Shelley L Anna

List of Publications by Year
in descending order

48 papers	5,610 citations	236612 25 h-index	223531 46 g-index
49 all docs	49 docs citations	49 times ranked	4993 citing authors

#	Article	IF	Citations
1	Formation of dispersions using â€œflow focusingâ€•in microchannels. Applied Physics Letters, 2003, 82, 364-366.	1.5	1,998
2	Microfluidic methods for generating continuous droplet streams. Journal Physics D: Applied Physics, 2007, 40, R319-R336.	1.3	677
3	Elasto-capillary thinning and breakup of model elastic liquids. Journal of Rheology, 2001, 45, 115-138.	1.3	443
4	Droplets and Bubbles in Microfluidic Devices. Annual Review of Fluid Mechanics, 2016, 48, 285-309.	10.8	394
5	Microscale tipstreaming in a microfluidic flow focusing device. Physics of Fluids, 2006, 18, 121512.	1.6	322
6	Experimental observations of the squeezing-to-dripping transition in T-shaped microfluidic junctions. Physical Review E, 2008, 78, 036317.	0.8	291
7	Role of geometry and fluid properties in droplet and thread formation processes in planar flow focusing. Physics of Fluids, 2009, 21, .	1.6	193
8	An interlaboratory comparison of measurements from filament-stretching rheometers using common test fluids. Journal of Rheology, 2001, 45, 83-114.	1.3	142
9	A Microtensiometer To Probe the Effect of Radius of Curvature on Surfactant Transport to a Spherical Interface. Langmuir, 2010, 26, 13310-13319.	1.6	103
10	Interfacial Dynamics and Rheology of Polymer-Grafted Nanoparticles at Airâ€“Water and Xyleneâ€“Water Interfaces. Langmuir, 2012, 28, 8052-8063.	1.6	101
11	Diffusion-limited adsorption to a spherical geometry: The impact of curvature and competitive time scales. Physical Review E, 2010, 82, 011604.	0.8	83
12	A non-gradient based algorithm for the determination of surface tension from a pendant drop: Application to low Bond number drop shapes. Journal of Colloid and Interface Science, 2009, 333, 557-562.	5.0	64
13	Role of Surface Anchoring and Geometric Confinement on Focal Conic Textures in Smectic-A Liquid Crystals. Langmuir, 2006, 22, 9986-9993.	1.6	59
14	Using bulk convection in a microtensiometer to approach kinetic-limited surfactant dynamics at fluidâ€“fluid interfaces. Journal of Colloid and Interface Science, 2012, 372, 183-191.	5.0	59
15	Competition Between Viscoelasticity and Surfactant Dynamics in Flow Focusing Microfluidics. Macromolecular Materials and Engineering, 2011, 296, 203-213.	1.7	46
16	The importance of experimental design on measurement of dynamic interfacial tension and interfacial rheology in diffusion-limited surfactant systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 467, 135-142.	2.3	46
17	Effect of surfactant tail length and ionic strength on the interfacial properties of nanoparticleâ€“surfactant complexes. Soft Matter, 2018, 14, 112-123.	1.2	44
18	Probing timescales for colloidal particle adsorption using slug bubbles in rectangular microchannels. Soft Matter, 2012, 8, 10759.	1.2	40

