Huai Z Li

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1019296/publications.pdf

Version: 2024-02-01

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	Formation characteristics of Taylor bubbles in a T-junction microchannel with chemical absorption. Chinese Journal of Chemical Engineering, 2022, 46, 214-222.	1.7	4
2	Formation dynamics and size prediction of bubbles for slurry system in T-shape microchannel. Chinese Journal of Chemical Engineering, 2022, 45, 153-161.	1.7	3
3	Formation of droplets of shearâ€thinning<scp>nonâ€Newtonian</scp>fluids in a stepâ€emulsification microdevice. AIChE Journal, 2022, 68, e17395.	1.8	11
4	Dynamics of droplet formation and mechanisms of satellite droplet formation in T-junction microchannel. Chemical Engineering Science, 2022, 248, 117217.	1.9	18
5	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
6	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
7	Distribution of liquidâ€"liquid two-phase flow in branching T-junction microchannels. Chemical Engineering Journal, 2022, 431, 133939.	6.6	3
8	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
9	Volumetric and Viscometric Properties of Sugar Alcohols in Glycylglycineâ€"Water Mixtures from 293.15 to 333.15 K. Journal of Chemical & Engineering Data, 2022, 67, 305-320.	1.0	2
10	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
11	Mass transfer and capture of carbon dioxide using amino acids sodium aqueous solution in microchannel. Chemical Engineering and Processing: Process Intensification, 2022, 173, 108831.	1.8	5
12	Distribution of liquid-liquid two-phase flow and droplet dynamics in asymmetric parallel microchannels. Chemical Engineering Journal, 2022, 441, 136027.	6.6	13
13	Effect of solvent on CO2 absorption performance in the microchannel. Journal of Molecular Liquids, 2022, 357, 119133.	2.3	8
14	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
15	Formation of viscoelastic droplets in a stepâ€emulsification microdevice. AIChE Journal, 2022, 68, .	1.8	9
16	Effects of gas concentration on hydrodynamics of gas absorption in a microchannel. AIChE Journal, 2022, 68, .	1.8	3
17	Slug bubble deformation and its influence on bubble breakup dynamics in microchannel. Chinese Journal of Chemical Engineering, 2022, 50, 66-74.	1.7	1
18	Bubble formation in high-viscosity liquids in step-emulsification microdevices. Journal of Industrial and Engineering Chemistry, 2022, 114, 221-232.	2.9	2

#	Article	IF	Citations
19	Intensification of gas-liquid two-phase flow and mass transfer in microchannels by sudden expansions. Chemical Engineering Science, 2021, 229, 116040.	1.9	22
20	Formation and uniformity of bubbles in highly viscous fluids in symmetric parallel microchannels. Chemical Engineering Science, 2021, 230, 116166.	1.9	17
21	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
22	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
23	The breakup dynamics and mechanism of viscous droplets in Y-shaped microchannels. Chemical Engineering Science, 2021, 231, 116300.	1.9	22
24	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
25	Mesoscale effect on bubble formation in stepâ€emulsification devices with two parallel microchannels. AIChE Journal, 2021, 67, .	1.8	5
26	Coalescence dynamics of two droplets of different viscosities in T-junction microchannel with a funnel-typed expansion chamber. Chinese Journal of Chemical Engineering, 2021, 38, 43-52.	1.7	2
27	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
28	Mass transfer of chemical absorption of CO2 in a serpentine minichannel. Chemical Engineering Journal, 2021, 414, 128791.	6.6	29
29	Formation mechanism and criterion of tail satellite droplets for moving droplet in microchannel. Chemical Engineering Science, 2021, 238, 116607.	1.9	7
30	Dynamics of non-Newtonian droplet breakup with partial obstruction in microfluidic Y-junction. Chemical Engineering Science, 2021, 240, 116696.	1.9	12
31	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
32	Motion dynamics of liquid drops and powder-encapsulated liquid marbles on an inclined solid surface. Powder Technology, 2021, 394, 1240-1247.	2.1	4
33	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
34	The breakup dynamics of bubbles stabilized by nanoparticles in a microfluidic Y-junction. Chemical Engineering Science, 2021, 245, 116867.	1.9	14
35	Bubble formation in T-junctions within parallelized microchannels: Effect of viscoelasticity. Chemical Engineering Journal, 2021, 426, 131783.	6.6	15
36	Effects on droplet generation in step-emulsification microfluidic devices. Chemical Engineering Science, 2021, 246, 116959.	1.9	13

