Werner Pesch

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/10858623/publications.pdf

Version: 2024-02-01

40 papers	2,085 citations	394421 19 h-index	330143 37 g-index
40 all docs	40 docs citations	40 times ranked	1230 citing authors

#	Article	IF	Citations
1	On low-Prandtl-number convection in an inclined layer of liquid mercury. Journal of Fluid Mechanics, 2019, 874, 76-101.	3.4	4
2	Spatio-temporal patterns in inclined layerÂconvection. Journal of Fluid Mechanics, 2016, 794, 719-745.	3.4	19
3	Spatiotemporal complexity of electroconvection patterns in nematic liquid crystals. Physical Review E, 2015, 92, 062510.	2.1	8
4	Patterns driven by combined ac and dc electric fields in nematic liquid crystals. Physical Review E, 2014, 89, 052507.	2.1	10
5	Optical analysis of spatially periodic patterns in nematic liquid crystals: Diffraction and shadowgraphy. Physical Review E, 2013, 87, 052504.	2.1	11
6	The Role of Flexoelectricity in Pattern Formation. , 2012, , 101-135.		0
7	Strong non-Boussinesq effects near the onset of convection in a fluid near its critical point. Journal of Fluid Mechanics, 2010, 642, 15-48.	3.4	17
8	Nonstandard electroconvection and flexoelectricity in nematic liquid crystals. Physical Review E, 2008, 77, 021705.	2.1	50
9	Self-Organization of Topological Defects due to Applied Constraints. Physical Review Letters, 2008, 101, 254102.	7.8	16
10	Competition and bistability of ordered undulations and undulation chaos in inclined layer convection. Journal of Fluid Mechanics, 2008, 597, 261-282.	3.4	27
11	Pattern Formation in the Rotating Cylindrical Annulus with an Azimuthal Magnetic Field at low Prandtl Numbers. JVC/Journal of Vibration and Control, 2007, 13, 1321-1330.	2.6	5
12	Isotropic and anisotropic electroconvection. Physics Reports, 2007, 448, 115-132.	25.6	46
13	Re-entrant hexagons in non-Boussinesq convection. Journal of Fluid Mechanics, 2006, 548, 341.	3.4	14
14	CONVECTIVE PATTERNS IN LIQUID CRYSTALS DRIVEN BY ELECTRIC FIELD. , 2006, , 55-82.		9
15	Onset of electroconvection of homeotropically aligned nematic liquid crystals. Physical Review E, 2006, 74, 046211.	2.1	11
16	Role of initial conditions in the decay of spatially periodic patterns in a nematic liquid crystal. Physical Review E, 2006, 73, 061705.	2.1	12
17	Defect Chaos and Bursts: Hexagonal Rotating Convection and the Complex Ginzburg-Landau Equation. Physical Review Letters, 2006, 96, 074501.	7.8	10
18	Complex-ordered patterns in shaken convection. Physical Review E, 2005, 71, 066214.	2.1	27

#	Article	IF	Citations
19	An Initial Look at Acceleration-Modulated Thermal Convection. , 2004, , 331-357.		0
20	Pattern formation in vertically oscillated convection. Nonlinearity, 2003, 16, C1-C10.	1.4	13
21	Whirling hexagons and defect chaos in hexagonal non-Boussinesq convection. New Journal of Physics, 2003, 5, 135-135.	2.9	9
22	Spiral-defect chaos: Swift-Hohenberg model versus Boussinesq equations. Physical Review E, 2002, 65, 037302.	2.1	7
23	Rayleigh-BÃ©nard convection with rotation at small Prandtl numbers. Physical Review E, 2002, 65, 056309.	2.1	25
24	Mechanisms of extensive spatiotemporal chaos in Rayleighâ€“BÃ©nard convection. Nature, 2000, 404, 733-736.	27.8	129
25	Superlattice Patterns in Vertically Oscillated Rayleigh-BÃ©nard Convection. Physical Review Letters, 2000, 85, 4281-4284.	7.8	62
26	Recent Developments in Rayleigh-BÃ©nard Convection. Annual Review of Fluid Mechanics, 2000, 32, 709-778.	25.0	826
27	Extended weakly nonlinear theory of planar nematic convection. Physical Review E, 1999, 59, 1747-1769.	2.1	47
28	Convection in the presence of a first-order phase change. Physical Review E, 1999, 60, 539-550.	2.1	5
29	Convection under rotation for Prandtl numbers near 1: KÃ¼ppers-Lortz instability. Physical Review E, 1998, 58, 5821-5833.	2.1	44
30	Rayleigh-BÃ©nard convection in a homeotropically aligned nematic liquid crystal. Physical Review E, 1998, 58, 5885-5897.	2.1	21
31	Dynamics and Selection of Giant Spirals in Rayleigh-BÃ©nard Convection. Physical Review Letters, 1998, 81, 5334-5337.	7.8	59
32	New Symmetry Breaking in Nonlinear Electroconvection of Nematic Liquid Crystals. Physical Review Letters, 1997, 79, 2367-2370.	7.8	67
33	General Mathematical Description of Pattern-Forming Instabilities. Partially Ordered Systems, 1996, , 69-90.	6.5	5
34	Theory of Rayleigh-BÃ©nard convection in planar nematic liquid crystals. Physical Review A, 1992, 45, 7242-7256.	2.5	22
35	Transport coefficients in the mixed state of dirty superconductors. European Physical Journal A, 1974, 269, 253-258.	2.5	11
36	Core structure and low-energy spectrum of isolated vortex lines in clean superconductors atT â‰ªT c. European Physical Journal A, 1974, 269, 59-64.	2.5	232

#	Article	IF	Citations
37	Density of states, entropy, and specific heat for dirty type II superconductors at arbitrary temperature. Journal of Low Temperature Physics, 1974, 17, 71-86.	1.4	46
38	Local structure and thermodynamic behavior of dirty superconductors in the mixed state at arbitrary temperature. Journal of Low Temperature Physics, 1974, 14, 29-51.	1.4	59
39	Local structure and thermodynamic properties of clean type II superconductors nearH c1 at arbitrary temperature. Journal of Low Temperature Physics, 1974, 15, 367-386.	1.4	94
40	Density of states in dirty type II superconductors near Tc. Solid State Communications, 1974, 14, 1251-1252.	1.9	6