Huai Z Li

List of Publications by Year
in descending order

226 papers	5,546 citations	87723 38 h-index	143772 57 g-index
233 all docs	233 docs citations	233 times ranked	3285 citing authors

#	Article	IF	Citations
1	Droplet formation and breakup dynamics in microfluidic flow-focusing devices: From dripping to jetting. Chemical Engineering Science, 2012, 84, 207-217.	1.9	224
2	Squeezing-to-dripping transition for bubble formation in a microfluidic T-junction. Chemical Engineering Science, 2010, 65, 3739-3748.	1.9	163
3	Impacts of hydrodynamic shear force on nucleation of flocculent sludge in anaerobic reactor. Water Research, 2009, 43, 3029-3036.	5.3	161
4	Bubble formation and breakup dynamics in microfluidic devices: A review. Chemical Engineering Science, 2015, 135, 343-372.	1.9	128
5	Bubble formation and breakup mechanism in a microfluidic flow-focusing device. Chemical Engineering Science, 2009, 64, 2392-2400.	1.9	117
6	Dynamics of bubble breakup in a microfluidic T-junction divergence. Chemical Engineering Science, 2011, 66, 4184-4195.	1.9	106
7	Fast pyrolysis of wood: direct measurement and study of ablation rate. Fuel, 1985, 64, 1514-1520.	3.4	93
8	Flow of non-Newtonian fluids around bubbles: PIV measurements and birefringence visualisation. Chemical Engineering Science, 2001, 56, 1137-1141.	1.9	81
9	Fusion-like behaviour of wood pyrolysis. Journal of Analytical and Applied Pyrolysis, 1987, 10, 291-308.	2.6	73
10	Modelling the bubble formation dynamics in non-Newtonian fluids. Chemical Engineering Science, 2002, 57, 339-346.	1.9	68
11	Bubble Formation Dynamics in Various Flow-Focusing Microdevices. Langmuir, 2008, 24, 13904-13911.	1.6	66
12	Ferrofluid droplet formation and breakup dynamics in a microfluidic flow-focusing device. Soft Matter, 2013, 9, 9792.	1.2	64
13	Flow patterns of liquidâ€"liquid two-phase flow in non-Newtonian fluids in rectangular microchannels. Chemical Engineering and Processing: Process Intensification, 2015, 91, 114-120.	1.8	64
14	Scaling the formation of slug bubbles in microfluidic flow-focusing devices. Microfluidics and Nanofluidics, 2010, 8, 467-475.	1.0	61
15	Pressure Drop of Newtonian and Non-Newtonian Fluids Across a Sulzer SMX Static Mixer. Chemical Engineering Research and Design, 1997, 75, 792-796.	2.7	57
16	Towards the understanding of bubble interactions and coalescence in non-Newtonian fluids: a cognitive approach. Chemical Engineering Science, 2001, 56, 6419-6425.	1.9	56
17	Size effect of anaerobic granular sludge on biogas production: A micro scale study. Bioresource Technology, 2016, 202, 165-171.	4.8	55
18	Dynamics of droplet breakup and formation of satellite droplets in a microfluidic T-junction. Chemical Engineering Science, 2018, 188, 158-169.	1.9	53

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19	Breakup dynamics for highâ€viscosity droplet formation in a flowâ€focusing device: Symmetrical and asymmetrical ruptures. AIChE Journal, 2016, 62, 325-337.	1.8	52
20	Bubbles in a viscous liquid: lattice Boltzmann simulation and experimental validation. Journal of Fluid Mechanics, 2006, 546, 113.	1.4	50
21	Scaling of the bubble formation in a flow-focusing device: Role of the liquid viscosity. Chemical Engineering Science, 2014, 105, 213-219.	1.9	49
22	Active control of ferrofluid droplet breakup dynamics in a microfluidic T-junction. Microfluidics and Nanofluidics, 2015, 18, 19-27.	1.0	48
23	Numerical simulation of the interactions between three equal-interval parallel bubbles rising in non-Newtonian fluids. Chemical Engineering Science, 2013, 93, 55-66.	1.9	47
