

Michael F Malone

List of Publications by Year in descending order

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95
papers

3,529
citations

101384

36
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143772

57
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all docs

98
docs citations

98
times ranked

1430
citing authors

#	ARTICLE	IF	CITATIONS
1	Liquid-liquid extraction for recovery of paclitaxel from plant cell culture: Solvent evaluation and use of extractants for partitioning and selectivity. <i>Biotechnology Progress</i> , 2012, 28, 990-997.	1.3	33
2	Predicting the Effect of the Homogenization Pressure on Emulsion Drop-Size Distributions. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6089-6100.	1.8	35
3	Semibatch Reactive Distillation for Isopropyl Acetate Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 1272-1277.	1.8	19
4	Prediction of emulsion drop size distributions with population balance equation models of multiple drop breakage. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 361, 96-108.	2.3	46
5	Operating Parameters and Selectivity in Batch Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 11547-11556.	1.8	8
6	Experimental studies and population balance equation models for breakage prediction of emulsion drop size distributions. <i>Chemical Engineering Science</i> , 2009, 64, 2433-2447.	1.9	83
7	Applications of population balance equation modeling to pharmaceutical emulsions. , 2009, , .		0
8	Feasible Products for Double-Feed Reactive Distillation Columns. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 3255-3264.	1.8	6
9	Self-similar inverse population balance modeling for turbulently prepared batch emulsions: Sensitivity to measurement errors. <i>Chemical Engineering Science</i> , 2006, 61, 7421-7435.	1.9	23
10	Experimental study of feasibility in kinetically-controlled reactive distillation. <i>AIChE Journal</i> , 2005, 51, 464-479.	1.8	8
11	Process Alternatives for Coupling Reaction and Distillation. <i>Chemical Engineering Research and Design</i> , 2004, 82, 140-147.	2.7	19
12	Effects of vapor-liquid mass transfer on feasibility of reactive distillation. <i>AIChE Journal</i> , 2004, 50, 1795-1813.	1.8	3
13	Parametric dependence of solution multiplicity in reactive flashes. <i>Chemical Engineering Science</i> , 2004, 59, 1589-1600.	1.9	12
14	Feasible Regions for Step-Growth Melt Polycondensation Systems. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 428-440.	1.8	13
15	Reactive distillation for methyl acetate production. <i>Computers and Chemical Engineering</i> , 2003, 27, 1855-1866.	2.0	67
16	Synthesis of Azeotropic Distillation Systems with Recycles. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 1783-1794.	1.8	19
17	Green Chemical Engineering Aspects of Reactive Distillation. <i>Environmental Science & Technology</i> , 2003, 37, 5325-5329.	4.6	54
18	Reaction Invariants and Mole Balances for Plant Complexes. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 3771-3783.	1.8	10

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19	Design of reactive extraction systems for bioproduct recovery. <i>AIChE Journal</i> , 2002, 48, 514-526.	1.8	51
20	Feasible region for a countercurrent cascade of vapor-liquid CSTRs. <i>AIChE Journal</i> , 2002, 48, 800-814.	1.8	34
21	Feasibility and synthesis of hybrid reactive distillation systems. <i>AIChE Journal</i> , 2002, 48, 2754-2768.	1.8	14
22	Multiple steady states in reactive distillation: kinetic effects. <i>Computers and Chemical Engineering</i> , 2002, 26, 81-93.	2.0	78
23	Batch process schedule optimization under parameter volatility. <i>International Journal of Production Research</i> , 2001, 39, 603-623.	4.9	8
24	A General Treatment of Uncertainties in Batch Process Planning. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 1507-1515.	1.8	14
25	A systematic method for reaction invariants and mole balances for complex chemistries. <i>Computers and Chemical Engineering</i> , 2001, 25, 1199-1217.	2.0	31
26	Feasible compositions for random copolymerizations. <i>Polymer Engineering and Science</i> , 2001, 41, 145-154.	1.5	3
27	Effect of chemical kinetics on feasible splits for reactive distillation. <i>AIChE Journal</i> , 2001, 47, 590-601.	1.8	32
28	The stability of a reactive flash. <i>Chemical Engineering Science</i> , 2001, 56, 4737-4745.	1.9	14
29	Feasible products for kinetically controlled reactive distillation of ternary mixtures. <i>AIChE Journal</i> , 2000, 46, 923-936.	1.8	22
30	Simulation of kinetic effects in reactive distillation. <i>Computers and Chemical Engineering</i> , 2000, 24, 2457-2472.	2.0	59
31	Selectivity Targets for Batch Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 1565-1575.	1.8	20
32	Flexible Batch Process Planning. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 2045-2055.	1.8	9
33	Batch Process Planning for Waste Minimization. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 2035-2044.	1.8	11
34	Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 3953-3957.	1.8	215
35	Computer-aided tools for the design of reactive distillation systems. <i>Computers and Chemical Engineering</i> , 1999, 23, S955-S962.	2.0	18
36	Bifurcation study of kinetic effects in reactive distillation. <i>AIChE Journal</i> , 1999, 45, 546-556.	1.8	53