#	Article	IF	Citations
19	On controlling the kinematics of a filament stretching rheometer using a real-time active control mechanism. Journal of Non-Newtonian Fluid Mechanics, 1999, 87, 307-335.	1.0	38
20	Regular perturbation analysis of small amplitude oscillatory dilatation of an interface in a capillary pressure tensiometer. Journal of Rheology, 2015, 59, 85-117.	1.3	37
21	Sequential Adsorption of an Irreversibly Adsorbed Nonionic Surfactant and an Anionic Surfactant at an Oil/Aqueous Interface. Langmuir, 2015, 31, 4063-4071.	1.6	35
22	Passive breakup of viscoelastic droplets and filament self-thinning at a microfluidic T-junction. Journal of Rheology, 2009, 53, 663-683.	1.3	28
23	Predicting conditions for microscale surfactant mediated tipstreaming. Physics of Fluids, 2012, 24, .	1.6	28
24	The effect of alkane tail length of C E8 surfactants on transport to the silicone oilâ€“water interface. Journal of Colloid and Interface Science, 2011, 355, 231-236.	5.0	27
25	A compact dual-crystal modulated birefringence-measurement system for microgravity applications. Measurement Science and Technology, 1999, 10, 946-955.	1.4	26
26	A criterion to assess the impact of confined volumes on surfactant transport to liquidâ€“fluid interfaces. Soft Matter, 2012, 8, 8917.	1.2	26
27	Controlling thread formation during tipstreaming through an active feedback control loop. Lab on A Chip, 2013, 13, 4534.	3.1	22
28	Effect of a controlled pre-deformation history on extensional viscosity of dilute polymer solutions. Rheologica Acta, 2008, 47, 841-859.	1.1	21
29	Highly uniform micro-cavity arrays in flexible elastomer film. Soft Matter, 2009, 5, 743.	1.2	21
30	Tuning bubbly structures in microchannels. Biomicrofluidics, 2012, 6, 22004-2200418.	1.2	21
31	Formation of a Rigid Hydrophobin Film and Disruption by an Anionic Surfactant at an Air/Water Interface. Langmuir, 2016, 32, 5542-5551.	1.6	20
32	Insoluble layer deposition and dilatational rheology at a microscale spherical cap interface. Soft Matter, 2016, 12, 7038-7055.	1.2	18
33	Development and characterization of a â€œstore and createâ€•microfluidic device to determine the heterogeneous freezing properties of ice nucleating particles. Aerosol Science and Technology, 2020, 54, 79-93.	1.5	18
34	Formation and ordering of topological defect arrays produced by dilatational strain and shear flow in smectic-Aliquid crystals. Physical Review E, 2012, 85, 011701.	0.8	17
35	Two-Phase Flow in Porous Media: Predicting Its Dependence on Capillary Number and Viscosity Ratio. Transport in Porous Media, 2011, 86, 243-259.	1.2	15
36	Stability of a compound sessile drop at the axisymmetric configuration. Journal of Colloid and Interface Science, 2016, 462, 88-99.	5.0	15

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37	Microfluidic Droplet-Based Tool To Determine Phase Behavior of a Fluid System with High Composition Resolution. Journal of Physical Chemistry B, 2018, 122, 4067-4076.	1.2	13
38	Gravity driven current during the coalescence of two sessile drops. Physics of Fluids, 2015, 27, .	1.6	12
39	Comparative microfluidic screening of amino acid salt solutions for post-combustion CO2 capture. International Journal of Greenhouse Gas Control, 2015, 43, 189-197.	2.3	11
40	Formation and elasticity of membranes of the class II hydrophobin Cerato-ulmin at oil-water interfaces. Colloids and Surfaces B: Biointerfaces, 2018, 164, 98-106.	2.5	11
41	Droplet-based characterization of surfactant efficacy in colloidal stabilization of carbon black in nonpolar solvents. Journal of Colloid and Interface Science, 2017, 493, 265-274.	5.0	8
42	Interaction of toroidal focal conic defects with shear flow. Soft Matter, 2012, 8, 6698.	1.2	5
43	Characterization of Ferromagnetic Nanoparticles Produced by A Carbon Arc. Materials Research Society Symposia Proceedings, 1994, 359, 35.	0.1	3
44	Impact of Viscosity Ratio on the Dynamics of Droplet Breakup in a Microfluidic Flow Focusing Device. AIP Conference Proceedings, 2008, , .	0.3	2
45	Numerical simulation of droplet formation in a microchannel device. International Journal of Multiphysics, 2013, 7, 271-286.	0.3	2
46	Modeling and Simulation of a Rollerball Microfluidic Device. , 2009, , .		1
47	A Microfluidic Tensiometer. , 2004, , 431.		0
48	Droplet Breakup in Shear and Elongation Dominated Flows in Microfluidic Devices. , 2005, , 669.		0