24	Hydrodynamic feedback on bubble breakup at a Tâ€junction within an asymmetric loop. AIChE Journal, 2014, 60, 1920-1929.	1.8	47
25	Bubble nucleation and growth in fluids. Chemical Engineering Science, 2007, 62, 7090-7097.	1.9	46
26	Breakup dynamics of slender droplet formation in shear-thinning fluids in flow-focusing devices. Chemical Engineering Science, 2016, 144, 75-86.	1.9	46
27	Chaotic bubble coalescence in non-Newtonian fluids. International Journal of Multiphase Flow, 1997, 23, 713-723.	1.6	45
28	Bubbles in non-Newtonian fluids: Formation, interactions and coalescence. Chemical Engineering Science, 1999, 54, 2247-2254.	1.9	45
29	Complex flow around a bubble rising in a non-Newtonian fluid. Physical Review E, 2005, 71, 036309.	0.8	45
30	Hydrodynamics and mass transfer of gas-liquid flow in a tree-shaped parallel microchannel with T-type bifurcations. Chemical Engineering Journal, 2019, 373, 1203-1211.	6.6	45
31	Negative wake behind a sphere rising in viscoelastic fluids: A lattice Boltzmann investigation. Physical Review E, 2006, 74, 056307.	0.8	44
32	Breakup dynamics of slender bubbles in nonâ€newtonian fluids in microfluidic flowâ€focusing devices. AIChE Journal, 2012, 58, 3560-3567.	1.8	44
33	Performance and microbial community of an expanded granular sludge bed reactor in the treatment of cephalosporin wastewater. Bioresource Technology, 2019, 275, 94-100.	4.8	44
34	Flow-field dynamics during droplet formation by dripping in hydrodynamic-focusing microfluidics. Physical Review E, 2009, 80, 015301.	0.8	43
35	Hydrodynamics and heat transfer of rheologically complex fluids in a Sulzer SMX static mixer. Chemical Engineering Science, 1996, 51, 1947-1955.	1.9	42
36	Origin of the negative wake behind a bubble rising in non-Newtonian fluids. Chemical Engineering Science, 2006, 61, 4041-4047.	1.9	42

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37	Passage of a bubble through a liquidâ€“liquid interface. AIChE Journal, 2008, 54, 594-600.	1.8	42
38	Gas-liquid two-phase flow in a square microchannel with chemical mass transfer: Flow pattern, void fraction and frictional pressure drop. International Journal of Heat and Mass Transfer, 2018, 127, 484-496.	2.5	39
39	Experimental investigation on gas-liquid mass transfer with fast chemical reaction in microchannel. International Journal of Heat and Mass Transfer, 2017, 114, 83-89.	2.5	38
40	Breakup dynamics for droplet formation in shear-thinning fluids in a flow-focusing device. Chemical Engineering Science, 2018, 176, 66-76.	1.9	38
41	An effective hybrid solvent of MEA/DEEA for CO2 absorption and its mass transfer performance in microreactor. Separation and Purification Technology, 2020, 242, 116795.	3.9	38
42	Effects of the Injection Period on the Rise Velocity and Shape of a Bubble in a Non-Newtonian Fluid. Chemical Engineering Research and Design, 2006, 84, 875-883.	2.7	37
43	Asymmetrical breakup of bubbles at a microfluidic T-junction divergence: feedback effect of bubble collision. Microfluidics and Nanofluidics, 2012, 13, 723-733.	1.0	37
44	Critical lengths for the transition of bubble breakup in microfluidic T-junctions. Chemical Engineering Science, 2014, 111, 244-254.	1.9	37
45	Rheological characteristics of highly concentrated anaerobic digested sludge. Biochemical Engineering Journal, 2014, 86, 57-61.	1.8	37
46	Dynamics of bubble breakup with partly obstruction in a microfluidic T-junction. Chemical Engineering Science, 2015, 132, 128-138.	1.9	37
47	Effects of thermal treatment on high solid anaerobic digestion of swine manure: Enhancement assessment and kinetic analysis. Waste Management, 2017, 62, 69-75.	3.7	37
