Omar K Matar

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2648717/publications.pdf

Version: 2024-02-01

246 papers	8,650 citations	41344 49 h-index	66911 78 g-index
249 all docs	249 docs citations	249 times ranked	5432 citing authors

#	Article	IF	Citations
1	Current advances in liquidâ€“liquid mixing in static mixers: A review. Chemical Engineering Research and Design, 2022, 177, 694-731.	5.6	42
2	Adsorption of Hydrolysed Polyacrylamide onto Calcium Carbonate. Polymers, 2022, 14, 405.	4.5	13
3	Linear stability analysis of Taylor bubble motion in downward flowing liquids in vertical tubes. Journal of Fluid Mechanics, 2022, 941, .	3.4	8
4	Drying-induced stresses in poroelastic drops on rigid substrates. Physical Review E, 2022, 105, .	2.1	2
5	An AI-based non-intrusive reduced-order model for extended domains applied to multiphase flow in pipes. Physics of Fluids, 2022, 34, .	4.0	21
6	Multiphase flow applications of nonintrusive reduced-order models with Gaussian process emulation. Data-Centric Engineering, 2022, 3, .	2.3	2
7	Experimental investigations of upward-inclined stratified oil-water flows using simultaneous two-line planar laser-induced fluorescence and particle velocimetry. International Journal of Multiphase Flow, 2021, 135, 103502.	3.4	13
8	Three-dimensional dynamics of falling films in the presence of insoluble surfactants. Journal of Fluid Mechanics, 2021, 906, .	3.4	7
9	Spreading and retraction dynamics of sessile evaporating droplets comprising volatile binary mixtures. Journal of Fluid Mechanics, 2021, 907, .	3.4	18
10	Dynamics of a surfactant-laden bubble bursting through an interface. Journal of Fluid Mechanics, 2021, 911, .	3.4	25
11	Real-time monitoring and hydrodynamic scaling of shear exfoliated graphene. 2D Materials, 2021, 8, 025029.	4.4	10
12	Surface Topography Effects on Pool Boiling via Non-equilibrium Molecular Dynamics Simulations. Langmuir, 2021, 37, 5731-5744.	3.5	19
13	Interaction of two non-coalescing bubbles rising in a non-isothermal self-rewetting fluid. European Journal of Mechanics, B/Fluids, 2021, 87, 103-112.	2.5	2
14	Direct numerical simulations of transient turbulent jets: vortex-interface interactions. Journal of Fluid Mechanics, 2021, 922, .	3.4	18
15	An experimental study of the thermohydraulic characteristics of flow boiling in horizontal pipes: Linking spatiotemporally resolved and integral measurements. Applied Thermal Engineering, 2021, 194, 117085.	6.0	12
16	Role of surfactant-induced Marangoni stresses in drop-interface coalescence. Journal of Fluid Mechanics, 2021, 925, .	3.4	20
17	Simultaneous laser-induced fluorescence and capacitance probe measurement of downwards annular gas-liquid flows. International Journal of Multiphase Flow, 2021, 142, 103665.	3.4	19
18	Prediction of multiphase flows with sharp interfaces using anisotropic mesh optimisation. Advances in Engineering Software, 2021, 160, 103044.	3.8	2

#	Article	IF	Citations
19	A combined experimental and computational study of phase-change dynamics and flow inside a sessile water droplet freezing due to interfacial heat transfer. International Journal of Heat and Mass Transfer, 2021, 180, 121803.	4.8	9
20	Continuum-scale modelling of polymer blends using the Cahnâ€“Hilliard equation: transport and thermodynamics. Soft Matter, 2021, 17, 5645-5665.	2.7	15
21	Numerical simulations of a falling film on the inner surface of a rotating cylinder. Physical Review E, 2020, 102, 043106.	2.1	0
22	Data-driven surrogate modeling and benchmarking for process equipment. Data-Centric Engineering, 2020, 1, .	2.3	5
23	Modelling the reservoir-to-tubing pressure drop imposed by multiple autonomous inflow control devices installed in a single completion joint in a horizontal well. Journal of Petroleum Science and Engineering, 2020, 189, 106991.	4.2	1
24	Numerical study of the impact of the channel shape on microchannel boiling heat transfer. International Journal of Heat and Mass Transfer, 2020, 150, 119322.	4.8	30
25	A control volume finite element method for threeâ€dimensional threeâ€phase flows. International Journal for Numerical Methods in Fluids, 2020, 92, 765-784.	1.6	6
26	Numerical simulation, clustering, and prediction of multicomponent polymer precipitation. Data-Centric Engineering, 2020, 1, .	2.3	7
27	Dynamics of retracting surfactant-laden ligaments at intermediate Ohnesorge number. Physical Review Fluids, 2020, 5, .	2.5	20
28	Effect of surfactant on elongated bubbles in capillary tubes at high Reynolds number. Physical Review Fluids, 2020, 5, .	2.5	18
29	Single-bubble dynamics in nanopores: Transition between homogeneous and heterogeneous nucleation. Physical Review Research, 2020, 2, .	3.6	9
30	Stability of slowly evaporating thin liquid films of binary mixtures. Physical Review Fluids, 2020, 5, .	2.5	4
31	Rico and the jets: Direct numerical simulations of turbulent liquid jets. Physical Review Fluids, 2020, 5, .	2.5	3
32	Mixing viscoplastic fluids in stirred vessels over multiple scales: A combined experimental and CFD approach. Chemical Engineering Science, 2019, 208, 115129.	3.8	26
33	Fundamental Study of Wax Deposition in Crude Oil Flows in a Pipeline via Interface-Resolved Numerical Simulations. Industrial & Engineering Chemistry Research, 2019, 58, 21797-21816.	3.7	14
34	Molecular Dynamics Simulation of the Superspreading of Surfactant-Laden Droplets. A Review. Fluids, 2019, 4, 176.	1.7	10
35	Fluid-solid phase transition of n-alkane mixtures: Coarse-grained molecular dynamics simulations and diffusion-ordered spectroscopy nuclear magnetic resonance. Scientific Reports, 2019, 9, 1002.	3.3	24
36	Non-isothermal bubble rise dynamics in a self-rewetting fluid: three-dimensional effects. Journal of Fluid Mechanics, 2019, 858, 689-713.	3.4	18

