Suzanne M Kresta

List of Publications by Citations

76 papers	1,977 citations	23 h-index	43 g-index
83 ext. papers	2,127 ext. citations	3.8 avg, IF	4.82 L-index

#	Paper	IF	Citations
76	Correlation of mean drop size and minimum drop size with the turbulence energy dissipation and the flow in an agitated tank. *Chemical Engineering Science*, **1998**, 53, 2063-2079	4.4	190
75	The flow field produced by a pitched blade turbine: Characterization of the turbulence and estimation of the dissipation rate. *Chemical Engineering Science*, **1993**, 48, 1761-1774	4.4	161
74	Impact of tank geometry on the maximum turbulence energy dissipation rate for impellers. *AICHE Journal*, **1996**, 42, 2476-2490	3.6	159
73	Prediction of the three-dimensional turbulent flow in stirred tanks. *AICHE Journal*, **1991**, 37, 448-460	3.6	140
72	The mean flow field produced by a 45□pitched blade turbine: Changes in the circulation pattern due to off bottom clearance. *Canadian Journal of Chemical Engineering*, **1993**, 71, 42-53	2.3	118
71	Turbulence in stirred tanks: Anisotropic, approximate, and applied. *Canadian Journal of Chemical Engineering*, **1998**, 76, 563-576	2.3	78
70	A new definition of mixing and segregation: Three dimensions of a key process variable. *Chemical Engineering Research and Design*, **2009**, 87, 633-647	5.5	77
69	Evolution of drop size distribution in liquid□liquid dispersions for various impellers**This paper was the winner of the first North American Mixing Forum Student Award, June, 1997.. *Chemical Engineering Science*, **1998**, 53, 2099-2113	4.4	74
68	Low frequency macroinstabilities in a stirred tank: scale-up and prediction based on large eddy simulations. *Chemical Engineering Science*, **2003**, 58, 2297-2311	4.4	67
67	Characteristics of a Confined Impinging Jet Reactor: Energy Dissipation, Homogeneous and Heterogeneous Reaction Products, and Effect of Unequal Flow. *Industrial & Engineering Chemistry Research*, **2009**, 48, 7945-7958	3.9	59
66	Active volume of mean circulation for stirred tanks agitated with axial impellers. *Chemical Engineering Science*, **2000**, 55, 1325-1335	4.4	59
65	Mechanisms of solids drawdown in stirred tanks. *Canadian Journal of Chemical Engineering*, **2008**, 86, 622-634	2.3	51
64	Effect of geometry on the mechanisms for off-bottom solids suspension in a stirred tank. *Chemical Engineering Science*, **2012**, 79, 163-176	4.4	49
63	Design rules for suspending concentrated mixtures of solids in stirred tanks. *Chemical Engineering Research and Design*, **2011**, 89, 1961-1971	5.5	41
62	Critical analysis of Zwietering correlation for solids suspension in stirred tanks. *Chemical Engineering Research and Design*, **2014**, 92, 413-422	5.5	36
61	The effect of geometry on the stability of flow patterns in stirred tanks. *Chemical Engineering Science*, **1994**, 49, 3651-3660	4.4	35
60	The effect of stabilizer addition and sonication on nanoparticle agglomeration in a confined impinging jet reactor. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2009**, 350, 38-50	5.1	34

59	Impeller characterization and selection: Balancing efficient hydrodynamics with process mixing requirements. *AICHE Journal*, **2012**, 58, 2573-2588	3.6	33
58	A novel geometry for solids drawdown in stirred tanks. *Chemical Engineering Research and Design*, **2009**, 87, 280-290	5.5	30
57	Self-Preservation of the Drop Size Distribution Function and Variation in the Stability Ratio for Rapid Coalescence of a Polydisperse Emulsion in a Simple Shear Field. *Journal of Colloid and Interface Science*, **1998**, 197, 57-67	9.3	29
56	Computational fluid dynamics for predicting performance of ultraviolet disinfection ? sensitivity to particle tracking inputs. *Journal of Environmental Engineering and Science*, **2007**, 6, 285-301	0.8	29
55	Transition from turbulent to transitional flow in the top half of a stirred tank. *Chemical Engineering Science*, **2013**, 98, 218-230	4.4	25
54	Batch blend time in square stirred tanks. *Chemical Engineering Science*, **2006**, 61, 2823-2825	4.4	25
53	Hands-on Demonstrations: An Alternative to Full Scale Lab Experiments. *Journal of Engineering Education*, **1998**, 87, 7-9	2.3	22
52	Comparison of Continuous Blend Time and Residence Time Distribution Models for a Stirred Tank. *Industrial & Engineering Chemistry Research*, **2008**, 47, 3532-3539	3.9	21
51	Measuring the scale of segregation in mixing data. *Canadian Journal of Chemical Engineering*, **2011**, 89, 1122-1138	2.3	20
50	Impact of sampling method and scale on the measurement of mixing and the coefficient of variance. *AICHE Journal*, **2008**, 54, 3068-3083	3.6	20
49	Three-dimensional wall jets: Axial flow in a stirred tank. *AICHE Journal*, **2001**, 47, 1277-1284	3.6	20
48	The confined impeller stirred tank (CIST): A bench scale testing device for specification of local mixing conditions required in large scale vessels. *Chemical Engineering Research and Design*, **2013**, 91, 2209-2224	5.5	16
47	Mechanically Stirred Vessels345-390		15
46	Internal annular wall jets: Radial flow in a stirred tank. *AICHE Journal*, **2001**, 47, 2390-2401	3.6	15
45	Solid□iquid Mixing543-584		12
44	Prediction of just suspended speed for mixed slurries at high solids loadings. *Chemical Engineering Research and Design*, **2013**, 91, 227-233	5.5	11
43	Mixing in the Fermentation and Cell Culture Industries1071-1170		11
42	Reduce Overdosing Effects in Chemical Demulsifier Applications by Increasing Mixing Energy and Decreasing Injection Concentration. *Energy & Fuels*, **2016**, 30, 5183-5189	4.1	11