48	Study of an enhanced dry anaerobic digestion of swine manure: Performance and microbial community property. Bioresource Technology, 2019, 282, 353-360.	4.8	37
49	Passage of a Gas Bubble through a Liquidâˆ'Liquid Interface. Industrial & Engineering Chemistry Research, 2007, 46, 6099-6104.	1.8	35
50	Effect of hydrodynamic shear on biogas production and granule characteristics in a continuous stirred tank reactor. Process Biochemistry, 2016, 51, 345-351.	1.8	35
51	Enhancement effect and mechanism of gas-liquid mass transfer by baffles embedded in the microchannel. Chemical Engineering Science, 2019, 201, 264-273.	1.9	35
52	Mass transfer characteristics of CO2 absorption into 1-butyl-3-methylimidazolium tetrafluoroborate aqueous solution in microchannel. International Journal of Heat and Mass Transfer, 2019, 128, 1064-1071.	2.5	35
53	Gasâ€“liquid flow stability and bubble formation in non-Newtonian fluids in microfluidic flow-focusing devices. Microfluidics and Nanofluidics, 2011, 10, 1135-1140.	1.0	34
54	Bubble formation in non-Newtonian fluids in a microfluidic T-junction. Chemical Engineering and Processing: Process Intensification, 2011, 50, 438-442.	1.8	34

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55	Breakup dynamics for droplet formation in a flow-focusing device: Rupture position of viscoelastic thread from matrix. Chemical Engineering Science, 2016, 153, 255-269.	1.9	33
56	Ablative melting of a solid cylinder perpendicularly pressed against a heated wall. International Journal of Heat and Mass Transfer, 1986, 29, 1407-1415.	2.5	32
57	Systematic Study on the Coalescence and Breakup Behaviors of Multiple Parallel Bubbles Rising in Power-law Fluid. Industrial & Engineering Chemistry Research, 2014, 53, 4850-4860.	1.8	32
58	Bubble breakup with permanent obstruction in an asymmetric microfluidic <scp>T</scp>â€junction. AIChE Journal, 2015, 61, 1081-1091.	1.8	31
59	Effect of Fenton pretreatment on anaerobic digestion of olive mill wastewater and olive mill solid waste in mesophilic conditions. International Journal of Green Energy, 2017, 14, 555-560.	2.1	31
60	Dynamics and mass transfer characteristics of CO2 absorption into MEA/[Bmim][BF4] aqueous solutions in a microchannel. Separation and Purification Technology, 2019, 210, 541-552.	3.9	31
61	Evidence for in-line bubble interactions in non-Newtonian fluids. Chemical Engineering Science, 1998, 53, 2219-2230.	1.9	30
62	Dynamics of bubble formation in highly viscous liquids in a flow-focusing device. Chemical Engineering Science, 2017, 172, 278-285.	1.9	30
63	Numbering-up strategies of micro-chemical process: Uniformity of distribution of multiphase flow in parallel microchannels. Chemical Engineering and Processing: Process Intensification, 2018, 132, 148-159.	1.8	30
64	Mass transfer characteristics of CO2 absorption into 2-amino-2-methyl-1-propanol non-aqueous solution in a microchannel. Journal of Industrial and Engineering Chemistry, 2019, 75, 194-201.	2.9	30
65	Mass transfer of chemical absorption of CO2 in a serpentine minichannel. Chemical Engineering Journal, 2021, 414, 128791.	6.6	29
66	An Experimental Investigation for Bubble Rising in Non-Newtonian Fluids and Empirical Correlation of Drag Coefficient. Journal of Fluids Engineering, Transactions of the ASME, 2010, 132, .	0.8	28
67	Multiscale hydrodynamic investigation to intensify the biogas production in upflow anaerobic reactors. Bioresource Technology, 2014, 155, 1-7.	4.8	28
68	Micro-magnetofluidics of ferrofluid droplet formation in a T-junction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 537, 572-579.	2.3	27
