Omar K Matar

List of Publications by Year
in descending order

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	Dynamics and stability of thin liquid films. Reviews of Modern Physics, 2009, 81, 1131-1198.	45.6	1,086
2	Fluoro- vs hydrocarbon surfactants: Why do they differ in wetting performance?. Advances in Colloid and Interface Science, 2014, 210, 65-71.	14.7	147
3	Disturbance wave development in two-phase gasâ€"liquid upwards vertical annular flow. International Journal of Multiphase Flow, 2013, 55, 111-129.	3.4	130
4	On the Faraday instability in a surfactant-covered liquid. Physics of Fluids, 2004, 16, 39-46.	4.0	129
5	Self-excited hydrothermal waves in evaporating sessile drops. Applied Physics Letters, 2008, 93, .	3.3	119
6	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
7	Electrically induced pattern formation in thin leaky dielectric films. Physics of Fluids, 2005, 17, 032104.	4.0	115
8	Optimizing Water Transport through Graphene-Based Membranes: Insights from Nonequilibrium Molecular Dynamics. ACS Applied Materials & Interfaces, 2016, 8, 12330-12336.	8.0	110
9	Dynamics and universal scaling law in geometrically-controlled sessile drop evaporation. Nature Communications, 2017, 8, 14783.	12.8	106
10	On viscous beads flowing down a vertical fibre. Journal of Fluid Mechanics, 2006, 553, 85.	3.4	105
11	The spreading of surfactant solutions on thin liquid films. Advances in Colloid and Interface Science, 2003, 106, 183-236.	14.7	96
12	Evaporation of sessile drops: a three-dimensional approach. Journal of Fluid Mechanics, 2015, 772, 705-739.	3.4	96
13	Thin film flow over structured packings at moderate Reynolds numbers. Chemical Engineering Science, 2005, 60, 1965-1975.	3.8	93
14	The development of transient fingering patterns during the spreading of surfactant coated films. Physics of Fluids, 1999, 11, 3232-3246.	4.0	92
15	Linear instability of pressure-driven channel flow of a Newtonian and a Herschel-Bulkley fluid. Physics of Fluids, 2007, 19, .	4.0	90
16	Pinchoff and satellite formation in surfactant covered viscous threads. Physics of Fluids, 2002, 14, 1364-1376.	4.0	89
17	Linear stability analysis and numerical simulation of miscible two-layer channel flow. Physics of Fluids, 2009, 21, .	4.0	89
18	Evaporation of Sessile Droplets Laden with Particles and Insoluble Surfactants. Langmuir, 2016, 32, 6871-6881.	3.5	88

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19	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
20	On surfactant-enhanced spreading and superspreading of liquid drops on solid surfaces. Journal of Fluid Mechanics, 2011, 670, 5-37.	3.4	85
21	Fingering phenomena associated with insoluble surfactant spreading on thin liquid films. Journal of Fluid Mechanics, 2004, 510, 169-200.	3.4	84
22	Pinning, Retraction, and Terracing of Evaporating Droplets Containing Nanoparticles. Langmuir, 2009, 25, 3601-3609.	3.5	84
23	Convective Rolls and Hydrothermal Waves in Evaporating Sessile Drops. Langmuir, 2012, 28, 11433-11439.	3.5	82
24	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
25	Models for Marangoni drying. Physics of Fluids, 2001, 13, 1869-1883.	4.0	70
26	Dynamics of surfactant-assisted spreading. Soft Matter, 2009, 5, 3801.	2.7	70
27	Effect of Contact Line Dynamics on the Thermocapillary Motion of a Droplet on an Inclined Plate. Langmuir, 2013, 29, 8892-8906.	3.5	70
28	Analysis of tear film rupture: effect of non-Newtonian rheology. Journal of Colloid and Interface Science, 2003, 262, 130-148.	9.4	68
29	Surface patterning via evaporation of ultrathin films containing nanoparticles. Journal of Colloid and Interface Science, 2003, 267, 92-110.	9.4	66
30	Capillary wave motion excited by high frequency surface acoustic waves. Physics of Fluids, 2010, 22, .	4.0	66
31	Spreading of a surfactant monolayer on a thin liquid film: Onset and evolution of digitated structures. Chaos, 1999, 9, 141-153.	2.5	64
32	Surfactant transport on mucus films. Journal of Fluid Mechanics, 2000, 425, 235-258.	3.4	64
33	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
34	Fouling in Crude Oil Preheat Trains: A Systematic Solution to an Old Problem. Heat Transfer Engineering, 2011, 32, 197-215.	1.9	62
35	Fingering phenomena created by a soluble surfactant deposition on a thin liquid film. Physics of Fluids, 2004, 16, 2933-2951.	4.0	60
36	Effects of Geometry, Flow Index, and Temperature on Flow Splitting. Heat Transfer Engineering, 2005, 26, 51-57.	1.9	60

