

Michael F Malone

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8119719/publications.pdf>

Version: 2024-02-01

95
papers

3,529
citations

101384

36
h-index

143772

57
g-index

98
all docs

98
docs citations

98
times ranked

1430
citing authors

#	ARTICLE	IF	CITATIONS
1	Reactive Distillation. Industrial & Engineering Chemistry Research, 2000, 39, 3953-3957.	1.8	215
2	Measurement of Residue Curve Maps and Heterogeneous Kinetics in Methyl Acetate Synthesis. Industrial & Engineering Chemistry Research, 1998, 37, 1917-1928.	1.8	132
3	Feasibility of separations for distillation of nonideal ternary mixtures. AIChE Journal, 1993, 39, 1303-1321.	1.8	112
4	Effect of kinetics on residue curve maps for reactive distillation. AIChE Journal, 1994, 40, 1814-1824.	1.8	110
5	Computing azeotropes in multicomponent mixtures. Computers and Chemical Engineering, 1993, 17, 1141-1155.	2.0	102
6	Automatic screening of entrainers for homogeneous azeotropic distillation. Industrial & Engineering Chemistry Research, 1991, 30, 760-772.	1.8	99
7	Global Stability Analysis and Calculation of Liquid-Liquid Equilibrium in Multicomponent Mixtures. Industrial & Engineering Chemistry Research, 1996, 35, 1395-1408.	1.8	98
8	Structure of Distillation Regions for Multicomponent Azeotropic Mixtures. AIChE Journal, 1998, 44, 1382-1391.	1.8	91
9	Attainable regions for reaction with separation. AIChE Journal, 1997, 43, 374-387.	1.8	88
10	Experimental studies and population balance equation models for breakage prediction of emulsion drop size distributions. Chemical Engineering Science, 2009, 64, 2433-2447.	1.9	83
11	Analysis of two-dimensional diffusion-controlled moving boundary problems. International Journal of Heat and Mass Transfer, 1975, 18, 901-910.	2.5	81
12	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
13	Feasibility and separation sequencing in multicomponent batch distillation. Chemical Engineering Science, 1991, 46, 1311-1326.	1.9	79
14	Multiple steady states in reactive distillation: kinetic effects. Computers and Chemical Engineering, 2002, 26, 81-93.	2.0	78
15	The effects of flow on miscibility in a blend of polystyrene and poly(vinyl methyl ether). Polymer Engineering and Science, 1989, 29, 1434-1445.	1.5	76
16	Shear-induced demixing in a polystyrene/poly(vinyl methyl ether) blend: in-situ fluorescence and rheometry. Macromolecules, 1992, 25, 5671-5676.	2.2	75
17	Stress-induced diffusion of macromolecules. Journal of Polymer Science, Polymer Physics Edition, 1977, 15, 1569-1583.	1.0	72
18	Reactive distillation for methyl acetate production. Computers and Chemical Engineering, 2003, 27, 1855-1866.	2.0	67

#	ARTICLE	IF	CITATIONS
19	Influence of phase separation on the linear viscoelastic behavior of a miscible polymer blend. Journal of Rheology, 1992, 36, 1625-1649.	1.3	65
20	Effects of shear on miscible polymer blends: in situ fluorescence studies. Macromolecules, 1991, 24, 5451-5458.	2.2	62
21	Patterns of composition change in multicomponent batch distillation. Chemical Engineering Science, 1990, 45, 1207-1221.	1.9	61
22	Nonideal multicomponent distillation: Use of bifurcation theory for design. AIChE Journal, 1991, 37, 1761-1779.	1.8	60
23	Simulation of kinetic effects in reactive distillation. Computers and Chemical Engineering, 2000, 24, 2457-2472.	2.0	59
24	Modeling of reactive distillation systems. Industrial & Engineering Chemistry Research, 1987, 26, 983-989.	1.8	57
25	Design of sidestream distillation columns. Industrial & Engineering Chemistry Process Design and Development, 1985, 24, 822-828.	0.6	55
26	Simple, analytical criteria for the sequencing of distillation columns. AIChE Journal, 1985, 31, 683-689.	1.8	54
27	Green Chemical Engineering Aspects of Reactive Distillation. Environmental Science & Technology, 2003, 37, 5325-5329.	4.6	54
28	Bifurcation study of kinetic effects in reactive distillation. AIChE Journal, 1999, 45, 546-556.	1.8	53
29	Extensional flow induced miscibility in a polymer blend. Polymer Bulletin, 1986, 16, 83-88.	1.7	52
30	Design of reactive extraction systems for bioproduct recovery. AIChE Journal, 2002, 48, 514-526.	1.8	51
31	Approximate design of multiple-feed/side-stream distillation systems. Industrial & Engineering Chemistry Research, 1987, 26, 1839-1845.	1.8	49
32	Prediction of emulsion drop size distributions with population balance equation models of multiple drop breakage. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 361, 96-108.	2.3	46
33	A kinetic and equilibrium model for nylon 6,6 polymerization. Journal of Applied Polymer Science, 1987, 33, 2333-2344.	1.3	43
34	Fluorescence evidence for shear flow-induced miscibility in a blend of polystyrene and poly(vinyl) Tj ETQq0 0 0 rgBT, Overlock, 10 Tf 50 1	2.2	42
35	Design for Simultaneous Reaction and Liquid-Liquid Extraction. Industrial & Engineering Chemistry Research, 1998, 37, 4748-4755.	1.8	39
36	New complex column arrangements for ideal distillation. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 694-699.	0.6	38