#	Article	IF	Citations
37	Dynamics of long gas bubbles rising in a vertical tube in a cocurrent liquid flow. Physical Review Fluids, 2019, 4, .	2.5	18
38	Thermocapillary and electrohydrodynamic effects on the stability of dynamic contact lines. Physical Review Fluids, 2019, 4, .	2.5	7
39	Towards scaleâ€up of graphene production via nonoxidizing liquid exfoliation methods. AICHE Journal, 2018, 64, 3246-3276.	3.6	32
40	A hybrid interface tracking â€“ level set technique for multiphase flow with soluble surfactant. Journal of Computational Physics, 2018, 359, 409-435.	3.8	37
41	Dynamics of liquidâ€“liquid flows in horizontal pipes using simultaneous twoâ€“line planar laserâ€“induced fluorescence and particle velocimetry. International Journal of Multiphase Flow, 2018, 101, 47-63.	3.4	23
42	Impact of droplets on immiscible liquid films. Soft Matter, 2018, 14, 1540-1551.	2.7	55
43	Moving Contact Lines: Linking Molecular Dynamics and Continuum-Scale Modeling. Langmuir, 2018, 34, 12501-12518.	3.5	26
44	The shape and motion of gas bubbles in a liquid flowing through a thin annulus. Journal of Fluid Mechanics, 2018, 855, 1017-1039.	3.4	8
45	Simulation of immiscible liquidâ€“liquid flows in complex microchannel geometries using a front-tracking scheme. Microfluidics and Nanofluidics, 2018, 22, 126.	2.2	11
46	Bulk viscosity of molecular fluids. Journal of Chemical Physics, 2018, 148, 174504.	3.0	59
47	Film Control to Study Contributions of Waves to Droplet Impact Dynamics on Thin Flowing Liquid Films. Journal of Visualized Experiments, 2018, , .	0.3	0
48	Dynamics of spreading thixotropic droplets. Journal of Non-Newtonian Fluid Mechanics, 2017, 240, 1-14.	2.4	5
49	Sub-100 nm wrinkling of polydimethylsiloxane by double frontal oxidation. Nanoscale, 2017, 9, 2030-2037.	5.6	25
50	Numerical study of three-dimensional droplet impact on a flowing liquid film in annular two-phase flow. Chemical Engineering Science, 2017, 166, 303-312.	3.8	34
51	Reduced Models for Thick Liquid Layers with Inertia on Highly Curved Substrates. SIAM Journal on Applied Mathematics, 2017, 77, 881-904.	1.8	7
52	Bulk advection and interfacial flows in the binary coalescence of surfactant-laden and surfactant-free drops. Soft Matter, 2017, 13, 4616-4628.	2.7	25
53	Dynamics and universal scaling law in geometrically-controlled sessile drop evaporation. Nature Communications, 2017, 8, 14783.	12.8	106
54	Droplet impact on flowing liquid films with inlet forcing: the splashing regime. Soft Matter, 2017, 13, 7473-7485.	2.7	14