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37	Superspreading: Mechanisms and Molecular Design. Langmuir, 2015, 31, 2304-2309.	3.5	59
38	Bulk viscosity of molecular fluids. Journal of Chemical Physics, 2018, 148, 174504.	3.0	59
39	Pressure-driven miscible two-fluid channel flow with density gradients. Physics of Fluids, 2009, 21, .	4.0	58
40	Dewetting of ultrathin surfactant-covered films. Physics of Fluids, 2002, 14, 4040-4054.	4.0	56
41	A Unified Approach for Patterning via Frontal Photopolymerization. Advanced Materials, 2015, 27, 6118-6124.	21.0	55
42	Impact of droplets on immiscible liquid films. Soft Matter, 2018, 14, 1540-1551.	2.7	55
43	Dewetting of thin liquid films near soft elastomeric layers. Journal of Colloid and Interface Science, 2004, 273, 581-588.	9.4	53
44	Electrostatic Suppression of the â€œCoffee Stain Effectâ€. Langmuir, 2014, 30, 5849-5858.	3.5	53
45	Nonlinear evolution of thin free viscous films in the presence of soluble surfactant. Physics of Fluids, 2002, 14, 4216-4234.	4.0	52
46	Interfacial Profile and Propagation of Frontal Photopolymerization Waves. Macromolecules, 2015, 48, 198-205.	4.8	52
47	Linear stability analysis of an insoluble surfactant monolayer spreading on a thin liquid film. Physics of Fluids, 1997, 9, 3645-3657.	4.0	51
48	Surfactant transport on highly viscous surface films. Journal of Fluid Mechanics, 2002, 466, 85-111.	3.4	51
49	Bubble rise dynamics in a viscoplastic material. Journal of Non-Newtonian Fluid Mechanics, 2015, 222, 217-226.	2.4	51
50	Axisymmetric wave regimes in viscous liquid film flow over a spinning disk. Journal of Fluid Mechanics, 2003, 495, 385-411.	3.4	49
51	Unstable Spreading of Aqueous Anionic Surfactant Solutions on Liquid Films. 2. Highly Soluble Surfactant. Langmuir, 2003, 19, 703-708.	3.5	49
52	The Dynamics of Marangoni-Driven Local Film Drainage between Two Drops. Journal of Colloid and Interface Science, 2001, 241, 233-247.	9.4	48
53	Surfactant-induced fingering phenomena beyond the critical micelle concentration. Journal of Fluid Mechanics, 2006, 564, 105.	3.4	47
54	Unstable van der Waals driven line rupture in Marangoni driven thin viscous films. Physics of Fluids, 2002, 14, 1642-1654.	4.0	46