#	ARTICLE	IF	CITATIONS
37	Minimum vapor flows in a distillation column with a sidestream stripper. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1985, 24, 1087-1090.	0.6	36
38	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
39	Feasible region for a countercurrent cascade of vapor-liquid CSTRs. <i>AIChE Journal</i> , 2002, 48, 800-814.	1.8	34
40	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
41	A purely hyperbolic model for unsteady viscoelastic flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1989, 32, 197-224.	1.0	32
42	Effect of chemical kinetics on feasible splits for reactive distillation. <i>AIChE Journal</i> , 2001, 47, 590-601.	1.8	32
43	A Geometric Design Method for Side-Stream Distillation Columns. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 3653-3664.	1.8	31
44	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
45	A simplified degradation model for nylon 6,6 polymerization. <i>Journal of Applied Polymer Science</i> , 1991, 42, 1009-1021.	1.3	30
46	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
47	Microstructural investigations of PBT/nylon 6,6 composites. <i>Journal of Applied Polymer Science</i> , 1988, 35, 1955-1965.	1.3	25
48	Processing and properties of poly(p-phenylene benzobisthiazole)/nylon fibers. <i>Journal of Applied Polymer Science</i> , 1987, 34, 931-944.	1.3	24
49	A Geometric Method for the Design of Liquid Extractors. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 2672-2681.	1.8	23
50	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
51	Feasible products for kinetically controlled reactive distillation of ternary mixtures. <i>AIChE Journal</i> , 2000, 46, 923-936.	1.8	22
52	Computing All Homogeneous and Heterogeneous Azeotropes in Multicomponent Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 4901-4912.	1.8	21
53	Selectivity Targets for Batch Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 1565-1575.	1.8	20
54	Synthesis of Azeotropic Distillation Systems with Recycles. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 1783-1794.	1.8	19

#	ARTICLE	IF	CITATIONS
55	Process Alternatives for Coupling Reaction and Distillation. <i>Chemical Engineering Research and Design</i> , 2004, 82, 140-147.	2.7	19
56	Semibatch Reactive Distillation for Isopropyl Acetate Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 1272-1277.	1.8	19
57	Approximate design and optimization of a thermally coupled distillation with prefractionation. <i>Industrial & Engineering Chemistry Research</i> , 1988, 27, 811-818.	1.8	18
58	Wiped film reactor model for nylon 6,6 polymerization. <i>Industrial & Engineering Chemistry Research</i> , 1990, 29, 2012-2020.	1.8	18
59	Computer-aided tools for the design of reactive distillation systems. <i>Computers and Chemical Engineering</i> , 1999, 23, S955-S962.	2.0	18
60	Design and operating targets for nonideal multicomponent batch distillation. <i>Industrial & Engineering Chemistry Research</i> , 1993, 32, 293-301.	1.8	16
61	A General Treatment of Uncertainties in Batch Process Planning. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 1507-1515.	1.8	14
62	The stability of a reactive flash. <i>Chemical Engineering Science</i> , 2001, 56, 4737-4745.	1.9	14
63	Feasibility and synthesis of hybrid reactive distillation systems. <i>AIChE Journal</i> , 2002, 48, 2754-2768.	1.8	14
64	Controlling thermally linked distillation columns. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1984, 23, 483-490.	0.6	13
65	Attainable Regions for Polymerization Reaction Systems. <i>Industrial & Engineering Chemistry Research</i> , 1997, 36, 1076-1084.	1.8	13
66	Feasible Regions for Step-Growth Melt Polycondensation Systems. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 428-440.	1.8	13
67	The interaction between separation system synthesis and process synthesis. <i>Computers and Chemical Engineering</i> , 1985, 9, 447-462.	2.0	12
68	Parametric dependence of solution multiplicity in reactive flashes. <i>Chemical Engineering Science</i> , 2004, 59, 1589-1600.	1.9	12
69	Batch Process Planning for Waste Minimization. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 2035-2044.	1.8	11
70	Net work consumption in distillation short-cut evaluation and applications to synthesis. <i>Computers and Chemical Engineering</i> , 1989, 13, 295-305.	2.0	10
71	Reaction Invariants and Mole Balances for Plant Complexes. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 3771-3783.	1.8	10
72	Flexible Batch Process Planning. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 2045-2055.	1.8	9

