

Len M Pismen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7148856/publications.pdf>

Version: 2024-02-01

61
papers

1,857
citations

257101

24
h-index

264894

42
g-index

61
all docs

61
docs citations

61
times ranked

1358
citing authors

#	ARTICLE	IF	CITATIONS
1	Disjoining potential and spreading of thin liquid layers in the diffuse-interface model coupled to hydrodynamics. <i>Physical Review E</i> , 2000, 62, 2480-2492.	0.8	199
2	Breakup of drops in a microfluidic T junction. <i>Physics of Fluids</i> , 2009, 21, .	1.6	176
3	On the motion of suspended particles in stationary homogeneous turbulence. <i>Journal of Fluid Mechanics</i> , 1978, 84, 193.	1.4	119
4	Fingering instability of thin evaporating liquid films. <i>Physical Review E</i> , 2002, 65, 021602.	0.8	95
5	Nonlocal diffuse interface theory of thin films and the moving contact line. <i>Physical Review E</i> , 2001, 64, 021603.	0.8	91
6	Interaction between short-scale Marangoni convection and long-scale deformational instability. <i>Physics of Fluids</i> , 1994, 6, 34-48.	1.6	75
7	Nonlocal description of evaporating drops. <i>Physics of Fluids</i> , 2010, 22, .	1.6	75
8	A continuum model of epithelial spreading. <i>Soft Matter</i> , 2013, 9, 3727.	1.2	75
9	Dynamics of defects in an active nematic layer. <i>Physical Review E</i> , 2013, 88, 050502.	0.8	68
10	Nonlinear evolution and secondary instabilities of Marangoni convection in a liquid-gas system with deformable interface. <i>Journal of Fluid Mechanics</i> , 1997, 341, 317-341.	1.4	64
11	The effect of a steady drift on the dispersion of a particle in turbulent fluid. <i>Journal of Fluid Mechanics</i> , 1979, 94, 369-381.	1.4	61
12	Asymptotic theory for a moving droplet driven by a wettability gradient. <i>Physics of Fluids</i> , 2006, 18, 042104.	1.6	59
13	Mobility and interactions of weakly nonwetting droplets. <i>Physics of Fluids</i> , 2004, 16, 2604-2612.	1.6	43
14	A Cell-Level Biomechanical Model of <i>Drosophila</i> Dorsal Closure. <i>Biophysical Journal</i> , 2012, 103, 2265-2274.	0.2	39
15	Crystallization kinetics and self-induced pinning in cellular patterns. <i>Physical Review E</i> , 2000, 62, R5-R8.	0.8	36
16	Motion of a contact line. <i>Physics of Fluids</i> , 1982, 25, 3.	1.4	34
17	Interaction of Vortices in a Complex Vector Field and Stability of a "Vortex Molecule". <i>Physical Review Letters</i> , 2000, 84, 634-637.	2.9	33
18	Effect of van der Waals Interactions on the Fingering Instability of Thermally Driven Thin Wetting Films. <i>Langmuir</i> , 2001, 17, 3930-3936.	1.6	33

#	ARTICLE	IF	CITATIONS
19	Chemical and mechanical signaling in epithelial spreading. <i>Physical Biology</i> , 2012, 9, 026009.	0.8	32
20	Solvability condition for the moving contact line. <i>Physical Review E</i> , 2008, 78, 056304.	0.8	30
21	Spinodal dewetting in a volatile liquid film. <i>Physical Review E</i> , 2004, 70, 021601.	0.8	29
22	Nonlocal Boundary Dynamics of Traveling Spots in a Reaction-Diffusion System. <i>Physical Review Letters</i> , 2001, 86, 548-551.	2.9	27
23	Modelling planar polarity of epithelia: the role of signal relay in collective cell polarization. <i>Journal of the Royal Society Interface</i> , 2011, 8, 1059-1063.	1.5	26
24	Turing patterns and solitary structures under global control. <i>Journal of Chemical Physics</i> , 1994, 101, 3135-3146.	1.2	25
25	A theoretical model of collective cell polarization and alignment. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 137, 103860.	2.3	25
26	Nonlinear waves and turbulence in Marangoni convection. <i>Physics of Fluids</i> , 1995, 7, 2679-2685.	1.6	23
27	Multiscale modeling of tumor growth induced by circadian rhythm disruption in epithelial tissue. <i>Journal of Biological Physics</i> , 2016, 42, 107-132.	0.7	23
28	Multiscale propagation phenomena in reaction-diffusion systems. <i>Journal of Chemical Physics</i> , 1979, 71, 462-473.	1.2	20
29	The relation of steady evaporating drops fed by an influx and freely evaporating drops. <i>Journal of Engineering Mathematics</i> , 2012, 73, 17-30.	0.6	17
30	Scale Dependence of Contact Line Computations. <i>Mathematical Modelling of Natural Phenomena</i> , 2008, 3, 98-107.	0.9	16
31	Active textiles with Janus fibres. <i>Soft Matter</i> , 2018, 14, 676-680.	1.2	16
32	Perturbation theory for traveling droplets. <i>Physical Review E</i> , 2006, 74, 041605.	0.8	14
33	Reshaping nemato-elastic sheets. <i>European Physical Journal E</i> , 2015, 38, 75.	0.7	14
34	Non linear dynamics of dissipative wave patterns near a bifurcation point. <i>Dynamical Systems</i> , 1986, 1, 97-113.	0.7	13
35	Two-tier symmetry-breaking model of patterns on a catalytic surface. <i>Physical Review E</i> , 1998, 58, 2065-2070.	0.8	13
36	Phase separation and disorder in doped nematic elastomers. <i>European Physical Journal E</i> , 2013, 36, 121.	0.7	10