#	Article	IF	Citations
55	Numerical simulation of three-dimensional breaking waves and its interaction with a vertical circular cylinder. Journal of Hydrodynamics, 2017, 29, 800-804.	3.2	11
56	Doubly excited pulse waves on thin liquid films flowing down an inclined plane: An experimental and numerical study. Physical Review E, 2017, 96, 013118.	2.1	11
57	Preface to the inaugural â€œPerspectivesâ€•article entitled â€œThe importance of being thinâ€•by Stephen H. Davis. Journal of Engineering Mathematics, 2017, 105, 1-2.	1.2	0
58	Impact of Droplets on Liquid Films in the Presence of Surfactant. Langmuir, 2017, 33, 12140-12148.	3.5	27
59	Monomer diffusion into static and evolving polymer networks during frontal photopolymerisation. Soft Matter, 2017, 13, 9199-9210.	2.7	12
60	Dynamics and stability of three-dimensional ferrofluid films in a magnetic field. Journal of Engineering Mathematics, 2017, 107, 253-268.	1.2	7
61	Preface to the special issue celebrating 50 years of the Journal of Engineering Mathematics. Journal of Engineering Mathematics, 2017, 107, 1-4.	1.2	0
62	A minimal model for solvent evaporation and absorption in thin films. Journal of Colloid and Interface Science, 2017, 488, 61-71.	9.4	16
63	On the role of buoyancy-driven instabilities in horizontal liquidâ€“liquid flow. International Journal of Multiphase Flow, 2017, 89, 123-135.	3.4	16
64	A multiscale approach to interpret and predict the apparent slip velocity at liquid-liquid interfaces. Journal of Physics: Conference Series, 2017, 923, 012003.	0.4	2
65	Physical insights into the bloodâ€“brain barrier translocation mechanisms. Physical Biology, 2017, 14, 041001.	1.8	27
66	Slip at liquid-liquid interfaces. Physical Review Fluids, 2017, 2, .	2.5	19
67	Accurate low-order modeling of electrified falling films at moderate Reynolds number. Physical Review Fluids, 2017, 2, .	2.5	13
68	Multi-Physics Modeling of Light-Limited Microalgae Growth in Raceway Ponds. IFAC-PapersOnLine, 2016, 49, 324-329.	0.9	10
69	Surface waves on a soft viscoelastic layer produced by an oscillating microbubble. Soft Matter, 2016, 12, 4247-4256.	2.7	8
70	Optimizing Water Transport through Graphene-Based Membranes: Insights from Nonequilibrium Molecular Dynamics. ACS Applied Materials & Interfaces, 2016, 8, 12330-12336.	8.0	110
71	A balanced-force control volume finite element method for interfacial flows with surface tension using adaptive anisotropic unstructured meshes. Computers and Fluids, 2016, 138, 38-50.	2.5	34
72	A Langevin model for fluctuating contact angle behaviour parametrised using molecular dynamics. Soft Matter, 2016, 12, 9604-9615.	2.7	18

#	Article	IF	Citations
73	Evaporation of Sessile Droplets Laden with Particles and Insoluble Surfactants. Langmuir, 2016, 32, 6871-6881.	3.5	88
74	Compressive advection and multiâ€component methods for interfaceâ€capturing. International Journal for Numerical Methods in Fluids, 2016, 80, 256-282.	1.6	27
75	Wrinkling Measurement of the Mechanical Properties of Drying Salt Thin Films. Langmuir, 2016, 32, 2199-2207.	3.5	11
76	The effect of adsorption kinetics on the rate of surfactant-enhanced spreading. Soft Matter, 2016, 12, 1009-1013.	2.7	29
77	Impact of droplets on inclined flowing liquid films. Physical Review E, 2015, 92, 023032.	2.1	43
78	Role of heat generation and thermal diffusion during frontal photopolymerization. Physical Review E, 2015, 92, 022403.	2.1	20
79	Thin viscous ferrofluid film in a magnetic field. Physics of Fluids, 2015, 27, 092102.	4.0	10
80	Surfactant enhanced spreading of liquid drops on solid surfaces. , 2015, , .		0
81	Numerical Modelling of Melt Behaviour in the Lower Vessel Head of a Nuclear Reactor. Procedia IUTAM, 2015, 15, 72-77.	1.2	0
82	Numerical Modelling of Debris Bed Water Quenching. Procedia IUTAM, 2015, 15, 64-71.	1.2	0
83	Tracking the deformation of a tissue phantom induced by ultrasound-driven bubble oscillations. Journal of Physics: Conference Series, 2015, 656, 012006.	0.4	1
84	A Unified Approach for Patterning via Frontal Photopolymerization. Advanced Materials, 2015, 27, 6118-6124.	21.0	55
85	Bubble rise dynamics in a viscoplastic material. Journal of Non-Newtonian Fluid Mechanics, 2015, 222, 217-226.	2.4	51
86	Electrostatic Suppression of the â€œCoffee-stain Effectâ€• Procedia IUTAM, 2015, 15, 172-177.	1.2	2
87	Frontal vitrification of PDMS using air plasma and consequences for surface wrinkling. Soft Matter, 2015, 11, 3067-3075.	2.7	46
88	Superspreading: Mechanisms and Molecular Design. Langmuir, 2015, 31, 2304-2309.	3.5	59
89	Controlling frontal photopolymerization with optical attenuation and mass diffusion. Physical Review E, 2015, 91, 062402.	2.1	20
90	Non-isothermal bubble rise: non-monotonic dependence of surface tension on temperature. Journal of Fluid Mechanics, 2015, 763, 82-108.	3.4	39

