tilted f-plane. <i>Journal of Fluid Mechanics</i> , <b>1998</b> , 360, 141-178	3.7	47
70	Twisted chimera states and multicore spiral chimera states on a two-dimensional torus. <i>Physical Review E</i> , <b>2015</b> , 92, 042921	2.4	43
69	Rayleigh and depinning instabilities of forced liquid ridges on heterogeneous substrates. <i>Physical Review E</i> , <b>2011</b> , 83, 016305	2.4	43
68	Reduced models for fluid flows with strong constraints. <i>Journal of Mathematical Physics</i> , <b>2007</b> , 48, 065405	2.5	42
67	Convectons, anticonvectons and multiconvectons in binary fluid convection. <i>Journal of Fluid Mechanics</i> , <b>2011</b> , 667, 586-606	3.7	40
66	Simulations of localized States of stationary convection in 3He-4He mixtures. <i>Physical Review Letters</i> , <b>2005</b> , 95, 244501	7.4	35
65	Minimal model of binary fluid convection. <i>Physical Review A</i> , <b>1990</b> , 42, 4693-4709	2.6	33
64	A nonlinear model for rotationally constrained convection with Ekman pumping. <i>Journal of Fluid Mechanics</i> , <b>2016</b> , 798, 50-87	3.7	33
63	Long-wave Marangoni instability with vibration. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 546, 61	3.7	32
62	Magnetohydrodynamic convectons. <i>Journal of Fluid Mechanics</i> , <b>2011</b> , 687, 595-605	3.7	30
61	Implications of tristability in pattern-forming ecosystems. <i>Chaos</i> , <b>2018</b> , 28, 033609	3.3	28
60	Convectons and secondary snaking in three-dimensional natural doubly diffusive convection. <i>Physics of Fluids</i> , <b>2013</b> , 25, 024105	4.4	28
59	Localized pinning states in closed containers: Homoclinic snaking without bistability. <i>Physical Review E</i> , <b>2009</b> , 80, 025201	2.4	28
58	Simulations of oscillatory binary fluid convection in large aspect ratio containers. <i>Physical Review E</i> , <b>2002</b> , 65, 016303	2.4	28
57	Fully nonlinear three-dimensional convection in a rapidly rotating layer. <i>Physics of Fluids</i> , <b>1999</b> , 11, 1469-1483	4.4	28
56	Homoclinic snaking of localized states in doubly diffusive convection. <i>Physics of Fluids</i> , <b>2011</b> , 23, 094102	4.4	27
55	Travelling wave convection in a rotating layer. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>1990</b> , 51, 195-209	1.4	27

54	Resonant mode interactions in Rayleigh-B�ard convection. <i>Physical Review E</i> , <b>1998</b> , 58, 3145-3156	2.4	24
53	Subcritical turbulent condensate in rapidly rotating Rayleigh-B�ard convection. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 864,	3.7	23
52	Damping of nearly inviscid water waves. <i>Physical Review E</i> , <b>1997</b> , 56, 5544-5548	2.4	22
51	Convectons in a rotating fluid layer. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 717, 417-448	3.7	21
50	Confined states in large-aspect-ratio thermosolutal convection. <i>Physical Review E</i> , <b>1998</b> , 57, 524-545	2.4	21
49	Reduced description of exact coherent states in parallel shear flows. <i>Physical Review E</i> , <b>2015</b> , 91, 043010	2.4	19
48	Robust wall states in rapidly rotating Rayleigh-B�ard convection. <i>Journal of Fluid Mechanics</i> , <b>2020</b> , 895,	3.7	19
47	Travelling convectons in binary fluid convection. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 722, 240-266	3.7	19
46	Dynamo waves in semi�finite and finite domains. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>1997</b> , 453, 119-143	2.4	19
45	On the transition to columnar convection. <i>Physics of Fluids</i> , <b>1995</b> , 7, 935-940	4.4	17
44	Impact of domain anisotropy on the inverse cascade in geostrophic turbulent convection. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 837,	3.7	16
43	Three-dimensional spatially localized binary-fluid convection in a porous medium. <i>Journal of Fluid Mechanics</i> , <b>2013</b> , 730,	3.7	16
42	Convectons in periodic and bounded domains. <i>Fluid Dynamics Research</i> , <b>2010</b> , 42, 025505	1.2	15
41	Onset of oscillatory binary fluid convection in finite containers. <i>Physical Review E</i> , <b>1999</b> , 59, 6730-41	2.4	15
40	Spatial localization in heterogeneous systems. <i>Physical Review E</i> , <b>2014</b> , 89, 012903	2.4	14
39	Localized states in periodically forced systems. <i>Physical Review Letters</i> , <b>2015</b> , 114, 034102	7.4	13
38	Localized rotating convection with no-slip boundary conditions. <i>Physics of Fluids</i> , <b>2013</b> , 25, 124105	4.4	13
37	First order phase transitions and the thermodynamic limit. <i>New Journal of Physics</i> , <b>2019</b> , 21, 123021	2.9	13

