

# Paul Kolodner

## List of Publications by Year in descending order

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64  
papers

3,558  
citations

136740

32  
h-index

128067

60  
g-index

64  
all docs

64  
docs citations

64  
times ranked

1531  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical measurement of the Soret coefficient of ethanol/water solutions. Journal of Chemical Physics, 1988, 88, 6512-6524.	1.2	271
2	Reversible Wetting&Dewetting Transitions on Electrically Tunable Superhydrophobic Nanostructured Surfaces. Langmuir, 2007, 23, 9128-9133.	1.6	251
3	Traveling waves and chaos in convection in binary fluid mixtures. Physical Review Letters, 1985, 55, 496-499.	2.9	227
4	Traveling-wave convection in an annulus. Physical Review Letters, 1988, 60, 1723-1726.	2.9	227
5	Microscopic fluorescent imaging of surface temperature profiles with 0.01&A°C resolution. Applied Physics Letters, 1982, 40, 782-784.	1.5	138
6	Molecular dissociation of SF6 by ultra-short CO2 laser pulses. Optics Communications, 1977, 20, 119-122.	1.0	136
7	Collisionless multiphoton energy deposition and dissociation of SF6. Physical Review A, 1979, 19, 704-716.	1.0	123
8	Onset of Oscillatory Convection in a Binary Fluid Mixture. Physical Review Letters, 1986, 56, 2621-2624.	2.9	112
9	Collisions between pulses of traveling-wave convection. Physical Review A, 1991, 44, 6466-6479.	1.0	100
10	Remote thermal imaging with 0.7&A;m spatial resolution using temperature&dependent fluorescent thin films. Applied Physics Letters, 1983, 42, 117-119.	1.5	98
11	Competing and coexisting dynamical states of travelling-wave convection in an annulus. Journal of Fluid Mechanics, 1990, 217, 441-467.	1.4	89
12	Drift, shape, and intrinsic destabilization of pulses of traveling-wave convection. Physical Review A, 1991, 44, 6448-6465.	1.0	86
13	Oscillatory convection in viscoelastic DNA suspensions. Journal of Non-Newtonian Fluid Mechanics, 1998, 75, 167-192.	1.0	86
14	Amplitude Equations from Spatiotemporal Binary-Fluid Convection Data. Physical Review Letters, 1999, 83, 3422-3425.	2.9	83
15	Dynamics of traveling waves near the onset of convection in binary fluid mixtures. Physica D: Nonlinear Phenomena, 1989, 37, 319-333.	1.3	81
16	Weakly Nonlinear Traveling-Wave Convection. Physical Review Letters, 1988, 61, 842-845.	2.9	80
17	Dispersive chaos in one-dimensional traveling-wave convection. Physical Review Letters, 1990, 65, 1579-1582.	2.9	77
18	Rayleigh-B&ard convection in an intermediate-aspect-ratio rectangular container. Journal of Fluid Mechanics, 1986, 163, 195-226.	1.4	71

#	ARTICLE	IF	CITATIONS
19	Characterization of dispersive chaos and related states of binary-fluid convection. <i>Physica D: Nonlinear Phenomena</i> , 1995, 85, 165-224.	1.3	63
20	Analysis of evaporating mist flow for enhanced convective heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 3346-3356.	2.5	61
21	Two-Dimensional Distribution of Self-Generated Magnetic Fields near the Laser-Plasma Resonant-Interaction Region. <i>Physical Review Letters</i> , 1979, 43, 1402-1403.	2.9	55
22	Nonchaotic Rayleigh-Bénard Convection with Four and Five Incommensurate Frequencies. <i>Physical Review Letters</i> , 1984, 53, 242-245.	2.9	54
23	Drifting pulses of traveling-wave convection. <i>Physical Review Letters</i> , 1991, 66, 1165-1168.	2.9	53
24	Convective fingering of an autocatalytic reaction front. <i>Physical Review E</i> , 1996, 53, 6012-6015.	0.8	52
25	Oscillatory Traveling-Wave Convection in a Finite Container. <i>Physical Review Letters</i> , 1987, 58, 2055-2058.	2.9	49
26	Transition from traveling-wave to stationary convection in fluid mixtures. <i>Physical Review Letters</i> , 1990, 65, 1431-1434.	2.9	48
27	Extended states of nonlinear traveling-wave convection. I. The Eckhaus instability. <i>Physical Review A</i> , 1992, 46, 6431-6451.	1.0	47
28	Stable, unstable, and defected confined states of traveling-wave convection. <i>Physical Review E</i> , 1994, 50, 2731-2755.	0.8	47
29	Measurements of the concentration field in nonlinear travelling-wave convection. <i>Journal of Fluid Mechanics</i> , 1992, 240, 31.	1.4	45
30	Extended states of nonlinear traveling-wave convection. II. Fronts and spatiotemporal defects. <i>Physical Review A</i> , 1992, 46, 6452-6468.	1.0	41
31	Onset of convection for autocatalytic reaction fronts in a vertical slab. <i>Physical Review E</i> , 1993, 48, 4378-4386.	0.8	36
32	Coexisting traveling waves and steady rolls in binary-fluid convection. <i>Physical Review E</i> , 1993, 48, R665-R668.	0.8	35
33	Dispersive chaos. <i>Journal of Statistical Physics</i> , 1991, 64, 945-960.	0.5	33
34	Electrically tunable superhydrophobic nanostructured surfaces. <i>Bell Labs Technical Journal</i> , 2005, 10, 161-170.	0.7	32
35	Proof of the Resonant Acceleration Mechanism for Fast Electrons in Gaseous Laser Targets. <i>Physical Review Letters</i> , 1976, 37, 1754-1757.	2.9	31
36	Interactions of nonlinear pulses in convection in binary fluids. <i>Physical Review A</i> , 1991, 43, 4269-4280.	1.0	30