#	Article	IF	Citations
91	Evaporation of sessile drops: a three-dimensional approach. Journal of Fluid Mechanics, 2015, 772, 705-739.	3.4	96
92	Crude Oil Fouling: Fluid Dynamics, Reactions and Phase Change. Procedia IUTAM, 2015, 15, 186-193.	1.2	11
93	Stability and Two-phase Dynamics of Evaporating Marangoni-driven Flows in Laterally-heated Liquid Layers and Sessile Droplets. Procedia IUTAM, 2015, 15, 116-123.	1.2	1
94	Modelling the superspreading of surfactant-laden droplets with computer simulation. Soft Matter, 2015, 11, 9254-9261.	2.7	37
95	Interfacial Profile and Propagation of Frontal Photopolymerization Waves. Macromolecules, 2015, 48, 198-205.	4.8	52
96	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.	2.5	27
97	Fluoro- vs hydrocarbon surfactants: Why do they differ in wetting performance?. Advances in Colloid and Interface Science, 2014, 210, 65-71.	14.7	147
98	On phase change in Marangoni-driven flows and its effects on the hydrothermal-wave instabilities. Physics of Fluids, 2014, 26, .	4.0	31
99	An experimental characterization of downwards gasâ€“liquid annular flow by laser-induced fluorescence: Flow regimes and film statistics. International Journal of Multiphase Flow, 2014, 60, 87-102.	3.4	116
100	Control volume finite element modelling of segregation of sand and granular flows in fluidized beds. International Journal of Multiphase Flow, 2014, 67, 191-199.	3.4	5
101	Adaptive unstructured mesh modelling of multiphase flows. International Journal of Multiphase Flow, 2014, 67, 104-110.	3.4	31
102	Modeling the effect of surface forces on the equilibrium liquid profile of a capillary meniscus. Soft Matter, 2014, 10, 6024-6037.	2.7	13
103	Thermocapillary-Driven Motion of a Sessile Drop: Effect of Non-Monotonic Dependence of Surface Tension on Temperature. Langmuir, 2014, 30, 4310-4321.	3.5	86
104	Two- and three-phase horizontal slug flow simulations using an interface-capturing compositional approach. International Journal of Multiphase Flow, 2014, 67, 85-91.	3.4	29
105	Influence of the Disjoining Pressure on the Equilibrium Interfacial Profile in Transition Zone Between a Thin Film and a Capillary Meniscus. Colloids and Interface Science Communications, 2014, 1, 18-22.	4.1	28
106	Experimental and Theoretical Study of the Emergence of Single Chirality in Attrition-Enhanced Deracemization. Crystal Growth and Design, 2014, 14, 928-937.	3.0	29
107	An ensemble method for sensor optimisation applied to falling liquid films. International Journal of Multiphase Flow, 2014, 67, 153-161.	3.4	2
108	Electrostatic Suppression of the â€œCoffee Stain Effectâ€• Langmuir, 2014, 30, 5849-5858.	3.5	53

#	Article	IF	Citations
109	Insights into surfactant-assisted superspreading. Current Opinion in Colloid and Interface Science, 2014, 19, 283-289.	7.4	22
110	Modelling of Fundamental Transfer Processes in Crude-Oil Fouling. , 2014, , .		5
111	A REVIEW OF LIQUID-LIQUID FLOW PATTERNS IN HORIZONTAL AND SLIGHTLY INCLINED PIPES. Multiphase Science and Technology, 2014, 26, 171-198.	0.5	15
112	Linear and nonlinear stability of hydrothermal waves in planar liquid layers driven by thermocapillarity. Physics of Fluids, 2013, 25, .	4.0	28
113	Electrostatically controlled large-amplitude, non-axisymmetric waves in thin film flows down a cylinder. Journal of Fluid Mechanics, 2013, 736, .	3.4	6
114	Disturbance wave development in two-phase gasâ€“liquid upwards vertical annular flow. International Journal of Multiphase Flow, 2013, 55, 111-129.	3.4	130
115	Effect of Contact Line Dynamics on the Thermocapillary Motion of a Droplet on an Inclined Plate. Langmuir, 2013, 29, 8892-8906.	3.5	70
116	An experimental investigation of fingering instabilities and growth dynamics in inclined counter-current gas-liquid channel flow. Physics of Fluids, 2013, 25, 122104.	4.0	4
117	Electrified coating flows on vertical fibres: enhancement or suppression of interfacial dynamics. Journal of Fluid Mechanics, 2013, 735, 427-456.	3.4	16
118	Nonequilibrium hysteresis and Wien effect water dissociation at a bipolar membrane. Physical Review E, 2012, 86, 056104.	2.1	22
119	Surface Tension-Induced Gel Fracture. Part 2. Fracture of Gelatin Gels. Langmuir, 2012, 28, 8017-8025.	3.5	13
120	Surface Tension-Induced Gel Fracture. Part 1. Fracture of Agar Gels. Langmuir, 2012, 28, 7197-7211.	3.5	18
121	Convective Rolls and Hydrothermal Waves in Evaporating Sessile Drops. Langmuir, 2012, 28, 11433-11439.	3.5	82
122	Compound viscous thread with electrostatic and electrokinetic effects. Journal of Fluid Mechanics, 2012, 701, 171-200.	3.4	6
123	Dynamics of a climbing surfactant-laden film II: Stability. Journal of Colloid and Interface Science, 2012, 371, 121-135.	9.4	9
124	Dynamics of a climbing surfactant-laden film â€“ I: Base-state flow. Journal of Colloid and Interface Science, 2012, 371, 107-120.	9.4	4
125	Characterisation of downwards co-current gas-liquid annular flows. , 2012, , .		6
126	Fouling in Crude Oil Preheat Trains: A Systematic Solution to an Old Problem. Heat Transfer Engineering, 2011, 32, 197-215.	1.9	62