#	Article	IF	Citations
37	Deformation and breakup of droplets in a double T-junction microdisperser with double input of the continuous phase. Chemical Engineering and Processing: Process Intensification, 2021, , 108674.	1.8	2
38	Mineral pollutants removal through immobilized microalgae-bacterial flocs in a multitrophic microreactor. Environmental Technology (United Kingdom), 2020, 41, 1912-1922.	1.2	4
39	Mechanism of bubble formation in stepâ€emulsification devices. AIChE Journal, 2020, 66, e16777.	1.8	15
40	Volumetric and Viscometric Properties for Binary and Ternary Solutions of Diethylenetriamine, <i>N</i>,<i>N</i>-Diethylethanolamine, and Water. Journal of Chemical & Engineering Data, 2020, 65, 239-254.	1.0	2
41	Drop impact on superhydrophobic surface with protrusions. Chemical Engineering Science, 2020, 212, 115351.	1.9	26
42	Enhancement and mechanism of adsorptive particles on gas-liquid interfacial mass transfer. Chemical Engineering and Processing: Process Intensification, 2020, 147, 107760.	1.8	5
43	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
44	Hydrodynamics of gas-liquid dispersion in transparent Sulzer static mixers SMXTM. Chemical Engineering Science, 2020, 213, 115398.	1.9	12
45	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
46	Microfluidic step emulsification techniques based on spontaneous transformation mechanism: A review. Journal of Industrial and Engineering Chemistry, 2020, 92, 18-40.	2.9	24
47	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
48	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
49	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
50	Interaction and drag coefficient of three horizontal bubbles with different sizes rising in the shear-thinning fluids. International Journal of Multiphase Flow, 2020, 125, 103214.	1.6	3
51	Controllable Droplet Coalescence in the T-Junction Microchannel with a Funnel-Typed Expansion Chamber. Industrial & Engineering Chemistry Research, 2020, 59, 10298-10307.	1.8	5
52	CO₂ Absorption by Liquid Films under Taylor Flow in Serpentine Minichannels. Industrial & Engineering Chemistry Research, 2020, 59, 12250-12261.	1.8	9
53	Pressure drop model of gas-liquid flow with mass transfer in tree-typed microchannels. Chemical Engineering Journal, 2020, 397, 125340.	6.6	16
54	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

#	Article	IF	Citations
55	Bubble formation in a step-emulsification microdevice with parallel microchannels. Chemical Engineering Science, 2020, 224, 115815.	1.9	9
56	Interfacial dynamics of the core-annular flow for glycerolâ€“water solution / ionic liquid ([BMIM][PF6]) two-phase flow in a microfluidic flow-focusing junction. Journal of the Taiwan Institute of Chemical Engineers, 2019, 98, 45-52.	2.7	5
57	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
58	Characterization of Bubble Shapes in Nonâ€Newtonian Fluids by Parametric Equations. Chemical Engineering and Technology, 2019, 42, 2321-2330.	0.9	6
59	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
60	Self-Sustained Coalescenceâ€“Breakup Cycles of Ferrodrops under a Magnetic Field. Langmuir, 2019, 35, 12028-12034.	1.6	3
61	Dynamics and modelling of bubble formation in asymmetric parallel microchannels. Chemical Engineering Science: X, 2019, 4, 100039.	1.5	4
62	Manipulable Formation of Ferrofluid Droplets in Y-Shaped Flow-Focusing Microchannels. Industrial & Engineering Chemistry Research, 2019, 58, 19226-19238.	1.8	15
63	Initial coalescence of a drop at a planar liquid surface. Physical Review E, 2019, 100, 033112.	0.8	7
64	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
65	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
66	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
67	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
68	Breakup dynamics of elastic droplet and stretching of polymeric filament in a T-junction. Chemical Engineering Science, 2019, 206, 212-223.	1.9	15
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	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
71	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
72	Study of an enhanced dry anaerobic digestion of swine manure: Performance and microbial community property. Bioresource Technology, 2019, 282, 353-360.	4.8	37