#	ARTICLE	IF	CITATIONS
37	Metric theory of nematic shells. <i>Physical Review E</i> , 2014, 90, 060501.	0.8	9
38	Multiplicity and stability of concentration waves. Analysis of a model autocatalytic system. <i>Journal of Chemical Physics</i> , 1978, 69, 4149-4158.	1.2	8
39	Biomechanical modeling of invasive breast carcinoma under a dynamic change in cell phenotype: collective migration of large groups of cells. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 723-743.	1.4	8
40	Diffuse-interface effects near a cusp singularity on a free surface. <i>Physical Review E</i> , 2004, 70, 051604.	0.8	7
41	Some singular errors near the contact line singularity, and ways to resolve both. <i>European Physical Journal: Special Topics</i> , 2011, 197, 33-36.	1.2	7
42	Discussion notes on "Some dry facts about dynamic wetting" by Y.D. Shikhmurzaev. <i>European Physical Journal: Special Topics</i> , 2011, 197, 63-65.	1.2	7
43	Viscous dissipation and dynamics of defects in an active nematic interface. <i>European Physical Journal E</i> , 2017, 40, 92.	0.7	7
44	Controlling Marangoni flow directionality: patterning nano-materials using sessile and sliding volatile droplets. <i>European Physical Journal: Special Topics</i> , 2017, 226, 1307-1324.	1.2	6
45	Nematicoelastic crawlers. <i>Physical Review E</i> , 2016, 93, 022703.	0.8	5
46	Chemocapillary instabilities of a contact line. <i>Physical Review E</i> , 2010, 81, 026307.	0.8	4
47	Genesis of two-dimensional patterns in cross-gradient fields. <i>Physical Review E</i> , 2011, 84, 061917.	0.8	4
48	Flexible helical yarn swimmers. <i>European Physical Journal E</i> , 2016, 39, 87.	0.7	4
49	Textures and shapes in nematic elastomers under the action of dopant concentration gradients. <i>Soft Matter</i> , 2017, 13, 2886-2892.	1.2	4
50	Challenges in nanoscale physics of wetting phenomena. <i>European Physical Journal: Special Topics</i> , 2020, 229, 1735-1738.	1.2	4
51	Ripening of surface phases coupled with oscillatory dynamics and self-induced spatial chaos through surface roughening. <i>Chaos</i> , 1999, 9, 55-61.	1.0	3
52	Strain dependence of cytoskeleton elasticity. <i>Soft Matter</i> , 2012, 8, 9193.	1.2	3
53	Physicists probing active media: What is the measure of success?. <i>European Physical Journal: Special Topics</i> , 2014, 223, 1243-1246.	1.2	3
54	Chemo-mechanical modeling of tumor growth in elastic epithelial tissue. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	3

#	ARTICLE	IF	CITATIONS
55	Reshaping of a Janus ring. <i>Physical Review E</i> , 2018, 97, 062705.	0.8	3
56	Shape-morphing architectures actuated by Janus fibers. <i>Soft Matter</i> , 2020, 16, 2086-2092.	1.2	3
57	Spontaneous nematic polarisation and deformation in active media. <i>European Physical Journal: Special Topics</i> , 2014, 223, 1247-1257.	1.2	2
58	Stressed states and persistent defects in confined nematic elastica. <i>Nonlinearity</i> , 2015, 28, 3957-3971.	0.6	2
59	Programmable filaments and textiles. <i>Physical Review Materials</i> , 2019, 3, .	0.9	2
60	Mathematical modeling of carcinoma growth with a dynamic change in the phenotype of cells. <i>Computer Research and Modeling</i> , 2018, 10, 879-902.	0.2	1
61	Mathematical Modeling of Invasive Carcinoma: Biomechanics of Small Groups of Cancer Cells. <i>Journal of Physics: Conference Series</i> , 2021, 1945, 012025.	0.3	0