#	Article	IF	Citations
127	On surfactant-enhanced spreading and superspreading of liquid drops on solid surfaces. Journal of Fluid Mechanics, 2011, 670, 5-37.	3.4	85
128	Three-dimensional convective and absolute instabilities in pressure-driven two-layer channel flow. International Journal of Multiphase Flow, 2011, 37, 987-993.	3.4	20
129	Two-fluid pressure-driven channel flow with wall deposition and ageing effects. Journal of Engineering Mathematics, 2011, 71, 109-130.	1.2	7
130	Interfacial instability in turbulent flow over a liquid film in a channel. International Journal of Multiphase Flow, 2011, 37, 812-830.	3.4	22
131	Breakup of an electrified, perfectly conducting, viscous thread in an AC field. Physical Review E, 2011, 83, 066314.	2.1	11
132	Pattern Formation in Evaporating Drops With and Without Nanoparticles. , 2011, , .		0
133	Breakup of an electrified viscous thread with charged surfactants. Physics of Fluids, 2011, 23, .	4.0	27
134	Shock-wave solutions in two-layer channel flow. II. Linear and nonlinear stability. Physics of Fluids, 2011, 23, 112101.	4.0	4
135	Surfactant-driven dynamics of liquid lenses. Physics of Fluids, 2011, 23, .	4.0	44
136	Dynamics and stability of an annular electrolyte film. Journal of Fluid Mechanics, 2010, 656, 481-506.	3.4	23
137	Coherent wave structures on falling fluid films flowing down a flexible wall. Chemical Engineering Science, 2010, 65, 950-961.	3.8	16
138	Numerical simulation of non-isothermal pressure-driven miscible channel flow with viscous heating. Chemical Engineering Science, 2010, 65, 3260-3267.	3.8	15
139	Laminar flow deformation of a droplet adhering to a wall in a channel. Chemical Engineering Science, 2010, 65, 4523-4534.	3.8	34
140	Stability of Plane Channel Flow With Viscous Heating. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	1.5	19
141	Capillary wave motion excited by high frequency surface acoustic waves. Physics of Fluids, 2010, 22, .	4.0	66
142	Three-dimensional linear instability in pressure-driven two-layer channel flow of a Newtonian and a Herschelâ€“Bulkley fluid. Physics of Fluids, 2010, 22, .	4.0	36
143	Shock-wave solutions in two-layer channel flow. I. One-dimensional flows. Physics of Fluids, 2010, 22, .	4.0	15
144	Linear stability analysis and numerical simulation of miscible two-layer channel flow. Physics of Fluids, 2009, 21, .	4.0	89