69	Effects of the Gas Feed on Bubble Formation in a Microfluidic T-Junction: Constant-Pressure versus Constant-Flow-Rate Injection. Industrial & Engineering Chemistry Research, 2019, 58, 10092-10105.	1.8	27
70	Bubble coalescence at a microfluidic T-junction convergence: from colliding to squeezing. Microfluidics and Nanofluidics, 2014, 16, 275-286.	1.0	26
71	Formation of satellite droplets in flow-focusing junctions: volume and neck rupture. Microsystem Technologies, 2015, 21, 499-507.	1.2	26
72	Drop impact on superhydrophobic surface with protrusions. Chemical Engineering Science, 2020, 212, 115351.	1.9	26

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73	Effects of increase modes of shear force on granule disruption in upflow anaerobic reactors. Water Research, 2012, 46, 3189-3196.	5.3	25
74	The viscosity distribution around a rising bubble in shear-thinning non-newtonian fluids. Brazilian Journal of Chemical Engineering, 2012, 29, 265-274.	0.7	25
75	Bubble formation at an orifice: A multiscale investigation. Chemical Engineering Science, 2013, 92, 118-125.	1.9	25
76	Crater formation on anaerobic granular sludge. Chemical Engineering Journal, 2016, 300, 423-428.	6.6	25
77	Microfluidic step emulsification techniques based on spontaneous transformation mechanism: A review. Journal of Industrial and Engineering Chemistry, 2020, 92, 18-40.	2.9	24
78	3D finite element simulation of fluid flow through a SMX static mixer. Computers and Chemical Engineering, 1998, 22, S759-S761.	2.0	23
79	Study on bubble formation in non-Newtonian fluids by laser image technique. Optics and Laser Technology, 2008, 40, 389-393.	2.2	23
80	Effect of the fluid injection configuration on droplet size in a microfluidic T junction. Physical Review E, 2014, 89, 013003.	0.8	23
81	Application of the electro-Fenton process for cutting fluid mineralization. Environmental Technology (United Kingdom), 2015, 36, 1924-1932.	1.2	23
82	Formation dynamics of elastic droplets in a microfluidic T-junction. Chemical Engineering Research and Design, 2018, 139, 188-196.	2.7	23
83	Effect of channel opening angle on the performance of structured packings. Chemical Engineering Journal, 2008, 144, 227-234.	6.6	22
84	Pinch-off mechanism for Taylor bubble formation in a microfluidic flow-focusing device. Microfluidics and Nanofluidics, 2014, 16, 1047-1055.	1.0	22
85	Bubble coalescence in non-Newtonian fluids in a microfluidic expansion device. Chemical Engineering and Processing: Process Intensification, 2015, 97, 38-44.	1.8	22
86	Dynamics of bubble breakup at a T junction. Physical Review E, 2016, 93, 022802.	0.8	22
87	Novel insight into high solid anaerobic digestion of swine manure after thermal treatment: Kinetics and microbial community properties. Journal of Environmental Management, 2019, 235, 169-177.	3.8	22
88	Mass-Transfer Characteristics of CO₂ Absorption into Aqueous Solutions of <i>N</i>-Methyldiethanolamine + Diethanolamine in a T-Junction Microchannel. ACS Sustainable Chemistry and Engineering, 2019, 7, 4368-4375.	3.2	22
89	Intensification of gas-liquid two-phase flow and mass transfer in microchannels by sudden expansions. Chemical Engineering Science, 2021, 229, 116040.	1.9	22
90	The breakup dynamics and mechanism of viscous droplets in Y-shaped microchannels. Chemical Engineering Science, 2021, 231, 116300.	1.9	22

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91	Rheological simulation of in-line bubble interactions. AIChE Journal, 1997, 43, 265-267.	1.8	21
92	Liquid/Liquid Viscous Dispersions with a SMX Static Mixer. Chemical Engineering Research and Design, 2007, 85, 395-405.	2.7	21