#	Article	IF	Citations
73	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
74	Dynamics and formation of alternating droplets under magnetic field at a T-junction. Chemical Engineering Science, 2019, 200, 248-256.	1.9	10
75	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
76	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
77	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
78	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
79	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
80	Inertio-capillary cross-streamline drift of droplets in Poiseuille flow using dissipative particle dynamics simulations. Soft Matter, 2018, 14, 2267-2280.	1.2	12
81	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
82	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
83	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
84	Breakup dynamics for droplet formation in shear-thinning fluids in a flow-focusing device. Chemical Engineering Science, 2018, 176, 66-76.	1.9	38
85	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
86	Computational Fluid Dynamics Simulation of Generation and Coalescence of Bubbles in Nonâ€Newtonian Fluids. Chemical Engineering and Technology, 2018, 41, 541-552.	0.9	2
87	Interfacial dynamics of the â€œsausageâ€•wave for glycerol-water solution/ionic liquid ([BMIM][PF6]) two-phase flow in a microfluidic flow-focusing junction. Chemical Engineering and Processing: Process Intensification, 2018, 133, 294-302.	1.8	5
88	Formation dynamics of elastic droplets in a microfluidic T-junction. Chemical Engineering Research and Design, 2018, 139, 188-196.	2.7	23
89	Novel insight of spatial mass transfer conditions of upflow anaerobic reactor. Journal of Cleaner Production, 2018, 204, 390-398.	4.6	15
90	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

#	Article	IF	Citations
91	Dynamics of droplet breakup and formation of satellite droplets in a microfluidic T-junction. Chemical Engineering Science, 2018, 188, 158-169.	1.9	53
92	Manipulation of microdroplets at a T-junction: Coalescence and scaling law. Journal of Industrial and Engineering Chemistry, 2018, 65, 272-279.	2.9	15
93	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
94	Velocity Evolution for the Coalescence of Two In-Line Bubbles Rising in Non-Newtonian Fluids. Theoretical Foundations of Chemical Engineering, 2018, 52, 459-464.	0.2	5
95	Critical condition for bubble breakup in a microfluidic flow-focusing junction. Chemical Engineering Science, 2017, 164, 178-187.	1.9	20
96	Undressing a Water Marble on Oil Film. Advanced Materials Interfaces, 2017, 4, 1700193.	1.9	7
97	Breakup dynamics of ferrofluid droplet in a microfluidic T-junction. Journal of Industrial and Engineering Chemistry, 2017, 54, 408-420.	2.9	19
98	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
99	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
100	The minimum in-line coalescence height of bubbles in non-Newtonian fluid. International Journal of Multiphase Flow, 2017, 92, 161-170.	1.6	18
101	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
102	Bubble pinch-off in Newtonian and non-Newtonian fluids. Chemical Engineering Science, 2017, 170, 98-104.	1.9	19
103	Selfâ€similar breakup of viscoelastic thread for droplet formation in flowâ€focusing devices. AIChE Journal, 2017, 63, 5196-5206.	1.8	19
104	Liquid Drops Hurdling Barriers of Various Geometries. Advanced Materials Interfaces, 2017, 4, 1700516.	1.9	7
105	Insight into mass transfer by convective diffusion in anaerobic granules to enhance biogas production. Biochemical Engineering Journal, 2017, 127, 154-160.	1.8	13
106	Dynamics of bubble formation in highly viscous liquids in a flow-focusing device. Chemical Engineering Science, 2017, 172, 278-285.	1.9	30
107	Deformation of liquid-liquid interfaces by a rotating rod. Physics of Fluids, 2017, 29, 072108.	1.6	3
108	Mimicking Dolphins to Produce Ring Bubbles in Water. Biomimetics, 2016, 1, 6.	1.5	1

