Krishna Kumar Singh

List of Publications by Year
in descending order

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62	1,055	394421	454955
papers	citations	19 h-index	30 g-index

63	63	63	542
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquidâ€“liquid extraction in microchannels with Zincâ€“D2EHPA system. Hydrometallurgy, 2014, 144-145, 54-62.	4.3	79
2	Liquidâ€“liquid extraction in microchannels and conventional stage-wise extractors: A comparative study. Chemical Engineering and Processing: Process Intensification, 2015, 98, 95-105.	3.6	62
3	Numerical simulation of mixing at 1â€“1 and 1â€“2 microfluidic junctions. Chemical Engineering and Processing: Process Intensification, 2014, 85, 227-240.	3.6	56
4	Liquidâ€“Liquid Two-Phase Flow Patterns in Y-Junction Microchannels. Industrial & Engineering Chemistry Research, 2017, 56, 12215-12226.	3.7	54
5	Representative drop sizes and drop size distributions in A/O dispersions in continuous flow stirred tank. Hydrometallurgy, 2008, 90, 121-136.	4.3	53
6	Liquidâ€“Liquid Two-Phase Flow Patterns in a Serpentine Microchannel. Industrial & Engineering Chemistry Research, 2012, 51, 5056-5066.	3.7	51
7	Solvent Extraction and Stripping Studies in Microchannels with TBP Nitric Acid System. Solvent Extraction and Ion Exchange, 2014, 32, 281-300.	2.0	45
8	Recovery of uranium from lean streams by extraction and direct precipitation in microchannels. Separation and Purification Technology, 2019, 227, 115641.	7.9	33
9	CFD simulation of two-phase flow in pulsed sieve-plate column â€“ Identification of a suitable drag model to predict dispersed phase hold up. Separation Science and Technology, 2016, 51, 2790-2803.	2.5	32
10	Effect of operating and geometric parameters on dispersed phase holdup in Pulsed Disc and Doughnut and Pulsed Sieve Plate Columns: A comparative study. Chemical Engineering and Processing: Process Intensification, 2017, 118, 131-142.	3.6	32
11	Solvent extraction in microbore tubes with UNPSâ€“TBP in dodecane system. Separation and Purification Technology, 2014, 128, 96-105.	7.9	30
12	On microfluidic solvent extraction of uranium. Chemical Engineering and Processing: Process Intensification, 2018, 132, 65-74.	3.6	29
13	Numerical simulations of liquid-liquid flow in a continuous gravity settler using OpenFOAM and experimental verification. Chemical Engineering Journal, 2017, 310, 120-133.	12.7	28
14	Bouncing of a bubble at a liquidâ€“liquid interface. AICHE Journal, 2017, 63, 3150-3157.	3.6	23
15	Transesterification of Sunflower Oil in Microreactors. International Journal of Chemical Reactor Engineering, 2014, 12, 47-62.	1.1	22
16	Single-stage micro-scale extraction: Studies with single microbore tubes and scale-up. Separation and Purification Technology, 2016, 158, 160-170.	7.9	21
17	CFD Modeling of Pulsed Disc and Doughnut Column: Prediction of Axial Dispersion in Pulsatile Liquidâ€“Liquid Two-Phase Flow. Industrial & Engineering Chemistry Research, 2019, 58, 15307-15320.	3.7	21
18	Population Balance Modeling of Liquidâ^'Liquid Dispersions in Homogeneous Continuous-Flow Stirred Tank. Industrial & Engineering Chemistry Research, 2009, 48, 8121-8133.	3.7	20