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37	A Novel Distillate Policy for Batch Reactive Distillation with Application to the Production of Butyl Acetate. Industrial & Engineering Chemistry Research, 1999, 38, 714-722.	1.8	80
38	Computing All Homogeneous and Heterogeneous Azeotropes in Multicomponent Mixtures. Industrial & Engineering Chemistry Research, 1999, 38, 4901-4912.	1.8	21
39	Economic Tradeoffs for Extraction Systems. Chemical Engineering Research and Design, 1998, 76, 361-367.	2.7	8
40	Structure of Distillation Regions for Multicomponent Azeotropic Mixtures. AIChE Journal, 1998, 44, 1382-1391.	1.8	91
41	Design for Simultaneous Reaction and Liquid-Liquid Extraction. Industrial & Engineering Chemistry Research, 1998, 37, 4748-4755.	1.8	39
42	Measurement of Residue Curve Maps and Heterogeneous Kinetics in Methyl Acetate Synthesis. Industrial & Engineering Chemistry Research, 1998, 37, 1917-1928.	1.8	132
43	Attainable Regions for Polymerization Reaction Systems. Industrial & Engineering Chemistry Research, 1997, 36, 1076-1084.	1.8	13
44	Attainable regions for reaction with separation. AIChE Journal, 1997, 43, 374-387.	1.8	88
45	Global Stability Analysis and Calculation of Liquid-Liquid Equilibrium in Multicomponent Mixtures. Industrial & Engineering Chemistry Research, 1996, 35, 1395-1408.	1.8	98
46	A Geometric Method for the Design of Liquid Extractors. Industrial & Engineering Chemistry Research, 1996, 35, 2672-2681.	1.8	23
47	A Geometric Design Method for Side-Stream Distillation Columns. Industrial & Engineering Chemistry Research, 1996, 35, 3653-3664.	1.8	31
48	Effect of kinetics on residue curve maps for reactive distillation. AIChE Journal, 1994, 40, 1814-1824.	1.8	110
49	Feasibility of separations for distillation of nonideal ternary mixtures. AIChE Journal, 1993, 39, 1303-1321.	1.8	112
50	Computing azeotropes in multicomponent mixtures. Computers and Chemical Engineering, 1993, 17, 1141-1155.	2.0	102
51	Design and operating targets for nonideal multicomponent batch distillation. Industrial & Engineering Chemistry Research, 1993, 32, 293-301.	1.8	16
52	Influence of phase separation on the linear viscoelastic behavior of a miscible polymer blend. Journal of Rheology, 1992, 36, 1625-1649.	1.3	65
53	Shear-induced demixing in a polystyrene/poly(vinyl methyl ether) blend: in-situ fluorescence and rheometry. Macromolecules, 1992, 25, 5671-5676.	2.2	75
54	Automatic screening of entrainers for homogeneous azeotropic distillation. Industrial & Engineering Chemistry Research, 1991, 30, 760-772.	1.8	99

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55	Effects of shear on miscible polymer blends: in situ fluorescence studies. <i>Macromolecules</i> , 1991, 24, 5451-5458.	2.2	62
56	Feasibility and separation sequencing in multicomponent batch distillation. <i>Chemical Engineering Science</i> , 1991, 46, 1311-1326.	1.9	79
57	A simplified degradation model for nylon 6,6 polymerization. <i>Journal of Applied Polymer Science</i> , 1991, 42, 1009-1021.	1.3	30
58	Nonideal multicomponent distillation: Use of bifurcation theory for design. <i>AIChE Journal</i> , 1991, 37, 1761-1779.	1.8	60
59	Effects of phase separation on the mechanical properties of polystyrene/poly(vinyl methyl ether) blends. <i>Polymer Engineering and Science</i> , 1991, 31, 981-987.	1.5	7
60	Microstructure and mechanical properties of in-situ network composite fibres of PBZT with nylon. <i>Journal of Materials Science</i> , 1991, 26, 2365-2371.	1.7	8
61	Molecular composites of poly(p-phenylene benzobisthiazole) with thermoplastics: coagulation studies. <i>Journal of Materials Science</i> , 1991, 26, 1762-1768.	1.7	3
62	Film diffusion effects in nylon 6,6 polymerization. <i>Journal of Applied Polymer Science</i> , 1990, 39, 603-619.	1.3	1
63	Patterns of composition change in multicomponent batch distillation. <i>Chemical Engineering Science</i> , 1990, 45, 1207-1221.	1.9	61
64	Polymer process design. Continuous production of chain growth homopolymers. <i>Computers and Chemical Engineering</i> , 1990, 14, 1127-1149.	2.0	5
65	Wiped film reactor model for nylon 6,6 polymerization. <i>Industrial & Engineering Chemistry Research</i> , 1990, 29, 2012-2020.	1.8	18
66	Solution viscosity for blends of lyotropic liquid crystalline and thermoplastic polymers. <i>Journal of Rheology</i> , 1990, 34, 485-502.	1.3	1
67	Solution processing of composite fibers containing rodlike and thermoplastic polymers. <i>Journal of Applied Polymer Science</i> , 1989, 38, 2205-2223.	1.3	2
68	A purely hyperbolic model for unsteady viscoelastic flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1989, 32, 197-224.	1.0	32
69	Network consumption in distillation short-cut evaluation and applications to synthesis. <i>Computers and Chemical Engineering</i> , 1989, 13, 295-305.	2.0	10
70	Computer vision methods for the study of spinodal decomposition in polymer blends. <i>Polymer Engineering and Science</i> , 1989, 29, 1426-1433.	1.5	2
71	The effects of flow on miscibility in a blend of polystyrene and poly(vinyl methyl ether). <i>Polymer Engineering and Science</i> , 1989, 29, 1434-1445.	1.5	76
72	Flowing film model for continuous nylon 66 polymerization. <i>Industrial & Engineering Chemistry Research</i> , 1989, 28, 1324-1332.	1.8	5