#	Article	IF	Citations
109	Newtonian and Nonâ€Newtonian Flows in Microchannels: Inline Rheological Characterization. Chemical Engineering and Technology, 2016, 39, 987-992.	0.9	15
110	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
111	Rheological characterization of digested sludge by solid sphere impact. Bioresource Technology, 2016, 218, 301-306.	4.8	2
112	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
113	Formation and breakup dynamics of ferrofluid drops. Chemical Engineering Research and Design, 2016, 115, 262-269.	2.7	12
114	Dynamics of bubble breakup at a T junction. Physical Review E, 2016, 93, 022802.	0.8	22
115	Crater formation on anaerobic granular sludge. Chemical Engineering Journal, 2016, 300, 423-428.	6.6	25
116	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
117	Breakup dynamics of slender droplet formation in shear-thinning fluids in flow-focusing devices. Chemical Engineering Science, 2016, 144, 75-86.	1.9	46
118	Magnetofluidic control of the breakup of ferrofluid droplets in a microfluidic Y-junction. RSC Advances, 2016, 6, 778-785.	1.7	21
119	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
120	Purification and detoxification of petroleum refinery wastewater by electrocoagulation process. Environmental Technology (United Kingdom), 2016, 37, 2348-2357.	1.2	15
121	Size effect of anaerobic granular sludge on biogas production: A micro scale study. Bioresource Technology, 2016, 202, 165-171.	4.8	55
122	Lattice Boltzmann investigation of droplet inertial spreading on various porous surfaces. Physical Review E, 2015, 91, 052405.	0.8	20
123	Self-similar pinch-off mechanism and scaling of ferrofluid drops. Physical Review E, 2015, 92, 061003.	0.8	6
124	Enhanced anaerobic digestion of waste activated sludge of low organic content in a novel digester. Water Science and Technology, 2015, 72, 966-973.	1.2	3
125	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
126	Dynamics of bubble breakup with partly obstruction in a microfluidic T-junction. Chemical Engineering Science, 2015, 132, 128-138.	1.9	37

#	Article	IF	Citations
127	Application of the electro-Fenton process for cutting fluid mineralization. Environmental Technology (United Kingdom), 2015, 36, 1924-1932.	1.2	23
128	Bubble breakup with permanent obstruction in an asymmetric microfluidic <scp>T</scp>â€junction. AIChE Journal, 2015, 61, 1081-1091.	1.8	31
129	Bubble formation and breakup dynamics in microfluidic devices: A review. Chemical Engineering Science, 2015, 135, 343-372.	1.9	128
130	Shear-induced tail breakup of droplets (bubbles) flowing in a straight microfluidic channel. Chemical Engineering Science, 2015, 135, 61-66.	1.9	14
131	Effects of rising biogas bubbles on the hydrodynamic shear conditions around anaerobic granule. Chemical Engineering Journal, 2015, 273, 111-119.	6.6	11
132	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
133	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
134	Bubble coalescence in non-Newtonian fluids in a microfluidic expansion device. Chemical Engineering and Processing: Process Intensification, 2015, 97, 38-44.	1.8	22
135	Formation of satellite droplets in flow-focusing junctions: volume and neck rupture. Microsystem Technologies, 2015, 21, 499-507.	1.2	26
136	Active control of ferrofluid droplet breakup dynamics in a microfluidic T-junction. Microfluidics and Nanofluidics, 2015, 18, 19-27.	1.0	48
137	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
138	Effect of the fluid injection configuration on droplet size in a microfluidic T junction. Physical Review E, 2014, 89, 013003.	0.8	23
139	Critical lengths for the transition of bubble breakup in microfluidic T-junctions. Chemical Engineering Science, 2014, 111, 244-254.	1.9	37
140	Pinch-off mechanism for Taylor bubble formation in a microfluidic flow-focusing device. Microfluidics and Nanofluidics, 2014, 16, 1047-1055.	1.0	22
141	Hydrodynamic feedback on bubble breakup at a Tâ€junction within an asymmetric loop. AIChE Journal, 2014, 60, 1920-1929.	1.8	47
142	Multiscale hydrodynamic investigation to intensify the biogas production in upflow anaerobic reactors. Bioresource Technology, 2014, 155, 1-7.	4.8	28
143	A damping phenomenon in viscoelastic fluids. Europhysics Letters, 2014, 105, 54006.	0.7	1
144	Intensified biogas purification in a stirred tank. Chemical Engineering and Processing: Process Intensification, 2014, 86, 1-8.	1.8	1