#	Article	IF	Citations
145	Electrically induced bubble deformation, translation and collapse. Journal of Engineering Mathematics, 2009, 65, 291-310.	1.2	5
146	Wave regimes in two-layer microchannel flow. Chemical Engineering Science, 2009, 64, 3094-3102.	3.8	21
147	Pinning, Retraction, and Terracing of Evaporating Droplets Containing Nanoparticles. Langmuir, 2009, 25, 3601-3609.	3.5	84
148	Surfactant-Enhanced Rapid Spreading of Drops on Solid Surfaces. Langmuir, 2009, 25, 14174-14181.	3.5	28
149	Pressure-driven miscible two-fluid channel flow with density gradients. Physics of Fluids, 2009, 21, .	4.0	58
150	Dynamics of surfactant-assisted spreading. Soft Matter, 2009, 5, 3801.	2.7	70
151	Dynamics and stability of thin liquid films. Reviews of Modern Physics, 2009, 81, 1131-1198.	45.6	1,086
152	Breakup of surfactant-laden jets above the critical micelle concentration. Journal of Fluid Mechanics, 2009, 629, 195-219.	3.4	38
153	Thin film flow over spinning discs: The effect of surface topography and flow rate modulation. Chemical Engineering Science, 2008, 63, 2225-2232.	3.8	14
154	Re-Examination of Reversibility in Reaction Models for the Spontaneous Emergence of Homochirality. Journal of Physical Chemistry B, 2008, 112, 5098-5104.	2.6	62
155	Advancing Contact Line Dynamics Induced by Soluble Surfactant Deposition on a Thin Liquid Film. AIP Conference Proceedings, 2008, , .	0.4	0
156	Self-excited hydrothermal waves in evaporating sessile drops. Applied Physics Letters, 2008, 93, .	3.3	119
157	Two-Layer Flow with One Viscous Layer in Inclined Channels. Mathematical Modelling of Natural Phenomena, 2008, 3, 126-148.	2.4	10
158	Linear instability of pressure-driven channel flow of a Newtonian and a Herschel-Bulkley fluid. Physics of Fluids, 2007, 19, .	4.0	90
159	Falling films on flexible inclines. Physical Review E, 2007, 76, 056301.	2.1	22
160	Interfacial dynamics in pressure-driven two-layer laminar channel flow with high viscosity ratios. Physical Review E, 2007, 75, 056314.	2.1	12
161	Dynamic spreading of droplets containing nanoparticles. Physical Review E, 2007, 76, 056315.	2.1	42
162	On Autophobing in Surfactant-Driven Thin Films. Langmuir, 2007, 23, 2588-2601.	3.5	26

#	Article	IF	Citations
163	Mean and turbulent fluctuating velocities in oilâ€“water vertical dispersed flows. Chemical Engineering Science, 2007, 62, 1199-1214.	3.8	23
164	Drop manipulation and surgery using electric fields. Journal of Colloid and Interface Science, 2007, 306, 368-378.	9.4	25
165	Dynamics and stability of flow down a flexible incline. Journal of Engineering Mathematics, 2007, 57, 145-158.	1.2	20
166	Surfactant-induced fingering phenomena beyond the critical micelle concentration. Journal of Fluid Mechanics, 2006, 564, 105.	3.4	47
167	On viscous beads flowing down a vertical fibre. Journal of Fluid Mechanics, 2006, 553, 85.	3.4	105
168	Collapse of a bubble in an electric field. Physical Review E, 2006, 74, 046309.	2.1	11
169	Investigation of phase inversion of liquid-liquid dispersions in agitated vessels. Tsinghua Science and Technology, 2006, 11, 202-206.	6.1	5
170	Laser-induced fluorescence (LIF) studies of liquidâ€“liquid flows. Part I: Flow structures and phase inversion. Chemical Engineering Science, 2006, 61, 4007-4021.	3.8	37
171	Laser-induced fluorescence (LIF) studies of liquidâ€“liquid flows. Part II: Flow pattern transitions at low liquid velocities in downwards flow. Chemical Engineering Science, 2006, 61, 4022-4026.	3.8	14
172	Population balance modelling of phase inversion in liquidâ€“liquid pipeline flows. Chemical Engineering Science, 2006, 61, 4994-4997.	3.8	25
173	A note on the coating of an inclined plane in the presence of soluble surfactant. Journal of Colloid and Interface Science, 2006, 293, 222-229.	9.4	14
174	Collisions of liquid coated solid spherical particles in a viscous fluid. Journal of Colloid and Interface Science, 2006, 301, 594-606.	9.4	1
175	On the dynamics of liquid lenses. Journal of Colloid and Interface Science, 2006, 303, 503-516.	9.4	42
176	Droplet spreading, imbibition and solidification on porous media. Journal of Fluid Mechanics, 2006, 562, 1.	3.4	36
177	The effect of surfactant on the flow of a thin liquid film over a spinning disc. Chemical Engineering Science, 2006, 61, 1074-1091.	3.8	6
178	The flow of a thin conducting film over a spinning disc in the presence of an electric field. Chemical Engineering Science, 2006, 61, 3838-3849.	3.8	11
179	Film flow down a fibre at moderate flow rates. Chemical Engineering Science, 2006, 61, 7279-7298.	3.8	34
180	Evaluation of drop size distribution from chord length measurements. AICHE Journal, 2006, 52, 931-939.	3.6	39