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73	Microstructural investigations of PBT/nylon 6,6 composites. Journal of Applied Polymer Science, 1988, 35, 1955-1965.	1.3	25
74	Approximate design and optimization of a thermally coupled distillation with prefractionation. Industrial & Engineering Chemistry Research, 1988, 27, 811-818.	1.8	18
75	Fluorescence evidence for shear flow-induced miscibility in a blend of polystyrene and poly(vinyl Tj ETQq1 1 0.784314 rgBT /Overlock 2.2 42		
76	Structure-Property Relationship of Solution-Spun Ppbt/Peek and Ppbt/Nylon 6,6 Composite Fibers. Materials Research Society Symposia Proceedings, 1988, 134, 541.	0.1	0
77	In-Situ Network-Composite Fibers of Pbzt/Nylon. Materials Research Society Symposia Proceedings, 1988, 134, 547.	0.1	2
78	Approximate design of multiple-feed/side-stream distillation systems. Industrial & Engineering Chemistry Research, 1987, 26, 1839-1845.	1.8	49
79	A kinetic and equilibrium model for nylon 6,6 polymerization. Journal of Applied Polymer Science, 1987, 33, 2333-2344.	1.3	43
80	Processing and properties of poly(p-phenylene benzobisthiazole)/nylon fibers. Journal of Applied Polymer Science, 1987, 34, 931-944.	1.3	24
81	Modeling of reactive distillation systems. Industrial & Engineering Chemistry Research, 1987, 26, 983-989.	1.8	57
82	New complex column arrangements for ideal distillation. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 694-699.	0.6	38
83	Simulation of welding flows in a slit. Part I: Kinematics. Polymer Engineering and Science, 1986, 26, 1012-1019.	1.5	6
84	Extensional flow induced miscibility in a polymer blend. Polymer Bulletin, 1986, 16, 83-88.	1.7	52
85	The interaction between separation system synthesis and process synthesis. Computers and Chemical Engineering, 1985, 9, 447-462.	2.0	12
86	Simple, analytical criteria for the sequencing of distillation columns. AIChE Journal, 1985, 31, 683-689.	1.8	54
87	Shortcut evaluation of T and Q^T for the synthesis of heat integrated distillation sequences. AIChE Journal, 1985, 31, 1039-1040.	1.8	7
88	Steady-state control of sidestream distillation columns. Industrial & Engineering Chemistry Process Design and Development, 1985, 24, 608-613.	0.6	8
89	Minimum vapor flows in a distillation column with a sidestream stripper. Industrial & Engineering Chemistry Process Design and Development, 1985, 24, 1087-1090.	0.6	36
90	Design of sidestream distillation columns. Industrial & Engineering Chemistry Process Design and Development, 1985, 24, 822-828.	0.6	55

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91	Minimum reflux, product distribution, and lumping rules for multicomponent distillation. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1984, 23, 764-768.	0.6	25
92	Controlling thermally linked distillation columns. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1984, 23, 483-490.	0.6	13
93	Estimating bounds for process optimization problems. An analogy to rules of thumb and structural modifications. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1982, 21, 289-298.	0.7	1
94	Stress-induced diffusion of macromolecules. <i>Journal of Polymer Science, Polymer Physics Edition</i> , 1977, 15, 1569-1583.	1.0	72
95	Analysis of two-dimensional diffusion-controlled moving boundary problems. <i>International Journal of Heat and Mass Transfer</i> , 1975, 18, 901-910.	2.5	81