#	Article	IF	Citations
19	Regime Transition and Holdup in Pulsed Sieve-Plate and Pulsed Disc-and-Doughnut Columns: A Comparative Study. Solvent Extraction and Ion Exchange, 2018, 36, 66-83.	2.0	20
20	Two-phase CFD modeling of pulsed disc and doughnut column: Prediction of dispersed phase holdup. Separation and Purification Technology, 2019, 209, 608-622.	7.9	20
21	Liquid-liquid dispersion in pulsed disc and doughnut column and pulsed sieve plate column: A comparative study. Progress in Nuclear Energy, 2019, 116, 76-86.	2.9	19
22	CFD modeling of pumpâ€•mix action in continuous flow stirred tank. AICHE Journal, 2008, 54, 42-55.	3.6	18
23	On continuous, solvent-free synthesis of ionic liquid [BMIM]Br in a microbore tube. Journal of Radioanalytical and Nuclear Chemistry, 2016, 307, 1001-1009.	1.5	18
24	Computational Fluid Dynamics Modeling of a Bench-scale Pumpâ^'Mixer:Â Head, Power and Residence Time Distribution. Industrial & Engineering Chemistry Research, 2007, 46, 2180-2190.	3.7	16
25	CFD-PBM simulations of a pulsed sieve plate column. Progress in Nuclear Energy, 2019, 111, 125-137.	2.9	15
26	Synthesis of polyacrylamide (PAM) beads in microreactors. Chemical Engineering and Processing: Process Intensification, 2020, 157, 108105.	3.6	13
27	Comparison of different microreactors for solvent-free, continuous synthesis of [EMIM][EtSO4] ionic liquid: An experimental and CFD study. Journal of Molecular Liquids, 2016, 222, 622-631.	4.9	11
28	CFD simulations of single-phase flow in pulsed disc and doughnut columns: Axial dispersion and pressure drop. Separation Science and Technology, 2017, 52, 2863-2877.	2.5	11
29	CFD simulations to predict dispersed phase holdup in a pulsed sieve plate column. Separation Science and Technology, 2018, 53, 2587-2600.	2.5	11
30	Direct precipitation of uranium from loaded organic in a microreactor. Separation Science and Technology, 2019, 54, 1430-1442.	2.5	11
31	Nuclear hydrogen production for industrial decarbonization: Creating the business case for the near term. International Journal of Energy Research, 2022, 46, 6929-6943.	4.5	11
32	High throughput, continuous, solvent-free synthesis of ionic liquid [BMIM]Br in a microbore tube. Chemical Engineering and Processing: Process Intensification, 2017, 121, 180-187.	3.6	10
33	Experimental investigations of liquidâ€“liquid disengagement in a continuous gravity settler. Chemical Engineering Research and Design, 2018, 139, 174-187.	5.6	9
34	Microfluidic extraction of uranium from dilute streams using TiAP in ionic liquid as the solvent. Chemical Engineering Research and Design, 2022, 177, 83-95.	5.6	9
35	Single-stage microscale solvent extraction in parallel microbore tubes using a monoblock distributor with integrated microfluidic junctions. Separation Science and Technology, 2017, 52, 2213-2223.	2.5	8
36	Axial dispersion and pressure drop for single-phase flow in annular pulsed disc and doughnut columns: A CFD study. Progress in Nuclear Energy, 2018, 106, 335-344.	2.9	8

