Guangsheng Luo

List of Publications by Year
in descending order

112 papers	2,619 citations	201575 27 h-index	243529 44 g-index
112 all docs	112 docs citations	112 times ranked	1715 citing authors

#	Article	IF	Citations
1	Determination of interfacial tension and viscosity under dripping flow in a step T-junction microdevice. Chinese Journal of Chemical Engineering, 2022, 42, 210-218.	1.7	3
2	A comprehensive study of droplet formation in a capillary embedded step T-junction: From squeezing to jetting. Chemical Engineering Journal, 2022, 427, 132067.	6.6	26
3	Determination of nitration kinetics of p-Nitrotoluene with a homogeneously continuous microflow. Chemical Engineering Science, 2022, 247, 117041.	1.9	24
4	Reaction kinetics determination based on microfluidic technology. Chinese Journal of Chemical Engineering, 2022, 41, 49-72.	1.7	31
5	Liquid-liquid flow and mass transfer characteristics in a miniaturized annular centrifugal device. Chemical Engineering Journal, 2022, 431, 134264.	6.6	16
6	Study on the three-stage growth of silica nanoparticles prepared by the drop-by-drop precipitation method. Powder Technology, 2022, 397, 117115.	2.1	2
7	Determination of the kinetics of chlorobenzene nitration using a homogeneously continuous microflow. AICHE Journal, 2022, 68, .	1.8	18
8	Taylor Bubble Generation Rules in Liquids with a Higher Viscosity in a T-Junction Microchannel. Industrial & Engineering Chemistry Research, 2022, 61, 2623-2632.	1.8	18
9	Direct imaging and mechanism study of C6 Î±-olefin adsorption on faujasite and Linde Type A zeolites. Nano Research, 2022, 15, 5322-5330.	5.8	6
10	Experimental and DFT studies on diesel-steam-reforming to hydrogen over a bimetallic Rhâ€“Ni-based MgO-Al2O3 microsphere catalyst. Fuel, 2022, 318, 123632.	3.4	5
11	A Much Cleaner Oxidation Process for 2,2â€²-Dibenzothiazole Disulfide Synthesis Catalyzed by Phosphotungstic Acid. Industrial & Engineering Chemistry Research, 2022, 61, 207-214.	1.8	3
12	Controllable preparation of thio-functionalized composite polysilsesquioxane microspheres in a microreaction system. Advanced Powder Technology, 2022, 33, 103578.	2.0	9
13	Quantitative determination of base-catalyzed hydrolysis kinetics of methyltrimethoxysilane by in-situ Raman spectroscopy. Chemical Engineering Journal, 2022, 446, 136889.	6.6	5
14	Dehydrochlorination of Î²-chlorohydrin in continuous microflow system: Reaction kinetics and process intensification. Chemical Engineering Journal, 2022, 444, 136498.	6.6	5
15	Ideality analysis and general laws of bubble swarm microflow for large-scale gasâ€“liquid microreaction processes. Chinese Journal of Chemical Engineering, 2022, 50, 56-65.	1.7	7
16	Effect of Viscosity on Liquidâ€“Liquid Slug Flow in a Step T-Junction Microchannel. Industrial & Engineering Chemistry Research, 2022, 61, 8333-8345.	1.8	6
17	Highly efficient twoâ€stage ringâ€opening of epichlorohydrin with carboxylic acid in a microreaction system. AICHE Journal, 2022, 68, .	1.8	1
18	Liquid-liquid colliding micro-dispersion and general scaling laws in novel T-junction microdevices. Chemical Engineering Science, 2022, 258, 117746.	1.9	6