93	Dynamical deformation of a flat liquidâ€"liquid interface. Experiments in Fluids, 2011, 50, 1293-1303.	1.1	21
94	A Multiscale Approach for Modeling Bubbles Rising in Non-Newtonian Fluids. Industrial & Engineering Chemistry Research, 2012, 51, 2084-2093.	1.8	21
95	Time-resolved mixing and flow-field measurements during droplet formation in a flow-focusing junction. Journal of Micromechanics and Microengineering, 2015, 25, 084014.	1.5	21
96	Magnetofluidic control of the breakup of ferrofluid droplets in a microfluidic Y-junction. RSC Advances, 2016, 6, 778-785.	1.7	21
97	Formation of droplet and â€œstring of sausagesâ€• for water-ionic liquid ([BMIM][PF6]) two-phase flow in a flow-focusing device. Chemical Engineering and Processing: Process Intensification, 2018, 125, 8-17.	1.8	21
98	Bubble Motion in Nonâ€Newtonian Fluids and Suspensions. Canadian Journal of Chemical Engineering, 2003, 81, 483-490.	0.9	20
99	Lattice Boltzmann investigation of droplet inertial spreading on various porous surfaces. Physical Review E, 2015, 91, 052405.	0.8	20
100	Critical condition for bubble breakup in a microfluidic flow-focusing junction. Chemical Engineering Science, 2017, 164, 178-187.	1.9	20
101	Study on the Flow Field around Two Parallel Moving Bubbles and Interaction Between Bubbles Rising in CMC Solutions by PIV. Chinese Journal of Chemical Engineering, 2009, 17, 904-913.	1.7	19
102	Microscale Investigation of Anaerobic Biogas Production under Various Hydrodynamic Conditions. Environmental Science & Technology, 2012, 46, 8698-8704.	4.6	19
103	Breakup dynamics of ferrofluid droplet in a microfluidic T-junction. Journal of Industrial and Engineering Chemistry, 2017, 54, 408-420.	2.9	19
104	Bubble pinch-off in Newtonian and non-Newtonian fluids. Chemical Engineering Science, 2017, 170, 98-104.	1.9	19
105	Selfâ€similar breakup of viscoelastic thread for droplet formation in flowâ€focusing devices. AIChE Journal, 2017, 63, 5196-5206.	1.8	19
106	Distribution of gas-liquid two-phase flow in parallel microchannels with the splitting of the liquid feed. Chemical Engineering Journal, 2020, 398, 125630.	6.6	19
107	Enhancement of gas-liquid mass transfer by nanofluids in a microchannel under Taylor flow regime. International Journal of Heat and Mass Transfer, 2021, 176, 121435.	2.5	19
108	Note on the mechanism of interfacial mass transfer of absorption processes. International Journal of Heat and Mass Transfer, 2005, 48, 3454-3460.	2.5	18

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109	Gas/liquid dispersions with a SMX static mixer in the laminar regime. Chemical Engineering Science, 2006, 61, 3506-3518.	1.9	18
110	Threeâ€dimensional numerical simulation of coalescence and interactions of multiple horizontal bubbles rising in shearâ€thinning fluids. AIChE Journal, 2015, 61, 3528-3546.	1.8	18
111	The minimum in-line coalescence height of bubbles in non-Newtonian fluid. International Journal of Multiphase Flow, 2017, 92, 161-170.	1.6	18
112	The effect of flow distribution on mass transfer of gas-liquid two-phase flow in two parallelized microchannels in a microfluidic loop. International Journal of Heat and Mass Transfer, 2019, 130, 266-273.	2.5	18
113	Dynamics of droplet formation and mechanisms of satellite droplet formation in T-junction microchannel. Chemical Engineering Science, 2022, 248, 117217.	1.9	18
114	Measurement of solid particle residence time in a cyclone reactor: A comparison of four methods. Chemical Engineering and Processing: Process Intensification, 1987, 22, 215-222.	1.8	17
