George Karapetsas

List of Publications by Year in descending order

41 papers	1,242 citations	361045 20 h-index	360668 35 g-index
41 all docs	41 docs citations	41 times ranked	941 citing authors

#	Article	IF	Citations
1	Stability analysis of a Newtonian film flow over hydrophobic microtextured substrates. Physical Review Fluids, 2022, 7, .	1.0	4
2	Open-source finite volume solvers for multiphase (n-phase) flows involving either Newtonian or non-Newtonian complex fluids. Computers and Fluids, 2022, 245, 105590.	1.3	4
3	Spreading and retraction dynamics of sessile evaporating droplets comprising volatile binary mixtures. Journal of Fluid Mechanics, 2021, 907, .	1.4	18
4	Dynamics of hygroscopic aqueous solution droplets undergoing evaporation or vapour absorption. Journal of Fluid Mechanics, 2021, 912, .	1.4	13
5	Stability analysis of viscoelastic film flows over an inclined substrate with rectangular trenches. Journal of Fluid Mechanics, 2021, 915, .	1.4	4
6	Stability of slowly evaporating thin liquid films of binary mixtures. Physical Review Fluids, 2020, 5, .	1.0	4
7	Dynamics and motion of a gas bubble in aÂviscoplastic medium under acoustic excitation. Journal of Fluid Mechanics, 2019, 865, 381-413.	1.4	11
8	Non-isothermal bubble rise dynamics in a self-rewetting fluid: three-dimensional effects. Journal of Fluid Mechanics, 2019, 858, 689-713.	1.4	18
9	Viscoelastic film flows over an inclined substrate with sinusoidal topography. I. Steady state. Physical Review Fluids, 2019, 4, .	1.0	10
10	Viscoelastic film flows over an inclined substrate with sinusoidal topography. II. Linear stability analysis. Physical Review Fluids, 2019, 4, .	1.0	7
11	Effect of substrate topography, material wettability and dielectric thickness on reversible electrowetting. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 555, 595-604.	2.3	13
12	Transient flow of gravity-driven viscous films over 3D patterned substrates: conditions leading to Wenzel, Cassie and intermediate states. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	13
13	On the degree of wetting of a slit by a liquid film flowing along an inclined plane. Journal of Fluid Mechanics, 2017, 820, 5-41.	1.4	10
14	Thermocapillary Droplet Actuation: Effect of Solid Structure and Wettability. Langmuir, 2017, 33, 10838-10850.	1.6	38
15	Steady viscoelastic film flow over 2D Topography: II. The effect of capillarity, inertia and substrate geometry. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 201-214.	1.0	15
16	How asymmetric surfaces induce directional droplet motion. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 511, 180-189.	2.3	23
17	Evaporation of Sessile Droplets Laden with Particles and Insoluble Surfactants. Langmuir, 2016, 32, 6871-6881.	1.6	88
18	Efficient modelling of droplet dynamics on complex surfaces. Journal of Physics Condensed Matter, 2016, 28, 085101.	0.7	32

#	Article	IF	Citations
19	Surfactant enhanced spreading of liquid drops on solid surfaces. , 2015, , .		0
20	Bubble rise dynamics in a viscoplastic material. Journal of Non-Newtonian Fluid Mechanics, 2015, 222, 217-226.	1.0	51
21	Non-linear dynamics of a viscoelastic film subjected to a spatially periodic electric field. Journal of Non-Newtonian Fluid Mechanics, 2015, 217, 1-13.	1.0	7
22	Non-isothermal bubble rise: non-monotonic dependence of surface tension on temperature. Journal of Fluid Mechanics, 2015, 763, 82-108.	1.4	39
23	On the origin of extrusion instabilities: Linear stability analysis of the viscoelastic die swell. Journal of Non-Newtonian Fluid Mechanics, 2015, 224, 61-77.	1.0	32
24	Numerical simulation of pressure-driven displacement of a viscoplastic material by a Newtonian fluid using the lattice Boltzmann method. European Journal of Mechanics, B/Fluids, 2015, 49, 197-207.	1.2	27
25	On phase change in Marangoni-driven flows and its effects on the hydrothermal-wave instabilities. Physics of Fluids, 2014, 26, .	1.6	31
26	Thermocapillary-Driven Motion of a Sessile Drop: Effect of Non-Monotonic Dependence of Surface Tension on Temperature. Langmuir, 2014, 30, 4310-4321.	1.6	86
27	The role of surfactants on the mechanism of the long-wave instability in liquid film flows. Journal of Fluid Mechanics, 2014, 741, 139-155.	1.4	25
28	On the stick-slip flow from slit and cylindrical dies of a Phan-Thien and Tanner fluid model. II. Linear stability analysis. Physics of Fluids, 2013, 25, 093105.	1.6	18
29	Some experiences with the slip boundary condition in viscous and viscoelastic flows. Journal of Non-Newtonian Fluid Mechanics, 2013, 198, 96-108.	1.0	8
30	The primary instability of falling films in the presence of soluble surfactants. Journal of Fluid Mechanics, 2013, 729, 123-150.	1.4	30
31	Linear and nonlinear stability of hydrothermal waves in planar liquid layers driven by thermocapillarity. Physics of Fluids, 2013, 25, .	1.6	28
32	Effect of Contact Line Dynamics on the Thermocapillary Motion of a Droplet on an Inclined Plate. Langmuir, 2013, 29, 8892-8906.	1.6	70
33	The Free (Open) Boundary Condition at inflow boundaries. Journal of Non-Newtonian Fluid Mechanics, 2012, 187-188, 16-31.	1.0	10
34	Convective Rolls and Hydrothermal Waves in Evaporating Sessile Drops. Langmuir, 2012, 28, 11433-11439.	1.6	82
35	On surfactant-enhanced spreading and superspreading of liquid drops on solid surfaces. Journal of Fluid Mechanics, 2011, 670, 5-37.	1.4	85
36	Surfactant-driven dynamics of liquid lenses. Physics of Fluids, 2011, 23, .	1.6	44

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37	On the stick-slip flow from slit and cylindrical dies of a Phan-Thien and Tanner fluid model. I. Steady state. Physics of Fluids, 2009, 21, .	1.6	12
38	Injection of a viscoplastic material inside a tube or between two parallel disks: Conditions for wall detachment of the advancing front. Journal of Rheology, 2009, 53, 1155-1191.	1.3	20
39	Steady extrusion of viscoelastic materials from an annular die. Journal of Non-Newtonian Fluid Mechanics, 2008, 154, 136-152.	1.0	29
40	Steady bubble rise and deformation in Newtonian and viscoplastic fluids and conditions for bubble entrapment. Journal of Fluid Mechanics, 2008, 601, 123-164.	1.4	135
41	Transient squeeze flow of viscoplastic materials. Journal of Non-Newtonian Fluid Mechanics, 2006, 133, 35-56.	1.0	48