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55	Nonlinear evolution of thin liquid films dewetting near soft elastomeric layers. Journal of Colloid and Interface Science, 2005, 286, 319-332.	9.4	46
56	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
57	Frontal vitrification of PDMS using air plasma and consequences for surface wrinkling. Soft Matter, 2015, 11, 3067-3075.	2.7	46
58	Marangoni instability of a thin liquid film resting on a locally heated horizontal wall. Physical Review E, 2003, 67, 056315.	2.1	45
59	PHASE INVERSION AND ASSOCIATED PHENOMENA. Multiphase Science and Technology, 2000, 12, 66.	0.5	45
60	Surfactant-driven dynamics of liquid lenses. Physics of Fluids, 2011, 23, .	4.0	44
61	Impact of droplets on inclined flowing liquid films. Physical Review E, 2015, 92, 023032.	2.1	43
62	On the dynamics of liquid lenses. Journal of Colloid and Interface Science, 2006, 303, 503-516.	9.4	42
63	Dynamic spreading of droplets containing nanoparticles. Physical Review E, 2007, 76, 056315.	2.1	42
64	Current advances in liquidâ€"liquid mixing in static mixers: A review. Chemical Engineering Research and Design, 2022, 177, 694-731.	5.6	42
65	A simple predictive tool for modelling phase inversion in liquidâ€"liquid dispersions. Chemical Engineering Science, 2002, 57, 1069-1072.	3.8	41
66	Unstable Spreading of Aqueous Anionic Surfactant Solutions on Liquid Films. Part 1. Sparingly Soluble Surfactant. Langmuir, 2003, 19, 696-702.	3.5	41
67	Experimental investigation of phase inversion in a stirred vessel using LIF. Chemical Engineering Science, 2005, 60, 85-94.	3.8	40
68	Evaluation of drop size distribution from chord length measurements. AICHE Journal, 2006, 52, 931-939.	3.6	39
69	Non-isothermal bubble rise: non-monotonic dependence of surface tension on temperature. Journal of Fluid Mechanics, 2015, 763, 82-108.	3.4	39
70	Surfactant spreading on a thin weakly viscoelastic film. Journal of Non-Newtonian Fluid Mechanics, 2002, 105, 53-78.	2.4	38
71	Breakup of surfactant-laden jets above the critical micelle concentration. Journal of Fluid Mechanics, 2009, 629, 195-219.	3.4	38
72	Flow of surfactant-laden thin films down an inclined plane. Journal of Engineering Mathematics, 2004, 50, 141-156.	1.2	37

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73	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
74	Modelling the superspreading of surfactant-laden droplets with computer simulation. Soft Matter, 2015, 11, 9254-9261.	2.7	37
75	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
76	Droplet spreading, imbibition and solidification on porous media. Journal of Fluid Mechanics, 2006, 562, 1.	3.4	36
77	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
78	Growth of non-modal transient structures during the spreading of surfactant coated films. Physics of Fluids, 1998, 10, 1234-1236.	4.0	35
79	Absorption of gas into a wavy falling film. Chemical Engineering Science, 2005, 60, 827-838.	3.8	35
80	Film flow down a fibre at moderate flow rates. Chemical Engineering Science, 2006, 61, 7279-7298.	3.8	34
81	Laminar flow deformation of a droplet adhering to a wall in a channel. Chemical Engineering Science, 2010, 65, 4523-4534.	3.8	34
82	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
83	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
84	Towards scaleâ€up of graphene production via nonoxidizing liquid exfoliation methods. AIChE Journal, 2018, 64, 3246-3276.	3.6	32
85	Prediction of phase inversion in agitated vessels using a two-region model. Chemical Engineering Science, 2005, 60, 3487-3495.	3.8	31
86	On phase change in Marangoni-driven flows and its effects on the hydrothermal-wave instabilities. Physics of Fluids, 2014, 26, .	4.0	31
87	Adaptive unstructured mesh modelling of multiphase flows. International Journal of Multiphase Flow, 2014, 67, 104-110.	3.4	31
88	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
89	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
90	Surfactant-induced fingering phenomena in thin film flow down an inclined plane. Physica D: Nonlinear Phenomena, 2005, 209, 62-79.	2.8	29