36	Weakly subcritical stationary patterns: Eckhaus instability and homoclinic snaking. <i>Physical Review E</i> , <b>2012</b> , 85, 026211	2.4	12
35	THE 1:2 MODE INTERACTION IN RAYLEIGH-BÉNARD CONVECTION WITH WEAKLY BROKEN MIDPLANE SYMMETRY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , <b>2001</b> , 11, 27-41	2	12
34	Chimera states in systems of nonlocal nonidentical phase-coupled oscillators. <i>Physical Review E</i> , <b>2015</b> , 91, 032918	2.4	11
33	Spatially localized structures in the Gray-Scott model. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2018</b> , 376,	3	11
32	An asymptotically reduced model of turbulent Langmuir circulation. <i>Geophysical and Astrophysical Fluid Dynamics</i> , <b>2009</b> , 103, 179-197	1.4	10
31	Forced snaking: Localized structures in the real Ginzburg-Landau equation with spatially periodic parametric forcing. <i>European Physical Journal: Special Topics</i> , <b>2016</b> , 225, 2549-2561	2.3	10
30	Nonsnaking doubly diffusive convectons and the twist instability. <i>Physics of Fluids</i> , <b>2013</b> , 25, 114102	4.4	9
29	Origin of finite pulse trains: Homoclinic snaking in excitable media. <i>Physical Review E</i> , <b>2015</b> , 91, 032924	2.4	8
28	Three-dimensional doubly diffusive convectons: instability and transition to complex dynamics. <i>Journal of Fluid Mechanics</i> , <b>2018</b> , 840, 74-105	3.7	8
27	A Reduced Model for Salt-Finger Convection in the Small Diffusivity Ratio Limit. <i>Fluids</i> , <b>2017</b> , 2, 6	1.6	6
26	Coupled mean flow-amplitude equations for nearly inviscid parametrically driven surface waves. <i>Annals of the New York Academy of Sciences</i> , <b>2002</b> , 974, 201-19	6.5	6
25	Binary fluid convection in a rotating cylinder. <i>Physics of Fluids</i> , <b>1995</b> , 7, 1553-1567	4.4	6
24	Equatorially trapped convection in a rapidly rotating shallow shell. <i>Physical Review Fluids</i> , <b>2018</b> , 3,	2.8	6
23	A New Resonance Mechanism in the Swift-Hohenberg Equation with Time-Periodic Forcing. <i>SIAM Journal on Applied Dynamical Systems</i> , <b>2015</b> , 14, 860-892	2.8	5
22	Dynamics of phase slips in systems with time-periodic modulation. <i>Physical Review E</i> , <b>2015</b> , 92, 062914	2.4	5
21	Defectlike structures and localized patterns in the cubic-quintic-septic Swift-Hohenberg equation. <i>Physical Review E</i> , <b>2019</b> , 100, 012204	2.4	4
20	Front depinning by deterministic and stochastic fluctuations: A comparison. <i>Physical Review E</i> , <b>2019</b> , 99, 062226	2.4	4
19	Dynamic patterns in the reduced Craik-Leibovich equations. <i>Physics of Fluids</i> , <b>2015</b> , 27, 046605	4.4	4

18	Faceting and coarsening dynamics in the complex Swift-Hohenberg equation. <i>Physical Review E</i> , <b>2009</b> , 80, 046221	2.4	4
17	Dissipative solitons in binary fluid convection. <i>Discrete and Continuous Dynamical Systems - Series S</i> , <b>2011</b> , 4, 1213-1225	2.8	4
16	Jet formation in salt-finger convection: a modified Rayleigh-Bénard problem. <i>Journal of Fluid Mechanics</i> , <b>2019</b> , 858, 228-263	3.7	4
15	Subcritical saturation of the magnetorotational instability through mean magnetic field generation. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2018</b> , 474, 3451-3465	4.3	3
14	Two-dimensional localized states in an active phase-field-crystal model. <i>Physical Review E</i> , <b>2021</b> , 103, 032601	2.4	3
13	Fluid-supported elastic sheet under compression: Multifold solutions. <i>Physical Review E</i> , <b>2019</b> , 99, 043001	1.4	2
12	Front propagation in weakly subcritical pattern-forming systems. <i>Physical Review E</i> , <b>2017</b> , 96, 032208	2.4	2
11	Dynamics of counterpropagating waves in parametrically forced, large aspect ratio, nearly conservative systems with nonzero detuning. <i>Fluid Dynamics Research</i> , <b>2003</b> , 33, 113-140	1.2	2
10	Fixed-flux salt-finger convection in the small diffusivity ratio limit. <i>Physics of Fluids</i> , <b>2020</b> , 32, 126601	4.4	2
9	Exact solutions of the cubic-quintic Swift-Hohenberg equation and their bifurcations. <i>Dynamical Systems</i> , <b>2013</b> , 28, 263-286	0.6	2
8	Stationary peaks in a multivariable reaction-diffusion system: foliated snaking due to subcritical Turing instability. <i>IMA Journal of Applied Mathematics</i> ,	1	2
7	Localized and extended patterns in the cubic-quintic Swift-Hohenberg equation on a disk. <i>Physical Review E</i> , <b>2021</b> , 104, 014208	2.4	2
6	Chaotic motion of localized structures. <i>Physical Review E</i> , <b>2020</b> , 101, 042212	2.4	1
5	Amplitude equations for coupled electrostatic waves in the limit of weak instability. <i>Journal of Plasma Physics</i> , <b>1998</b> , 60, 159-180	2.7	1
4	Origin of jumping oscillons in an excitable reaction-diffusion system.. <i>Physical Review E</i> , <b>2021</b> , 104, L062201	2.4	1
3	Effect of small inclination on binary convection in elongated rectangular cells. <i>Physical Review E</i> , <b>2019</b> , 99, 023113	2.4	1
2	Oscillatory Binary Fluid Convection in Finite Containers <b>2003</b> , 91-144		1
1	Dissipative Systems. <i>Advances in Dynamics, Patterns, Cognition</i> , <b>2020</b> , 279-303	0.7	