41	Demulsifier performance in froth treatment: Untangling the effects of mixing, bulk concentration and injection concentration using a standardized mixing test cell (CIST). *Fuel Processing Technology*, **2015**, 138, 361-367	7.2	10
40	Reactor performance with high velocity surface feed. *Chemical Engineering Science*, **2006**, 61, 3033-3043	4.4	10
39	Gas–Liquid Mixing in Turbulent Systems585-638		10
38	The Future of Mixing Research. *Chemical Engineering and Technology*, **2004**, 27, 208-214	2	10
37	Effect of amine and thiol addition on the surface chemistry and agglomeration of fine Cu powders. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2008**, 325, 72-80	5.1	9
36	Blending of Miscible Liquids507-542		9
35	Immiscible Liquid–Liquid Systems639-753		9
34	Rotor–Stator Mixing Devices479-505		9
33	Model reduction for prediction of silver halide precipitation. *Chemical Engineering Science*, **2005**, 60, 2135-2153	4.4	9
32	Demulsifier Performance in Diluted Bitumen Dewatering: Effects of Mixing and Demulsifier Dosage. *Energy & Fuels*, **2016**, 30, 9962-9974	4.1	9
31	Comments to On the origin, frequency and magnitude of macro-instabilities of the flows in stirred vessels by Nikiforaki et al.. *Chemical Engineering Science*, **2004**, 59, 951-953	4.4	8
30	The Effects of Mixing, Reaction Rates, and Stoichiometry on Yield for Mixing Sensitive Reactions—Part II: Design Protocols. *International Journal of Chemical Engineering*, **2012**, 2012, 1-13	2.2	7
29	Mixing in Pipelines391-477		7
28	Turbulence in Mixing Applications19-87		6
27	Dewatering of Poor-Quality Bitumen Froth: Induction Time and Mixing Effects. *Energy & Fuels*, **2018**, 32, 10032-10041	4.1	5
26	The Effects of Mixing, Reaction Rates, and Stoichiometry on Yield for Mixing Sensitive Reactions—Part I: Model Development. *International Journal of Chemical Engineering*, **2012**, 2012, 1-16	2.2	5
25	Mixing in the Fine Chemicals and Pharmaceutical Industries1027-1069		5
24	CFD Simulations of Three-dimensional Wall Jets in a Stirred Tank. *Canadian Journal of Chemical Engineering*, **2008**, 80, 1-15	2.3	4

23	Computational Fluid Mixing257-343		4
22	Laminar Mixing: A Dynamical Systems Approach89-143		3
21	Mixing and Chemical Reactions755-867		3
20	Boundary conditions required for the CFD simulation of flows in stirred tanks **1996**, 297-316		3
19	Effective sapphire repellency treatment to reduce fouling of a focused beam reflectance measurement (FBRM) probe in bituminous systems. *Canadian Journal of Chemical Engineering*, **2019**, 97, 1949-1952	2.3	3
18	Negative Impact of High Stirring Speed in Laboratory-Scale Three-Phase Hydrogenations. *Industrial & Engineering Chemistry Research*, **2014**, 53, 18091-18094	3.9	2
17	Turbulent Mixing Fundamentals **2015**, 27-41		2
16	Solids Mixing887-985		2
15	Residence Time Distributions1-17		2
14	Limits of Fully Turbulent Flow in a Stirred Tank **2000**, 17-24		2
13	Analysis of Macro-Instabilities (MI) of the Flow Field in a Stirred Tank Agitated with Axial Impellers **2000**, 361-368		2
12	Psychrometric charts in color: An example of active learning for chemical engineering students and faculty members. *Education for Chemical Engineers*, **2018**, 22, 14-19	2.4	2
11	A novel factorial design search to determine realizable constant sets for a multi-mechanism model of mixing sensitive precipitation. *Computers and Chemical Engineering*, **2017**, 106, 322-338	4	1
10	Mixing of Highly Viscous Fluids, Polymers, and Pastes987-1025		1
9	Mechanical Design of Mixing Equipment1247-1332		1
8	Teaching innovation in an age of disruption. *Canadian Journal of Chemical Engineering*, **2021**, 99, 2138-2148	1.9	1
7	Turbulence damping above the cloud height in suspensions of concentrated slurries in stirred tanks. *AICHE Journal*, **2021**, 67, e17207	3.6	1
6	Impact of sampling method and scale on the measurement of mixing and the coefficient of variance **2008**, 54, 3068		1

5	Blend Time Measurement in the Confined Impeller Stirred Tank. *Chemical Engineering and Technology*, **2019**, 42, 1594	2
4	Fluid Mixing Technology in the Petroleum Industry1171-1186	
3	Mixing in the Pulp and Paper Industry1187-1246	
2	Role of the Mixing Equipment Supplier1333-1352	
1	Mechanistic Model of Amine Hydrochloride Salts Precipitation in a Confined Impinging Jet Reactor. *Industrial & Engineering Chemistry Research*, **2020**, 59, 20877-20891	3.9