115	The Drag Coefficient and the Shape for a Single Bubble Rising in Non-Newtonian Fluids. Journal of Fluids Engineering, Transactions of the ASME, 2012, 134, .	0.8	17
116	Pressure drop in a splitâ€andâ€recombine caterpillar micromixer in case of newtonian and nonâ€newtonian fluids. AIChE Journal, 2013, 59, 2679-2685.	1.8	17
117	Formation and uniformity of bubbles in highly viscous fluids in symmetric parallel microchannels. Chemical Engineering Science, 2021, 230, 116166.	1.9	17
118	Bubbles' rising dynamics in polymeric solutions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 325, 43-50.	0.9	16
119	An analytical approach to the rise velocity of periodic bubble trains in non-Newtonian fluids. European Physical Journal E, 2005, 16, 29-35.	0.7	16
120	Pressure drop model of gas-liquid flow with mass transfer in tree-typed microchannels. Chemical Engineering Journal, 2020, 397, 125340.	6.6	16
121	A multiscale approach for studying an anaerobic multiphase bioreactor. Chemical Engineering Science, 2011, 66, 3423-3431.	1.9	15
122	Experimental investigation of bubble and drop formation at submerged orifices. Chemical Papers, 2013, 67, .	1.0	15
123	Newtonian and Nonâ€Newtonian Flows in Microchannels: Inline Rheological Characterization. Chemical Engineering and Technology, 2016, 39, 987-992.	0.9	15
124	Purification and detoxification of petroleum refinery wastewater by electrocoagulation process. Environmental Technology (United Kingdom), 2016, 37, 2348-2357.	1.2	15
125	Novel insight of spatial mass transfer conditions of upflow anaerobic reactor. Journal of Cleaner Production, 2018, 204, 390-398.	4.6	15
126	Manipulation of microdroplets at a T-junction: Coalescence and scaling law. Journal of Industrial and Engineering Chemistry, 2018, 65, 272-279.	2.9	15

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127	Manipulable Formation of Ferrofluid Droplets in Y-Shaped Flow-Focusing Microchannels. Industrial & Engineering Chemistry Research, 2019, 58, 19226-19238.	1.8	15
128	Breakup dynamics of elastic droplet and stretching of polymeric filament in a T-junction. Chemical Engineering Science, 2019, 206, 212-223.	1.9	15
129	Mechanism of bubble formation in stepâ€emulsification devices. AIChE Journal, 2020, 66, e16777.	1.8	15
130	Bubble formation in T-junctions within parallelized microchannels: Effect of viscoelasticity. Chemical Engineering Journal, 2021, 426, 131783.	6.6	15
131	Shear-induced tail breakup of droplets (bubbles) flowing in a straight microfluidic channel. Chemical Engineering Science, 2015, 135, 61-66.	1.9	14
132	Experimental investigation on the breakup dynamics for bubble formation in viscous liquids in a flow-focusing device. Chemical Engineering Science, 2016, 152, 516-527.	1.9	14
133	Asymmetrical breakup and size distribution of droplets in a branching microfluidic T-junction. Korean Journal of Chemical Engineering, 2019, 36, 21-29.	1.2	14
134	An effective method to facile coalescence of microdroplet in the symmetrical T-junction with expanded convergence. Chemical Engineering Science, 2020, 213, 115389.	1.9	14
135	Investigation of hydrodynamics in high solid anaerobic digestion by particle image velocimetry and computational fluid dynamics: Role of mixing on flow field and dead zone reduction. Bioresource Technology, 2021, 319, 124130.	4.8	14
136	The breakup dynamics of bubbles stabilized by nanoparticles in a microfluidic Y-junction. Chemical Engineering Science, 2021, 245, 116867.	1.9	14
137	Insight into mass transfer by convective diffusion in anaerobic granules to enhance biogas production. Biochemical Engineering Journal, 2017, 127, 154-160.	1.8	13