#	Article	IF	Citations
181	Numerical simulations of fingering instabilities in surfactant-driven thin films. Physics of Fluids, 2006, 18, 032103.	4.0	17
182	The Flow of Thin Liquid Films Over Spinning Discs. Canadian Journal of Chemical Engineering, 2006, 84, 625-642.	1.7	19
183	Coating of an inclined plane in the presence of insoluble surfactant. Journal of Colloid and Interface Science, 2005, 287, 261-272.	9.4	14
184	Experimental investigation of phase inversion in a stirred vessel using LIF. Chemical Engineering Science, 2005, 60, 85-94.	3.8	40
185	Prediction of phase inversion in agitated vessels using a two-region model. Chemical Engineering Science, 2005, 60, 3487-3495.	3.8	31
186	Absorption of gas into a wavy falling film. Chemical Engineering Science, 2005, 60, 827-838.	3.8	35
187	Thin film flow over structured packings at moderate Reynolds numbers. Chemical Engineering Science, 2005, 60, 1965-1975.	3.8	93
188	Gas absorption into a wavy film flowing over a spinning disc. Chemical Engineering Science, 2005, 60, 2051-2060.	3.8	25
189	Nonlinear evolution of thin liquid films dewetting near soft elastomeric layers. Journal of Colloid and Interface Science, 2005, 286, 319-332.	9.4	46
190	Surfactant-induced fingering phenomena in thin film flow down an inclined plane. Physica D: Nonlinear Phenomena, 2005, 209, 62-79.	2.8	29
191	Dynamics of thin free films with reaction-driven density and viscosity variations. Physics of Fluids, 2005, 17, 122102.	4.0	7
192	Electrically induced pattern formation in thin leaky dielectric films. Physics of Fluids, 2005, 17, 032104.	4.0	115
193	The flow of thin liquid films over spinning disks:â€ƒ Hydrodynamics and mass transfer. Physics of Fluids, 2005, 17, 052102.	4.0	28
194	Effects of Geometry, Flow Index, and Temperature on Flow Splitting. Heat Transfer Engineering, 2005, 26, 51-57.	1.9	60
195	Spreading characteristics of an insoluble surfactant film on a thin liquid layer: comparison between theory and experiment. Journal of Fluid Mechanics, 2005, 544, 23.	3.4	46
196	On compound liquid threads with large viscosity contrasts. Journal of Fluid Mechanics, 2005, 533, .	3.4	25
197	Rupture Analysis of the Corneal Mucus Layer of the Tear Film. Molecular Simulation, 2004, 30, 167-172.	2.0	20
198	On the Faraday instability in a surfactant-covered liquid. Physics of Fluids, 2004, 16, 39-46.	4.0	129

#	Article	IF	Citations
199	Fingering phenomena created by a soluble surfactant deposition on a thin liquid film. Physics of Fluids, 2004, 16, 2933-2951.	4.0	60
200	Evolution scales for wave regimes in liquid film flow over a spinning disk. Physics of Fluids, 2004, 16, 1532-1545.	4.0	26
201	Flow of surfactant-laden thin films down an inclined plane. Journal of Engineering Mathematics, 2004, 50, 141-156.	1.2	37
202	Dewetting of thin liquid films near soft elastomeric layers. Journal of Colloid and Interface Science, 2004, 273, 581-588.	9.4	53
203	Simultaneous thermal and surfactant-induced Marangoni effects in thin liquid films. Journal of Colloid and Interface Science, 2004, 274, 183-199.	9.4	24
204	Stabilising effect of the Coriolis forces on a viscous liquid film flowing over a spinning disc. Comptes Rendus - Mecanique, 2004, 332, 203-207.	2.1	12
205	Dewetting Behavior of Aqueous Cationic Surfactant Solutions on Liquid Films. Langmuir, 2004, 20, 7575-7582.	3.5	28
206	Nonlinear parametrically excited surface waves in surfactant-covered thin liquid films. Journal of Fluid Mechanics, 2004, 520, 243-265.	3.4	12
207	Fingering phenomena associated with insoluble surfactant spreading on thin liquid films. Journal of Fluid Mechanics, 2004, 510, 169-200.	3.4	84
208	Rupture of a Surfactant-Covered Thin Liquid Film on a Flexible Wall. SIAM Journal on Applied Mathematics, 2004, 64, 2144-2166.	1.8	24
209	Modelling of film flow over a spinning disk. Journal of Chemical Technology and Biotechnology, 2003, 78, 151-155.	3.2	17
210	Pattern formation in thin liquid films with charged surfactants. Journal of Colloid and Interface Science, 2003, 268, 448-463.	9.4	18
211	Film drainage between two surfactant-coated drops colliding at constant approach velocity. Journal of Colloid and Interface Science, 2003, 257, 93-107.	9.4	79
212	Hydrodynamic instability of a thin viscous film between two drops. Journal of Colloid and Interface Science, 2003, 261, 575-579.	9.4	12
213	Analysis of tear film rupture: effect of non-Newtonian rheology. Journal of Colloid and Interface Science, 2003, 262, 130-148.	9.4	68
214	Surfactant driven flows overlying a hydrophobic epithelium: film rupture in the presence of slip. Journal of Colloid and Interface Science, 2003, 264, 160-175.	9.4	30
215	Surface patterning via evaporation of ultrathin films containing nanoparticles. Journal of Colloid and Interface Science, 2003, 267, 92-110.	9.4	66
216	The spreading of surfactant solutions on thin liquid films. Advances in Colloid and Interface Science, 2003, 106, 183-236.	14.7	96