#	ARTICLE	IF	CITATIONS
73	Steady-state control of sidestream distillation columns. <i>Industrial & Engineering Chemistry Process Design and Development</i> , 1985, 24, 608-613.	0.6	8
74	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
75	Economic Tradeoffs for Extraction Systems. <i>Chemical Engineering Research and Design</i> , 1998, 76, 361-367.	2.7	8
76	Batch process schedule optimization under parameter volatility. <i>International Journal of Production Research</i> , 2001, 39, 603-623.	4.9	8
77	Experimental study of feasibility in kinetically-controlled reactive distillation. <i>AIChE Journal</i> , 2005, 51, 464-479.	1.8	8
78	Operating Parameters and Selectivity in Batch Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 11547-11556.	1.8	8
79	Shortcut evaluation of \hat{Q}^T and \hat{Q}^B for the synthesis of heat integrated distillation sequences. <i>AIChE Journal</i> , 1985, 31, 1039-1040.	1.8	7
80	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
81	Simulation of welding flows in a slit. Part I: Kinematics. <i>Polymer Engineering and Science</i> , 1986, 26, 1012-1019.	1.5	6
82	Feasible Products for Double-Feed Reactive Distillation Columns. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 3255-3264.	1.8	6
83	Flowing film model for continuous nylon 66 polymerization. <i>Industrial & Engineering Chemistry Research</i> , 1989, 28, 1324-1332.	1.8	5
84	Polymer process design. I. Continuous production of chain growth homopolymers. <i>Computers and Chemical Engineering</i> , 1990, 14, 1127-1149.	2.0	5
85	Molecular composites of poly(p-phenylene benzobisthiazole) with thermoplastics: coagulation studies. <i>Journal of Materials Science</i> , 1991, 26, 1762-1768.	1.7	3
86	Feasible compositions for random copolymerizations. <i>Polymer Engineering and Science</i> , 2001, 41, 145-154.	1.5	3
87	Effects of vapor-liquid mass transfer on feasibility of reactive distillation. <i>AIChE Journal</i> , 2004, 50, 1795-1813.	1.8	3
88	In-Situ Network Composite Fibers of Pbzt/Nylon. <i>Materials Research Society Symposia Proceedings</i> , 1988, 134, 547.	0.1	2
89	Solution processing of composite fibers containing rodlike and thermoplastic polymers. <i>Journal of Applied Polymer Science</i> , 1989, 38, 2205-2223.	1.3	2
90	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

#	ARTICLE	IF	CITATIONS
91	Estimating bounds for process optimization problems. An analogy to rules of thumb and structural modifications. Industrial & Engineering Chemistry Fundamentals, 1982, 21, 289-298.	0.7	1
92	Film diffusion effects in nylon 6,6 polymerization. Journal of Applied Polymer Science, 1990, 39, 603-619.	1.3	1
93	Solution viscosity for blends of lyotropic liquid crystalline and thermoplastic polymers. Journal of Rheology, 1990, 34, 485-502.	1.3	1
94	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
95	Applications of population balance equation modeling to pharmaceutical emulsions. , 2009, , .		0