#	ARTICLE	IF	CITATIONS
37	Observations of the Eckhaus instability in one-dimensional traveling-wave convection. <i>Physical Review A</i> , 1992, 46, R1739-R1742.	1.0	30
38	Noncontact surface temperature measurement during reactive-ion etching using fluorescent polymer films. <i>Applied Physics Letters</i> , 1983, 42, 749-751.	1.5	29
39	Counterpropagating quasilinear wave packets in binary-fluid convection. <i>Physical Review Letters</i> , 1992, 69, 2519-2522.	2.9	29
40	Concentration field in traveling-wave and stationary convection in fluid mixtures. <i>Physical Review A</i> , 1991, 43, 7105-7108.	1.0	28
41	Repeated transients of weakly nonlinear traveling-wave convection. <i>Physical Review E</i> , 1993, 47, 1038-1048.	0.8	28
42	Confined states of traveling-wave convection. <i>Physical Review A</i> , 1991, 43, 7101-7104.	1.0	27
43	Interaction of localized pulses of traveling-wave convection with propagating disturbances. <i>Physical Review A</i> , 1990, 42, 7504-7506.	1.0	24
44	Finite-amplitude traveling-wave convection in binary fluid mixtures. <i>Physica D: Nonlinear Phenomena</i> , 1986, 23, 220-229.	1.3	23
45	Pulses of oscillatory convection. <i>Physical Review A</i> , 1987, 36, 2499-2502.	1.0	21
46	Droplet mixing using electrically tunable superhydrophobic nanostructured surfaces. <i>Microfluidics and Nanofluidics</i> , 2009, 7, 137-140.	1.0	21
47	Stable and unstable pulses of traveling-wave convection. <i>Physical Review A</i> , 1991, 43, 2827-2832.	1.0	20
48	Controlling Dispersive Chaos in Binary-Fluid Convection. <i>Physical Review Letters</i> , 1999, 83, 730-733.	2.9	18
49	Neutrally stable fronts of slow convective traveling waves. <i>Physical Review A</i> , 1990, 42, 2475-2478.	1.0	16
50	The transition to finite-amplitude traveling-wave convection in binary fluid mixtures. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1987, 2, 97-108.	0.5	14
51	Arbitrary-width confined states of traveling-wave convection: Pinning, locking, drift, and stability. <i>Physical Review E</i> , 1993, 48, R4187-R4190.	0.8	13
52	Weakly nonlinear states as propagating fronts in convecting binary mixtures. <i>Physical Review A</i> , 1990, 41, 5743-5746.	1.0	12
53	Heat transport by parallel-roll convection in a rectangular container. <i>Journal of Fluid Mechanics</i> , 1987, 185, 205-234.	1.4	11
54	Spatial-feedback control of dispersive chaos in binary-fluid convection. <i>Physical Review E</i> , 2000, 61, 2519-2532.	0.8	10

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55	Pinning and long-time-scale behavior in traveling-wave convection. Journal of Statistical Physics, 1991, 64, 903-912.	0.5	8
56	Electric-field and photochemical effects in D85N mutant bacteriorhodopsin substituted with 4-keto-retinal. Thin Solid Films, 1997, 302, 231-234.	0.8	7
57	Effect of confined states of traveling-wave convection on the lateral concentration profile. Physical Review A, 1990, 42, 7204-7210.	1.0	4
58	Complex Demodulation Techniques for Experiments on Traveling-Wave Convection. NATO ASI Series Series B: Physics, 1990, , 73-91.	0.2	4
59	Numerical Analysis of Mist-Cooled High Power Components in Cabinets. , 2009, , .		4
60	Comment on "Spatially and temporally modulated traveling-wave pattern in convecting binary mixtures". Physical Review Letters, 1989, 63, 578-578.	2.9	3
61	Electric-Field Effects in 13-Demethyl-11,14-Epoxyretinal-Bacteriorhodopsin Films. Photochemistry and Photobiology, 1999, 70, 103-110.	1.3	3
62	Electric-field effects in dry films of D85N and D85,96N mutant bacteriorhodopsin. Bioelectrochemistry, 2000, 51, 67-73.	2.4	2
63	Nonrandom Suprathermal Electron Emission in Resonance Absorption. Physical Review Letters, 1980, 45, 1790-1794.	2.9	1
64	"Video lock-in amplifier": Phase-sensitive detection of digital image sequences. Review of Scientific Instruments, 1985, 56, 1657-1661.	0.6	0