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19	Mechanism and modeling of Taylor bubble generation in viscous liquids via the vertical squeezing route. Chemical Engineering Science, 2022, 258, 117763.	1.9	7
20	Rapid demulsification and phase separation in a miniaturized centrifugal demulsification device. Chemical Engineering Journal, 2022, 446, 137276.	6.6	15
21	Fast deoxygenation in a miniaturized annular centrifugal device. Separation and Purification Technology, 2022, 297, 121546.	3.9	3
22	Hydrodynamics and Scaling Laws of Gasâ€“Liquid Taylor Flow in Viscous Liquids in a Microchannel. Industrial & Engineering Chemistry Research, 2022, 61, 10275-10284.	1.8	8
23	Pressure drop analysis for the droplet break-up flow in a locally constrictive microchannel. Chemical Engineering Science, 2021, 230, 116190.	1.9	10
24	Microreaction processes for synthesis and utilization of epoxides: A review. Chemical Engineering Science, 2021, 229, 116071.	1.9	56
25	Kinetic study ofo-nitrotoluene nitration in a homogeneously continuous microflow. Reaction Chemistry and Engineering, 2021, 7, 111-122.	1.9	16
26	Microfluidic electrosynthesis of thiuram disulfides. Green Chemistry, 2021, 23, 582-591.	4.6	14
27	Remarkable improvement of epoxide ring-opening reaction efficiency and selectivity with water as a green regulator. Reaction Chemistry and Engineering, 2021, 6, 2159-2169.	1.9	6
28	Geometric Effect on Gasâ€“Liquid Bubbly Flow in Capillary-Embedded T-Junction Microchannels. Industrial & Engineering Chemistry Research, 2021, 60, 4735-4744.	1.8	20
29	Formation Mechanism of Monodispersed Polysilsesquioxane Spheres in One-Step Solâ€“Gel Method. Langmuir, 2021, 37, 5878-5885.	1.6	13
30	Highâ€frequency formation of bubble with short length in a capillary embedded step Tâ€junction microdevice. AICHE Journal, 2021, 67, e17376.	1.8	23
31	Novel microfabricated nozzle array with grooves for microdroplet generation. Chemical Engineering Journal, 2021, 416, 129103.	6.6	5
32	Main Reaction Network and Kinetics in the Synthesis of 2,2â€²-Dibenzothiazole Disulfide. Industrial & Engineering Chemistry Research, 2021, 60, 10094-10100.	1.8	1
33	General rules of bubble formation in viscous liquids in a modified step T-junction microdevice. Chemical Engineering Science, 2021, 239, 116621.	1.9	30
34	Co-precipitation continuous synthesis of the Ni-Rh-Ce0.75Zr0.25O2-Î´ catalyst in the membrane dispersion microreactor system for n-dodecane steam reforming to hydrogen. Fuel, 2021, 297, 120785.	3.4	16
35	Continuous-flow synthesis of polymethylsilsesquioxane spheres in a microreaction system. Powder Technology, 2021, 390, 521-528.	2.1	9
36	Diesel reforming to hydrogen over the mesoporous Niâ€“MgO catalyst synthesized in microfluidic platform. International Journal of Hydrogen Energy, 2021, 46, 36709-36720.	3.8	11