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91	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
92	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
93	The effect of adsorption kinetics on the rate of surfactant-enhanced spreading. Soft Matter, 2016, 12, 1009-1013.	2.7	29
94	Droplet deformation in confined shear and extensional flow. Chemical Engineering Science, 2002, 57, 1217-1230.	3.8	28
95	Dewetting Behavior of Aqueous Cationic Surfactant Solutions on Liquid Films. Langmuir, 2004, 20, 7575-7582.	3.5	28
96	The flow of thin liquid films over spinning disks:â€ƒ Hydrodynamics and mass transfer. Physics of Fluids, 2005, 17, 052102.	4.0	28
97	Surfactant-Enhanced Rapid Spreading of Drops on Solid Surfaces. Langmuir, 2009, 25, 14174-14181.	3.5	28
98	Linear and nonlinear stability of hydrothermal waves in planar liquid layers driven by thermocapillarity. Physics of Fluids, 2013, 25, .	4.0	28
99	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
100	A theoretical study of chemical delivery within the lung using exogenous surfactant. Medical Engineering and Physics, 2003, 25, 115-132.	1.7	27
101	Breakup of an electrified viscous thread with charged surfactants. Physics of Fluids, 2011, 23, .	4.0	27
102	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
103	Compressive advection and multiâ€component methods for interfaceâ€capturing. International Journal for Numerical Methods in Fluids, 2016, 80, 256-282.	1.6	27
104	Impact of Droplets on Liquid Films in the Presence of Surfactant. Langmuir, 2017, 33, 12140-12148.	3.5	27
105	Physical insights into the bloodâ€“brain barrier translocation mechanisms. Physical Biology, 2017, 14, 041001.	1.8	27
106	Evolution scales for wave regimes in liquid film flow over a spinning disk. Physics of Fluids, 2004, 16, 1532-1545.	4.0	26
107	On Autophobing in Surfactant-Driven Thin Films. Langmuir, 2007, 23, 2588-2601.	3.5	26
108	Moving Contact Lines: Linking Molecular Dynamics and Continuum-Scale Modeling. Langmuir, 2018, 34, 12501-12518.	3.5	26

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109	Mixing viscoplastic fluids in stirred vessels over multiple scales: A combined experimental and CFD approach. Chemical Engineering Science, 2019, 208, 115129.	3.8	26
110	Gas absorption into a wavy film flowing over a spinning disc. Chemical Engineering Science, 2005, 60, 2051-2060.	3.8	25
111	On compound liquid threads with large viscosity contrasts. Journal of Fluid Mechanics, 2005, 533, .	3.4	25
112	Population balance modelling of phase inversion in liquidâ€"liquid pipeline flows. Chemical Engineering Science, 2006, 61, 4994-4997.	3.8	25
113	Drop manipulation and surgery using electric fields. Journal of Colloid and Interface Science, 2007, 306, 368-378.	9.4	25
114	Sub-100 nm wrinkling of polydimethylsiloxane by double frontal oxidation. Nanoscale, 2017, 9, 2030-2037.	5.6	25
115	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
116	Dynamics of a surfactant-laden bubble bursting through an interface. Journal of Fluid Mechanics, 2021, 911, .	3.4	25
117	Simultaneous thermal and surfactant-induced Marangoni effects in thin liquid films. Journal of Colloid and Interface Science, 2004, 274, 183-199.	9.4	24
118	Rupture of a Surfactant-Covered Thin Liquid Film on a Flexible Wall. SIAM Journal on Applied Mathematics, 2004, 64, 2144-2166.	1.8	24
119	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
120	Mean and turbulent fluctuating velocities in oilâ€"water vertical dispersed flows. Chemical Engineering Science, 2007, 62, 1199-1214.	3.8	23
121	Dynamics and stability of an annular electrolyte film. Journal of Fluid Mechanics, 2010, 656, 481-506.	3.4	23
122	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
123	Falling films on flexible inclines. Physical Review E, 2007, 76, 056301.	2.1	22
124	Interfacial instability in turbulent flow over a liquid film in a channel. International Journal of Multiphase Flow, 2011, 37, 812-830.	3.4	22
125	Nonequilibrium hysteresis and Wien effect water dissociation at a bipolar membrane. Physical Review E, 2012, 86, 056104.	2.1	22
126	Insights into surfactant-assisted superspreading. Current Opinion in Colloid and Interface Science, 2014, 19, 283-289.	7.4	22