#	Article	IF	Citations
145	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
146	Rheological characteristics of highly concentrated anaerobic digested sludge. Biochemical Engineering Journal, 2014, 86, 57-61.	1.8	37
147	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
148	Bubble coalescence at a microfluidic T-junction convergence: from colliding to squeezing. Microfluidics and Nanofluidics, 2014, 16, 275-286.	1.0	26
149	Bubble formation at an orifice: A multiscale investigation. Chemical Engineering Science, 2013, 92, 118-125.	1.9	25
150	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
151	Ferrofluid droplet formation and breakup dynamics in a microfluidic flow-focusing device. Soft Matter, 2013, 9, 9792.	1.2	64
152	Biogas purification using intensified absorption in a stirred cell. Current Opinion in Biotechnology, 2013, 24, S43.	3.3	0
153	Experimental investigation of bubble and drop formation at submerged orifices. Chemical Papers, 2013, 67, .	1.0	15
154	Rheology and sedimentation velocity of alkaline suspensions of hematite particles at elevated temperature. Chemical Engineering and Processing: Process Intensification, 2013, 70, 233-240.	1.8	4
155	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
156	Bubbles in Non-Newtonian Fluids: A Multiscale Modeling. Oil and Gas Science and Technology, 2013, 68, 1059-1072.	1.4	3
157	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
158	Microscale Investigation of Anaerobic Biogas Production under Various Hydrodynamic Conditions. Environmental Science & Technology, 2012, 46, 8698-8704.	4.6	19
159	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
160	Droplet formation and breakup dynamics in microfluidic flow-focusing devices: From dripping to jetting. Chemical Engineering Science, 2012, 84, 207-217.	1.9	224
161	Effects of increase modes of shear force on granule disruption in upflow anaerobic reactors. Water Research, 2012, 46, 3189-3196.	5.3	25
162	Turbulent Characteristic of Liquid Around a Chain of Bubbles in Non-Newtonian Fluid. Chinese Journal of Chemical Engineering, 2012, 20, 883-888.	1.7	4