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37	Mechanism and kinetics of epoxide ring-opening with carboxylic acids catalyzed by the corresponding carboxylates. Chemical Engineering Science, 2021, 242, 116746.	1.9	17
38	Effect of characteristic component on diesel steam reforming to hydrogen over highly dispersed Niâ€“Rh- and Ni-based catalysts: Experiment and DFT calculation study. Fuel, 2021, 303, 121306.	3.4	18
39	Adsorption separation of liquid-phase C5-C6 alkynes and olefins using FAU zeolite adsorbents. Separation and Purification Technology, 2021, 278, 119563.	3.9	8
40	Green and sustainable synthesis of poly(Î´-valerolactone) with a TBD catalyzed ring-opening polymerization reaction. Reaction Chemistry and Engineering, 2021, 7, 76-83.	1.9	1
41	A microreactor-based research for the kinetics of polyvinyl butyral (PVB) synthesis reaction. Chemical Engineering Journal, 2020, 383, 123181.	6.6	18
42	Hydrodynamics and mass transfer of gasâ€“liquid flow in micropacked bed reactors with metal foam packing. AICHE Journal, 2020, 66, e16803.	1.8	38
43	Liquidâ€“Liquid Mass Transfer Enhancement in Milliscale Packed Beds. Industrial & Engineering Chemistry Research, 2020, 59, 4048-4057.	1.8	16
44	Reaction Pathway and Selectivity Control of Tetraethyl Thiuram Disulfide Synthesis with NaHCO₃ as a pH Regulator. ACS Omega, 2020, 5, 23736-23742.	1.6	2
45	Preparation of 2,3-Epoxypropyl Neodecanoate: Process Optimization and Mechanism Discussion. Industrial & Engineering Chemistry Research, 2020, 59, 19168-19176.	1.8	7
46	Selective Adsorption of C₆, C₈, and C₁₀ Linear Î±-Olefins from Binary Liquid-Phase Olefin/Paraffin Mixtures Using Zeolite Adsorbents: Experiment and Simulations. Langmuir, 2020, 36, 8597-8609.	1.6	17
47	Continuous, homogeneous and rapid synthesis of 4-bromo-3-methylanisole in a modular microreaction system. Chinese Journal of Chemical Engineering, 2020, 28, 2092-2098.	1.7	8
48	Hydrogen Production via Model Diesel Steam Reforming over a High-Performance Ni/Ce_{0.75}La_{0.25}O_{2âˆ’Î´}-Î³-Al₂O₃ Catalyst with Oxygen Vacancies. Industrial & Engineering Chemistry Research, 2020, 59, 15188-15201.	1.8	12
49	Investigation of the Nucleation and Initial Growth of Nanosilica Using In Situ Small-Angle X-ray Scattering and Reactive Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2020, 124, 21853-21866.	1.5	3
50	Determination of Dynamic Interfacial Tension during the Generation of Tiny Droplets in the Liquidâ€“Liquid Jetting Flow Regime. Langmuir, 2020, 36, 13633-13641.	1.6	22
51	Kinetics on thermal dissociation and oligomerization of dicyclopentadiene in a high temperature & pressure microreactor. Chemical Engineering Science, 2020, 228, 115892.	1.9	13
52	Experimental and modelâ€based study of biohydration of acrylonitrile to acrylamide in a microstructured chemical system. AICHE Journal, 2020, 66, e16298.	1.8	7
53	A chemical looping technology for the synthesis of 2,2â€²-dibenzothiazole disulfide. Green Chemistry, 2020, 22, 2778-2785.	4.6	5
54	Investigation of external mass transfer in micropacked bed reactors. Chemical Engineering Journal, 2020, 393, 124793.	6.6	30

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55	Tetramethylammonium neodecanoate as a recyclable catalyst for acidolysis reaction of epichlorohydrin with neodecanoic acid. Journal of Catalysis, 2020, 385, 44-51.	3.1	10
56	High-throughput preparation of uniform tiny droplets in multiple capillaries embedded stepwise microchannels. Journal of Flow Chemistry, 2020, 10, 271-282.	1.2	18
57	Interactions between CO₂-Responsive Switchable Emulsion Droplets Determined by Using Optical Tweezers. Langmuir, 2020, 36, 4600-4606.	1.6	9
58	Ultra-low formation of octahydrophenazine in the Beckmann rearrangement of cyclohexanone oxime using a microreactor. Reaction Chemistry and Engineering, 2019, 4, 1991-1999.	1.9	2
59	Highly efficient and greener synthesis of TS-1 in a flow system by recycling the mother liquid. Microporous and Mesoporous Materials, 2019, 288, 109585.	2.2	14
60	Preparation and in-situ surface modification of CaCO3 nanoparticles with calcium stearate in a microreaction system. Powder Technology, 2019, 356, 414-422.	2.1	25
61	Continuous synthesis of tetraethyl thiuram disulfide with CO2 as acid agent in a gas-liquid microdispersion system. Journal of Flow Chemistry, 2019, 9, 211-220.	1.2	7
62	Manipulable Formation of Ferrofluid Droplets in Y-Shaped Flow-Focusing Microchannels. Industrial & Engineering Chemistry Research, 2019, 58, 19226-19238.	1.8	15
63	Liquidâ€“Liquid Microdispersion Method for the Synthesis of TS-1 Free of Extra-Framework Ti Species. Industrial & Engineering Chemistry Research, 2019, 58, 12010-12017.	1.8	3
64	Manipulation and Control of Structure and Size of Inorganic Nanomaterials in Microchemical Systems. Chemical Engineering and Technology, 2019, 42, 1996-2008.	0.9	11
65	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
66	A modified mixedâ€acid catalytic system for Beckmann rearrangement of cyclohexanone oxime. AICHE Journal, 2019, 65, e16603.	1.8	13
67	Dynamics and formation of alternating droplets under magnetic field at a T-junction. Chemical Engineering Science, 2019, 200, 248-256.	1.9	10
68	Recent developments in microfluidic device-based preparation, functionalization, and manipulation of nano- and micro-materials. Particuology, 2019, 45, 1-19.	2.0	50
69	Kinetics Study of Sulfuric Acid Alkylation of Isobutane and Butene Using a Microstructured Chemical System. Industrial & Engineering Chemistry Research, 2019, 58, 1150-1158.	1.8	10
70	Microreaction Technology for Synthetic Chemistry. Chinese Journal of Chemistry, 2019, 37, 161-170.	2.6	34
71	Cyclohexanone ammoximation over TS-1 catalyst without organic solvent in a microreaction system. Chemical Engineering Science, 2018, 187, 60-66.	1.9	32
72	Organocatalyzed Beckmann rearrangement of cyclohexanone oxime in a microreactor: Kinetic model and product inhibition. AICHE Journal, 2018, 64, 571-577.	1.8	20