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37	CFD-PB Modelling of Liquidâ€“liquid Two-phase Flow in Pulsed Disc and Doughnut Column. Solvent Extraction and Ion Exchange, 2020, 38, 536-554.	2.0	8
38	CFD modelling of mass transfer in liquidâ€“liquid core-annular flow in a microchannel. Chemical Engineering Science, 2022, 249, 117295.	3.8	8
39	Numerical Simulation of Uranium Extraction from Nitric Acid Medium Using Hollow-Fiber Contactor. Solvent Extraction and Ion Exchange, 2019, 37, 526-544.	2.0	7
40	When the doorbell rings in COVID-19 times: Numerical insights into some possible scenarios. Physics of Fluids, 2021, 33, 045128.	4.0	7
41	Extraction of uranium(VI) by tri iso-amyl phosphate (TiAP) in ionic liquids. Journal of Radioanalytical and Nuclear Chemistry, 2017, 312, 255-262.	1.5	6
42	Continuous synthesis of tributyl phosphate in microreactor. Progress in Nuclear Energy, 2020, 126, 103402.	2.9	6
43	Selective separation of Cu from large excess of Zn using a microfluidic platform. Chemical Engineering and Processing: Process Intensification, 2021, 159, 108215.	3.6	6
44	CFD Simulations of Pulsed Sieve Plate Column: Axial Dispersion in Single-phase Flow. Separation Science and Technology, 0, , 150707114628006.	2.5	5
45	Drop formation at nozzles submerged in quiescent continuous phase: an experimental study with TBP-dodecane and nitric acid system. Nuclear Science and Techniques/Hewuli, 2018, 29, 1.	3.4	5
46	Passage of a bubble through the interface between a shear-thinning heavier liquid and a Newtonian lighter liquid. Chemical Engineering Communications, 2020, 207, 790-807.	2.6	5
47	CFD modelling of oscillatory flow in columns having different types of internals. Chemical Engineering and Processing: Process Intensification, 2020, 155, 108052.	3.6	5
48	Spread of virus laden aerosols inside a moving sports utility vehicle with open windows: A numerical study. Physics of Fluids, 2021, 33, 095117.	4.0	5
49	Real time concentration estimation of ammonium nitrate in thermal denitration process: An ultrasonic approach. Sensors and Actuators A: Physical, 2021, 331, 112927.	4.1	5
50	Non-invasive monitoring of segregated phases in a biogas plant: An ultrasonic approach. Results in Engineering, 2022, 14, 100477.	5.1	5
51	Ultrasonic Method for Online Tracking of Interface and Dispersion Band in Gravity Settlers. Industrial & Engineering Chemistry Research, 2020, 59, 13260-13270.	3.7	4
52	Computational Fluid Dynamics Modelling to Predict Axial Dispersion in Pulsatile Liquid-liquid Two-phase Flow in Pulsed Sieve Plate Columns. Solvent Extraction and Ion Exchange, 2021, 39, 328-352.	2.0	4
53	Effect of operating and geometric parameters on axial dispersion in pulsed disc and doughnut and pulsed sieve plate columns: A comparative study. Progress in Nuclear Energy, 2021, 142, 103987.	2.9	4
54	Solvent-Free Synthesis of [DMIM]DMP Ionic Liquid in a Microreactor and Scale-Up Aspects. Industrial & Engineering Chemistry Research, 2022, 61, 2973-2985.	3.7	4

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55	Numerical simulations to evaluate basic geometrical shapes as headers for equal liquid flow distribution. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 707-717.	1.5	3
56	In-line phase separator for microfluidic solvent extraction of uranium. Journal of Radioanalytical and Nuclear Chemistry, 2020, 324, 123-133.	1.5	3
57	CFD Modeling of Single-Drop Hydrodynamics at Submerged Nozzles: Validation with TBP-Dodecane and Nitric Acid System and Parametric Analysis. Solvent Extraction and Ion Exchange, 2019, 37, 191-210.	2.0	2
58	Drop formation at submerged nozzles: Comparison of aqueous dispersed and organic dispersed cases for TBP-dodecane and nitric acid system. Nuclear Engineering and Technology, 2019, 51, 761-768.	2.3	2
59	Drop formation at a hole in a plate submerged in quiescent continuous phase: comparison of plain hole and nozzle hole. Chemical Engineering Communications, 2019, 206, 1317-1336.	2.6	2
60	Large-scale synthesis of ionic liquid [BMIM]Br in a microbore tube. Chemical Engineering Research and Design, 2021, 170, 34-44.	5.6	2
61	Dispersed-phase Volume Fraction and Flow Regimes in Oscillatory Liquid-Liquid Two-Phase Flow in Annuli: Comparison of Sieve-Plate and Baffle-Plate Internals. Solvent Extraction and Ion Exchange, 2021, 39, 424-448.	2.0	0
62	Computational fluid dynamics modeling of uranium(VI) transport through hollow fiber supported liquid membrane. Separation Science and Technology, 2021, 56, 2848-2863.	2.5	0