#	Article	IF	Citations
163	Impacts of hydrodynamic conditions on sludge digestion in internal circulation anaerobic digester. Process Biochemistry, 2012, 47, 1627-1632.	1.8	12
164	A Multiscale Approach for Modeling Bubbles Rising in Non-Newtonian Fluids. Industrial & Engineering Chemistry Research, 2012, 51, 2084-2093.	1.8	21
165	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
166	Breakup dynamics of slender bubbles in nonâ€newtonian fluids in microfluidic flowâ€focusing devices. AIChE Journal, 2012, 58, 3560-3567.	1.8	44
167	Experimental study of the bubble formation in T-Y junction micro-mixers. Houille Blanche, 2011, 97, 62-69.	0.3	2
168	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
169	Dynamical deformation of a flat liquidâ€"liquid interface. Experiments in Fluids, 2011, 50, 1293-1303.	1.1	21
170	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
171	A multiscale approach for studying an anaerobic multiphase bioreactor. Chemical Engineering Science, 2011, 66, 3423-3431.	1.9	15
172	Dynamics of bubble breakup in a microfluidic T-junction divergence. Chemical Engineering Science, 2011, 66, 4184-4195.	1.9	106
173	Bubble formation in non-Newtonian fluids in a microfluidic T-junction. Chemical Engineering and Processing: Process Intensification, 2011, 50, 438-442.	1.8	34
174	Scaling the formation of slug bubbles in microfluidic flow-focusing devices. Microfluidics and Nanofluidics, 2010, 8, 467-475.	1.0	61
175	Formation mechanism and size prediction of bubble in opposite-flowing T-shaped microchannel. Transactions of Tianjin University, 2010, 16, 251-255.	3.3	2
176	Chaotic Characteristics of Bubbles Rising with Coalescences in Pseudoplastic Fluid. Chinese Journal of Chemical Engineering, 2010, 18, 18-26.	1.7	4
177	Squeezing-to-dripping transition for bubble formation in a microfluidic T-junction. Chemical Engineering Science, 2010, 65, 3739-3748.	1.9	163
178	Hydration effect on the electronic transport properties of oligomeric phenylene ethynylene molecular junctions. Chinese Physics B, 2010, 19, 067305.	0.7	3
179	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
180	Flow-field dynamics during droplet formation by dripping in hydrodynamic-focusing microfluidics. Physical Review E, 2009, 80, 015301.	0.8	43

#	Article	IF	Citations
181	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
182	Liquid Film Characteristics on Surface of Structured Packing. Chinese Journal of Chemical Engineering, 2009, 17, 47-52.	1.7	9
183	Effect of counter current gas phase on liquid film. Frontiers of Chemical Engineering in China, 2009, 3, 135-137.	0.6	1
184	Modified model of bubble formation in non-Newtonian fluids. Transactions of Tianjin University, 2009, 15, 56-60.	3.3	1
185	Bubble formation and breakup mechanism in a microfluidic flow-focusing device. Chemical Engineering Science, 2009, 64, 2392-2400.	1.9	117
186	Impacts of hydrodynamic shear force on nucleation of flocculent sludge in anaerobic reactor. Water Research, 2009, 43, 3029-3036.	5.3	161
187	Route to chaos in the rising dynamics of a bubble chain in a polymeric fluid. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 6155-6160.	0.9	1
188	Passage of a bubble through a liquidâ€"liquid interface. AIChE Journal, 2008, 54, 594-600.	1.8	42
189	Effect of channel opening angle on the performance of structured packings. Chemical Engineering Journal, 2008, 144, 227-234.	6.6	22
190	Study on bubble formation in non-Newtonian fluids by laser image technique. Optics and Laser Technology, 2008, 40, 389-393.	2.2	23
191	Bubble Formation Dynamics in Various Flow-Focusing Microdevices. Langmuir, 2008, 24, 13904-13911.	1.6	66
192	Passage of a Gas Bubble through a Liquidâ˜'Liquid Interface. Industrial & Engineering Chemistry Research, 2007, 46, 6099-6104.	1.8	35
193	Bubble Formation in Non-Newtonian Fluids Using Laser Image Measurement System. Chinese Journal of Chemical Engineering, 2007, 15, 611-615.	1.7	8
194	Liquid/Liquid Viscous Dispersions with a SMX Static Mixer. Chemical Engineering Research and Design, 2007, 85, 395-405.	2.7	21
195	Bubble nucleation and growth in fluids. Chemical Engineering Science, 2007, 62, 7090-7097.	1.9	46
196	Bubbles in a viscous liquid: lattice Boltzmann simulation and experimental validation. Journal of Fluid Mechanics, 2006, 546, 113.	1.4	50
197	Origin of the negative wake behind a bubble rising in non-Newtonian fluids. Chemical Engineering Science, 2006, 61, 4041-4047.	1.9	42
198	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