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73	Green Synthesis of Thiuram Disulfides with CO₂ as an Acid Agent for Sustainable Development. Industrial & Engineering Chemistry Research, 2018, 57, 16572-16578.	1.8	9
74	Ultrafast synthesis of TS-1 without extraframework titanium species in a continuous flow system. Microporous and Mesoporous Materials, 2018, 270, 149-154.	2.2	17
75	Manipulation of microdroplets at a T-junction: Coalescence and scaling law. Journal of Industrial and Engineering Chemistry, 2018, 65, 272-279.	2.9	15
76	Determination of the Liquid/Liquid Mass Transfer Coefficient for Each Phase in Microchannels. Industrial & Engineering Chemistry Research, 2018, 57, 9028-9036.	1.8	12
77	Investigation of dynamic surface tension in gasâ€“liquid absorption using a microflow interfacial tensiometer. Reaction Chemistry and Engineering, 2017, 2, 232-238.	1.9	12
78	Design and Scaling Up of Microchemical Systems: A Review. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 285-305.	3.3	208
79	Highly efficient synthesis of polyvinyl butyral (PVB) using a membrane dispersion microreactor system and recycling reaction technology. Green Chemistry, 2017, 19, 2155-2163.	4.6	25
80	Microdroplet Generation with Dilute Surfactant Concentration in a Modified T-Junction Device. Industrial & Engineering Chemistry Research, 2017, 56, 12131-12138.	1.8	17
81	Liquidâ€“liquid microflow reaction engineering. Reaction Chemistry and Engineering, 2017, 2, 611-627.	1.9	90
82	Impurity Formation in the Beckmann Rearrangement of Cyclohexanone Oxime to Yield Îµ-Caprolactam. Industrial & Engineering Chemistry Research, 2017, 56, 14207-14213.	1.8	8
83	Microflow extraction: A review of recent development. Chemical Engineering Science, 2017, 169, 18-33.	1.9	175
84	Synthesizing bromobutyl rubber by a microreactor system. AICHE Journal, 2017, 63, 1002-1009.	1.8	21
85	Kinetic study and intensification of acetyl guaiacol nitration with nitric acidâ€”acetic acid system in a microreactor. Journal of Flow Chemistry, 2016, 6, 309-314.	1.2	30
86	Mass-Transfer-Controlled Dynamic Interfacial Tension in Microfluidic Emulsification Processes. Langmuir, 2016, 32, 3174-3185.	1.6	38
87	Study on the transient interfacial tension in a microfluidic droplet formation coupling interphase mass transfer process. AICHE Journal, 2016, 62, 2542-2549.	1.8	20
88	Kinetics study of acrylic acid polymerization with a microreactor platform. Chemical Engineering Journal, 2016, 284, 233-239.	6.6	30
89	Determination of kinetics of CO₂ absorption in solutions of 2â€aminoâ€2â€methylâ€1â€propanol using a microfluidic technique. AICHE Journal, 2015, 61, 4358-4366.	1.8	32
90	Kinetic study of reactions of aniline and benzoyl chloride in a microstructured chemical system. AICHE Journal, 2015, 61, 3804-3811.	1.8	25