#	Article	IF	Citations
217	A theoretical study of chemical delivery within the lung using exogenous surfactant. Medical Engineering and Physics, 2003, 25, 115-132.	1.7	27
218	Unstable Spreading of Aqueous Anionic Surfactant Solutions on Liquid Films. Part 1. Sparingly Soluble Surfactant. Langmuir, 2003, 19, 696-702.	3.5	41
219	Axisymmetric wave regimes in viscous liquid film flow over a spinning disk. Journal of Fluid Mechanics, 2003, 495, 385-411.	3.4	49
220	Unstable Spreading of Aqueous Anionic Surfactant Solutions on Liquid Films. 2. Highly Soluble Surfactant. Langmuir, 2003, 19, 703-708.	3.5	49
221	Marangoni instability of a thin liquid film resting on a locally heated horizontal wall. Physical Review E, 2003, 67, 056315.	2.1	45
222	Pinchoff and satellite formation in compound viscous threads. Physics of Fluids, 2003, 15, 3409-3428.	4.0	14
223	Unstable van der Waals driven line rupture in Marangoni driven thin viscous films. Physics of Fluids, 2002, 14, 1642-1654.	4.0	46
224	Pinchoff and satellite formation in surfactant covered viscous threads. Physics of Fluids, 2002, 14, 1364-1376.	4.0	89
225	Dewetting of ultrathin surfactant-covered films. Physics of Fluids, 2002, 14, 4040-4054.	4.0	56
226	Nonlinear evolution of thin free viscous films in the presence of soluble surfactant. Physics of Fluids, 2002, 14, 4216-4234.	4.0	52
227	Parametrically driven surface waves in surfactantâ€“covered liquids. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 2815-2828.	2.1	10
228	Surfactant transport on highly viscous surface films. Journal of Fluid Mechanics, 2002, 466, 85-111.	3.4	51
229	Instability of long-wavelength disturbances on gravity-modulated surfactant-covered thin liquid layers. Journal of Fluid Mechanics, 2002, 466, 249-258.	3.4	19
230	Simulation Studies of Phase Inversion in Agitated Vessels Using a Monte Carlo Technique. Journal of Colloid and Interface Science, 2002, 248, 443-454.	9.4	19
231	Surfactant spreading on a thin weakly viscoelastic film. Journal of Non-Newtonian Fluid Mechanics, 2002, 105, 53-78.	2.4	38
232	A simple predictive tool for modelling phase inversion in liquidâ€“liquid dispersions. Chemical Engineering Science, 2002, 57, 1069-1072.	3.8	41
233	Droplet deformation in confined shear and extensional flow. Chemical Engineering Science, 2002, 57, 1217-1230.	3.8	28
234	A description of phase inversion behaviour in agitated liquidâ€“liquid dispersions under the influence of the Marangoni effect. Chemical Engineering Science, 2002, 57, 3505-3520.	3.8	20

#	Article	IF	Citations
235	MODELLING HYDRODYNAMICS AND MASS TRANSFER IN STRUCTURED PACKINGS - A REVIEW. Multiphase Science and Technology, 2002, 14, 46.	0.5	12
236	Models for Marangoni drying. Physics of Fluids, 2001, 13, 1869-1883.	4.0	70
237	The Dynamics of Marangoni-Driven Local Film Drainage between Two Drops. Journal of Colloid and Interface Science, 2001, 241, 233-247.	9.4	48
238	Couette Flow of Two Immiscible Liquids between Two Concentric Cylinders: The Formation of Toroidal Drops and Liquid Sheaths. Physical Review Letters, 2001, 86, 1211-1214.	7.8	1
239	Surfactant transport on mucus films. Journal of Fluid Mechanics, 2000, 425, 235-258.	3.4	64
240	PHASE INVERSION AND ASSOCIATED PHENOMENA. Multiphase Science and Technology, 2000, 12, 66.	0.5	45
241	The development of transient fingering patterns during the spreading of surfactant coated films. Physics of Fluids, 1999, 11, 3232-3246.	4.0	92
242	Spreading of a surfactant monolayer on a thin liquid film: Onset and evolution of digitated structures. Chaos, 1999, 9, 141-153.	2.5	64
243	Growth of non-modal transient structures during the spreading of surfactant coated films. Physics of Fluids, 1998, 10, 1234-1236.	4.0	35
244	Linear stability analysis of an insoluble surfactant monolayer spreading on a thin liquid film. Physics of Fluids, 1997, 9, 3645-3657.	4.0	51
245	Dynamics and Stability of Surfactant Coated thin Spreading Films. Materials Research Society Symposia Proceedings, 1996, 464, 237.	0.1	5
246	A numerical investigation of three-dimensional falling liquid films. Environmental Fluid Mechanics, 0, , 1.	1.6	2