138	Bench-scale insight into the amenability of case barren copper ores towards XRF-based bulk sorting. Minerals Engineering, 2018, 121, 129-136.	1.8	13
139	Hydrodynamics and gas-liquid mass transfer in a cross-flow T-junction microchannel: Comparison of two operation modes. Separation and Purification Technology, 2021, 255, 117697.	3.9	13
140	Mass transfer enhancement of CO2 absorption into [Bmim][BF4] aqueous solution in microchannels by heart-shaped grooves. Chemical Engineering and Processing: Process Intensification, 2021, 167, 108536.	1.8	13
141	Effects on droplet generation in step-emulsification microfluidic devices. Chemical Engineering Science, 2021, 246, 116959.	1.9	13
142	Distribution of liquid-liquid two-phase flow and droplet dynamics in asymmetric parallel microchannels. Chemical Engineering Journal, 2022, 441, 136027.	6.6	13
143	Effect of packing on drop swarms extraction of high viscosity solvents. Hydrometallurgy, 2005, 78, 30-40.	1.8	12
144	Impacts of hydrodynamic conditions on sludge digestion in internal circulation anaerobic digester. Process Biochemistry, 2012, 47, 1627-1632.	1.8	12

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145	Mineralization of the Pharmaceutical Î²-Blocker Atenolol by Means of Indirect Electrochemical Advanced Oxidation Process: Parametric and Kinetic Study. Separation Science and Technology, 2014, 49, 2942-2950.	1.3	12
146	Formation and breakup dynamics of ferrofluid drops. Chemical Engineering Research and Design, 2016, 115, 262-269.	2.7	12
147	Inertio-capillary cross-streamline drift of droplets in Poiseuille flow using dissipative particle dynamics simulations. Soft Matter, 2018, 14, 2267-2280.	1.2	12
148	Hydrodynamics of gas-liquid dispersion in transparent Sulzer static mixers SMXTM. Chemical Engineering Science, 2020, 213, 115398.	1.9	12
149	Dynamics of non-Newtonian droplet breakup with partial obstruction in microfluidic Y-junction. Chemical Engineering Science, 2021, 240, 116696.	1.9	12
150	RESIDENCE TIME DISTRIBUTION OF RHEOLOGICALLY COMPLEX FLUIDS PASSING THROUGH A SULZER SMX STATIC MIXER. Chemical Engineering Communications, 1998, 165, 1-15.	1.5	11
151	Effects of rising biogas bubbles on the hydrodynamic shear conditions around anaerobic granule. Chemical Engineering Journal, 2015, 273, 111-119.	6.6	11
152	Flow field investigation of high solid anaerobic digestion by Particle Image Velocimetry (PIV). Science of the Total Environment, 2018, 626, 592-602.	3.9	11
153	Dynamics and interfacial evolution for bubble breakup in shear-thinning non-Newtonian fluid in microfluidic T-junction. Chemical Engineering Science, 2019, 208, 115158.	1.9	11
154	Gas-liquid distribution and mass transfer of CO2 absorption into sodium glycinate aqueous solution in parallel multi-channel microreactor. International Journal of Heat and Mass Transfer, 2020, 157, 119943.	2.5	11
155	Formation of droplets of shearâ€thinning<scp>nonâ€Newtonian</scp>fluids in a stepâ€emulsification microdevice. AIChE Journal, 2022, 68, e17395.	1.8	11
156	Bubble dynamics and mass transfer enhancement in splitâ€"andâ€"recombine (SAR) microreactor with rapid chemical reaction. Separation and Purification Technology, 2022, 287, 120573.	3.9	11
157	Dynamics and formation of alternating droplets under magnetic field at a T-junction. Chemical Engineering Science, 2019, 200, 248-256.	1.9	10
158	Quantitative hydrodynamic characterization of high solid anaerobic digestion: Correlation of â€œmixing-fluidity-energyâ€•and scale-up effect. Bioresource Technology, 2022, 344, 126237.	4.8	10
159	Performance and pressure drop of<scp>CO₂</scp>absorption into taskâ€specific and halideâ€free ionic liquids in a microchannel. AIChE Journal, 2022, 68, .	1.8	10