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91	Pressure drop-based determination of dynamic interfacial tension of droplet generation process in T-junction microchannel. Microfluidics and Nanofluidics, 2015, 18, 503-512.	1.0	46
92	Organocatalyzed Beckmann Rearrangement of Cyclohexanone Oxime in a Microchemical System. Organic Process Research and Development, 2015, 19, 352-356.	1.3	15
93	Modeling ethyl diazoacetate synthesis in an adiabatic microchemical system. Chemical Engineering Journal, 2015, 273, 406-412.	6.6	6
94	Mass transfer characteristics of bubbly flow in microchannels. Chemical Engineering Science, 2014, 109, 306-314.	1.9	44
95	Preparation of highly dispersed precipitated nanosilica in a membrane dispersion microreactor. Chemical Engineering Journal, 2014, 258, 327-333.	6.6	30
96	Liquidâ€“liquid microflows and mass transfer performance in slit-like microchannels. Chemical Engineering Journal, 2014, 258, 34-42.	6.6	40
97	Intensification of fast exothermic reaction by gas agitation in a microchemical system. AICHE Journal, 2014, 60, 2724-2730.	1.8	51
98	Experimental study of liquid/liquid second-dispersion process in constrictive microchannels. Chemical Engineering Journal, 2014, 254, 443-451.	6.6	49
99	Microdroplet coalescences at microchannel junctions with different collision angles. AICHE Journal, 2013, 59, 643-649.	1.8	45
100	Novel One-Step Synthesis Process from Cyclohexanone to Caprolactam in Trifluoroacetic Acid. Industrial & Engineering Chemistry Research, 2013, 52, 6377-6381.	1.8	30
101	Generating microbubbles in a co-flowing microfluidic device. Chemical Engineering Science, 2013, 100, 486-495.	1.9	54
102	In situ preparation of hydrophobic CaCO3 nanoparticles in a gasâ€“liquid microdispersion process. Particuology, 2013, 11, 421-427.	2.0	46
103	Liquidâ€“Liquid Equilibria for the System Water + 1,3-Dichloro-2-propanol + Epichlorohydrin from (283.2) Tj ETQq1 1 0.784314 rgBT /O	1.0	5
104	A facile pressure drop measurement system and its applications to gasâ€“liquid microflows. Microfluidics and Nanofluidics, 2013, 15, 715-724.	1.0	14
105	Controllable preparation of uniform polystyrene nanospheres with premix membrane emulsification. Journal of Applied Polymer Science, 2013, 129, 1202-1211.	1.3	6
106	Controllable preparation of particles with microfluidics. Particuology, 2011, 9, 545-558.	2.0	110
107	Preparation of ZnO nanoparticles using the direct precipitation method in a membrane dispersion micro-structured reactor. Powder Technology, 2010, 202, 130-136.	2.1	122
108	Heat-Transfer Performance of a Liquidâ^'Liquid Microdispersed System. Industrial & Engineering Chemistry Research, 2008, 47, 9754-9758.	1.8	28

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109	Catalytic Kinetics of Dibenzothiophene Oxidation with the Combined Catalyst of Quaternary Ammonium Bromide and Phosphotungstic Acid. Industrial & Engineering Chemistry Research, 2007, 46, 6221-6227.	1.8	17
110	Preparation of barium sulfate particles using filtration dispersion precipitation method in O/W system. Powder Technology, 2005, 153, 90-94.	2.1	21
111	Anatase-TiO2 nano-particle preparation with a micro-mixing technique and its photocatalytic performance. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 380, 320-325.	2.6	41
112	Organocatalyzed Beckmann Rearrangement of Cyclohexanone Oxime by Trifluoroacetic Anhydride in Microreactors. Industrial & Engineering Chemistry Research, 0, , .	1.8	1