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127	Wave regimes in two-layer microchannel flow. Chemical Engineering Science, 2009, 64, 3094-3102.	3.8	21
128	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
129	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
130	Rupture Analysis of the Corneal Mucus Layer of the Tear Film. Molecular Simulation, 2004, 30, 167-172.	2.0	20
131	Dynamics and stability of flow down a flexible incline. Journal of Engineering Mathematics, 2007, 57, 145-158.	1.2	20
132	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
133	Role of heat generation and thermal diffusion during frontal photopolymerization. Physical Review E, 2015, 92, 022403.	2.1	20
134	Controlling frontal photopolymerization with optical attenuation and mass diffusion. Physical Review E, 2015, 91, 062402.	2.1	20
135	Role of surfactant-induced Marangoni stresses in drop-interface coalescence. Journal of Fluid Mechanics, 2021, 925, .	3.4	20
136	Dynamics of retracting surfactant-laden ligaments at intermediate Ohnesorge number. Physical Review Fluids, 2020, 5, .	2.5	20
137	Instability of long-wavelength disturbances on gravity-modulated surfactant-covered thin liquid layers. Journal of Fluid Mechanics, 2002, 466, 249-258.	3.4	19
138	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
139	The Flow of Thin Liquid Films Over Spinning Discs. Canadian Journal of Chemical Engineering, 2006, 84, 625-642.	1.7	19
140	Stability of Plane Channel Flow With Viscous Heating. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	1.5	19
141	Surface Topography Effects on Pool Boiling via Non-equilibrium Molecular Dynamics Simulations. Langmuir, 2021, 37, 5731-5744.	3.5	19
142	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
143	Slip at liquid-liquid interfaces. Physical Review Fluids, 2017, 2, .	2.5	19
144	Pattern formation in thin liquid films with charged surfactants. Journal of Colloid and Interface Science, 2003, 268, 448-463.	9.4	18

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145	Surface Tension-Induced Gel Fracture. Part 1. Fracture of Agar Gels. Langmuir, 2012, 28, 7197-7211.	3.5	18
146	A Langevin model for fluctuating contact angle behaviour parametrised using molecular dynamics. Soft Matter, 2016, 12, 9604-9615.	2.7	18
147	Non-isothermal bubble rise dynamics in a self-rewetting fluid: three-dimensional effects. Journal of Fluid Mechanics, 2019, 858, 689-713.	3.4	18
148	Spreading and retraction dynamics of sessile evaporating droplets comprising volatile binary mixtures. Journal of Fluid Mechanics, 2021, 907, .	3.4	18
149	Direct numerical simulations of transient turbulent jets: vortex-interface interactions. Journal of Fluid Mechanics, 2021, 922, .	3.4	18
150	Dynamics of long gas bubbles rising in a vertical tube in a cocurrent liquid flow. Physical Review Fluids, 2019, 4, .	2.5	18
151	Effect of surfactant on elongated bubbles in capillary tubes at high Reynolds number. Physical Review Fluids, 2020, 5, .	2.5	18
152	Modelling of film flow over a spinning disk. Journal of Chemical Technology and Biotechnology, 2003, 78, 151-155.	3.2	17
153	Numerical simulations of fingering instabilities in surfactant-driven thin films. Physics of Fluids, 2006, 18, 032103.	4.0	17
154	Coherent wave structures on falling fluid films flowing down a flexible wall. Chemical Engineering Science, 2010, 65, 950-961.	3.8	16
155	Electrified coating flows on vertical fibres: enhancement or suppression of interfacial dynamics. Journal of Fluid Mechanics, 2013, 735, 427-456.	3.4	16
156	A minimal model for solvent evaporation and absorption in thin films. Journal of Colloid and Interface Science, 2017, 488, 61-71.	9.4	16
157	On the role of buoyancy-driven instabilities in horizontal liquidâ€"liquid flow. International Journal of Multiphase Flow, 2017, 89, 123-135.	3.4	16
158	Numerical simulation of non-isothermal pressure-driven miscible channel flow with viscous heating. Chemical Engineering Science, 2010, 65, 3260-3267.	3.8	15
159	Shock-wave solutions in two-layer channel flow. I. One-dimensional flows. Physics of Fluids, 2010, 22, .	4.0	15
160	Continuum-scale modelling of polymer blends using the Cahnâ€"Hilliard equation: transport and thermodynamics. Soft Matter, 2021, 17, 5645-5665.	2.7	15
161	A REVIEW OF LIQUID-LIQUID FLOW PATTERNS IN HORIZONTAL AND SLIGHTLY INCLINED PIPES. Multiphase Science and Technology, 2014, 26, 171-198.	0.5	15
162	Pinchoff and satellite formation in compound viscous threads. Physics of Fluids, 2003, 15, 3409-3428.	4.0	14