160	Liquid Film Characteristics on Surface of Structured Packing. Chinese Journal of Chemical Engineering, 2009, 17, 47-52.	1.7	9
161	CO₂ Absorption by Liquid Films under Taylor Flow in Serpentine Minichannels. Industrial & Engineering Chemistry Research, 2020, 59, 12250-12261.	1.8	9
162	Bubble formation in a step-emulsification microdevice with parallel microchannels. Chemical Engineering Science, 2020, 224, 115815.	1.9	9

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163	Comparison of formation of bubbles and droplets in step-emulsification microfluidic devices. Journal of Industrial and Engineering Chemistry, 2022, 106, 469-481.	2.9	9
164	Formation of viscoelastic droplets in a stepâ€emulsification microdevice. AIChE Journal, 2022, 68, .	1.8	9
165	Bubble Formation in Non-Newtonian Fluids Using Laser Image Measurement System. Chinese Journal of Chemical Engineering, 2007, 15, 611-615.	1.7	8
166	Chaotic behavior of in-line bubbles rising with coalescences in non-Newtonian fluids: A multiscale analysis. Korean Journal of Chemical Engineering, 2011, 28, 56-63.	1.2	8
167	Pressure drop of single phase flow in microchannels and its application in characterizing the apparent rheological property of fluids. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	8
168	The effect of viscosity ratio on drop pinch-off dynamics in two-fluid flow. Journal of Industrial and Engineering Chemistry, 2020, 91, 347-354.	2.9	8
169	Effect of solvent on CO2 absorption performance in the microchannel. Journal of Molecular Liquids, 2022, 357, 119133.	2.3	8
170	Le cyclone: Un rÃ©acteur chimique. Application Ã la rÃ©action de dÃ©carbonatation de NaHCO₃. Canadian Journal of Chemical Engineering, 1992, 70, 1132-1142.	0.9	7
171	Undressing a Water Marble on Oil Film. Advanced Materials Interfaces, 2017, 4, 1700193.	1.9	7
172	Liquid Drops Hurdling Barriers of Various Geometries. Advanced Materials Interfaces, 2017, 4, 1700516.	1.9	7
173	Initial coalescence of a drop at a planar liquid surface. Physical Review E, 2019, 100, 033112.	0.8	7
174	The effect of liquid viscosity on bubble formation dynamics in a flow-focusing device. International Journal of Multiphase Flow, 2019, 117, 206-211.	1.6	7
175	3D simulation of interaction and drag coefficient of bubbles continuously rising with equilateral triangle arrangement in shear-thinning fluids. International Journal of Multiphase Flow, 2019, 110, 69-81.	1.6	7
176	Flow Distribution and Mass Transfer of Gasâ€"Liquid Flow in Parallel Microchannels with Different Tree-Shaped Distributors: Halving-Width versus Constant-Width. Industrial & Engineering Chemistry Research, 2020, 59, 1327-1335.	1.8	7
177	Volumetric and Viscometric Properties of Maltitol in Glycylglycine Aqueous Solutions at <i>T</i> = 293.15â€"333.15 K. Journal of Chemical & Engineering Data, 2021, 66, 360-367.	1.0	7
178	Visualization of mass transfer in mixing processes in high solid anaerobic digestion using Laser Induced Fluorescence (LIF) technique. Waste Management, 2021, 127, 121-129.	3.7	7
179	Formation mechanism and criterion of tail satellite droplets for moving droplet in microchannel. Chemical Engineering Science, 2021, 238, 116607.	1.9	7
180	Stability and uniformity of gasâ€"liquid two-phase flow in shear-thinning fluids in parallelized microchannels. Chemical Engineering Journal, 2022, 444, 136679.	6.6	7

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181	Self-similar pinch-off mechanism and scaling of ferrofluid drops. Physical Review E, 2015, 92, 061003.	0.8	6
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