#	Article	IF	Citations
199	Gas/liquid dispersions with a SMX static mixer in the laminar regime. Chemical Engineering Science, 2006, 61, 3506-3518.	1.9	18
200	Negative wake behind a sphere rising in viscoelastic fluids: A lattice Boltzmann investigation. Physical Review E, 2006, 74, 056307.	0.8	44
201	Effect of packing on drop swarms extraction of high viscosity solvents. Hydrometallurgy, 2005, 78, 30-40.	1.8	12
202	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
203	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
204	Complex flow around a bubble rising in a non-Newtonian fluid. Physical Review E, 2005, 71, 036309.	0.8	45
205	Bubbles' rising dynamics in polymeric solutions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 325, 43-50.	0.9	16
206	Bubble Motion in Nonâ€Newtonian Fluids and Suspensions. Canadian Journal of Chemical Engineering, 2003, 81, 483-490.	0.9	20
207	Modelling the bubble formation dynamics in non-Newtonian fluids. Chemical Engineering Science, 2002, 57, 339-346.	1.9	68
208	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
209	Flow of non-Newtonian fluids around bubbles: PIV measurements and birefringence visualisation. Chemical Engineering Science, 2001, 56, 1137-1141.	1.9	81
210	Simulation of the bubble formation dynamics in rheologically complex fluids. Computer Aided Chemical Engineering, 2000, , 445-450.	0.3	0
211	Bubbles in non-Newtonian fluids: Formation, interactions and coalescence. Chemical Engineering Science, 1999, 54, 2247-2254.	1.9	45
212	Evidence for in-line bubble interactions in non-Newtonian fluids. Chemical Engineering Science, 1998, 53, 2219-2230.	1.9	30
213	Chaotic Behavior of Bubble Coalescence in Non-Newtonian Fluids. Chemical Engineering and Technology, 1998, 21, 983-985.	0.9	1
214	3D finite element simulation of fluid flow through a SMX static mixer. Computers and Chemical Engineering, 1998, 22, S759-S761.	2.0	23
215	Formation des bulles dans les fluide newtoniens et non newtoniens. Comptes Rendus De L'AcadÃ©mie Des Sciences - Series IIB - Mechanics-Physics-Chemistry-Astronomy, 1998, 326, 301-308.	0.1	0
216	RESIDENCE TIME DISTRIBUTION OF RHEOLOGICALLY COMPLEX FLUIDS PASSING THROUGH A SULZER SMX STATIC MIXER. Chemical Engineering Communications, 1998, 165, 1-15.	1.5	11

#	Article	IF	Citations
217	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
218	Chaotic bubble coalescence in non-Newtonian fluids. International Journal of Multiphase Flow, 1997, 23, 713-723.	1.6	45
219	Rheological simulation of in-line bubble interactions. AICHE Journal, 1997, 43, 265-267.	1.8	21
220	Hydrodynamics and heat transfer of rheologically complex fluids in a Sulzer SMX static mixer. Chemical Engineering Science, 1996, 51, 1947-1955.	1.9	42
221	FLASH DISCHARGE OF SUPERCRITICAL FLUID AND HIGH PRESSURE GAS THROUGH PIPES: EXPERIMENTAL RESULTS AND MODELLING. Chemical Engineering Communications, 1992, 117, 415-431.	1.5	3
222	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
223	Fusion-like behaviour of wood pyrolysis. Journal of Analytical and Applied Pyrolysis, 1987, 10, 291-308.	2.6	73
224	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
225	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
226	Fast pyrolysis of wood: direct measurement and study of ablation rate. Fuel, 1985, 64, 1514-1520.	3.4	93