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163	Coating of an inclined plane in the presence of insoluble surfactant. Journal of Colloid and Interface Science, 2005, 287, 261-272.	9.4	14
164	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
165	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
166	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
167	Droplet impact on flowing liquid films with inlet forcing: the splashing regime. Soft Matter, 2017, 13, 7473-7485.	2.7	14
168	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
169	Surface Tension-Induced Gel Fracture. Part 2. Fracture of Gelatin Gels. Langmuir, 2012, 28, 8017-8025.	3.5	13
170	Modeling the effect of surface forces on the equilibrium liquid profile of a capillary meniscus. Soft Matter, 2014, 10, 6024-6037.	2.7	13
171	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
172	Accurate low-order modeling of electrified falling films at moderate Reynolds number. Physical Review Fluids, 2017, 2, .	2.5	13
173	Adsorption of Hydrolysed Polyacrylamide onto Calcium Carbonate. Polymers, 2022, 14, 405.	4.5	13
174	Hydrodynamic instability of a thin viscous film between two drops. Journal of Colloid and Interface Science, 2003, 261, 575-579.	9.4	12
175	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
176	Nonlinear parametrically excited surface waves in surfactant-covered thin liquid films. Journal of Fluid Mechanics, 2004, 520, 243-265.	3.4	12
177	Interfacial dynamics in pressure-driven two-layer laminar channel flow with high viscosity ratios. Physical Review E, 2007, 75, 056314.	2.1	12
178	Monomer diffusion into static and evolving polymer networks during frontal photopolymerisation. Soft Matter, 2017, 13, 9199-9210.	2.7	12
179	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
180	MODELLING HYDRODYNAMICS AND MASS TRANSFER IN STRUCTURED PACKINGS - A REVIEW. Multiphase Science and Technology, 2002, 14, 46.	0.5	12

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181	Collapse of a bubble in an electric field. Physical Review E, 2006, 74, 046309.	2.1	11
182	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
183	Breakup of an electrified, perfectly conducting, viscous thread in an AC field. Physical Review E, 2011, 83, 066314.	2.1	11
184	Crude Oil Fouling: Fluid Dynamics, Reactions and Phase Change. Procedia IUTAM, 2015, 15, 186-193.	1.2	11
185	Wrinkling Measurement of the Mechanical Properties of Drying Salt Thin Films. Langmuir, 2016, 32, 2199-2207.	3.5	11
186	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
187	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
188	Simulation of immiscible liquidâ€“liquid flows in complex microchannel geometries using a front-tracking scheme. Microfluidics and Nanofluidics, 2018, 22, 126.	2.2	11
189	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
190	Two-Layer Flow with One Viscous Layer in Inclined Channels. Mathematical Modelling of Natural Phenomena, 2008, 3, 126-148.	2.4	10
191	Thin viscous ferrofluid film in a magnetic field. Physics of Fluids, 2015, 27, 092102.	4.0	10
192	Multi-Physics Modeling of Light-Limited Microalgae Growth in Raceway Ponds. IFAC-PapersOnLine, 2016, 49, 324-329.	0.9	10
193	Molecular Dynamics Simulation of the Superspreading of Surfactant-Laden Droplets. A Review. Fluids, 2019, 4, 176.	1.7	10
194	Real-time monitoring and hydrodynamic scaling of shear exfoliated graphene. 2D Materials, 2021, 8, 025029.	4.4	10
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