Michael F Doherty

List of Publications by Year in Descending Order

171 papers	7,528 citations	52 h-index	78 g-index
180 ext. papers	8,123 ext. citations	4.6 avg, IF	6.12 L-index

#	Paper	IF	Citations
171	Innovation in Chemical Reactor Engineering Practice and Science. *Computers and Chemical Engineering*, **2022**, 107699	4	
170	Free energies of crystals computed using Einstein crystal with fixed center of mass and differing spring constants. *Journal of Chemical Physics*, **2021**, 154, 164509	3.9	2
169	Crystal Morphology Modeling of Solvates and Hydrates of Organic Molecular Crystals: Olanzapine Solvate and Dihydrate. *Crystal Growth and Design*, **2021**, 21, 4871-4877	3.5	
168	A New Software Framework for Implementing Crystal Growth Models to Materials of Any Crystallographic Complexity. *Crystal Growth and Design*, **2020**, 20, 2885-2892	3.5	4
167	Performing solvation free energy calculations in LAMMPS using the decoupling approach. *Journal of Computer-Aided Molecular Design*, **2020**, 34, 641-646	4.2	5
166	Absolute chemical potentials for complex molecules in fluid phases: A centroid reference for predicting phase equilibria. *Journal of Chemical Physics*, **2020**, 153, 214504	3.9	0
165	Digital design of crystalline solids. *Computers and Chemical Engineering*, **2020**, 133, 106637	4	4
164	A rapid screening methodology for chemical processes. *Computers and Chemical Engineering*, **2020**, 142, 107039	4	2
163	Thermodynamic assessment of carbon dioxide emission reduction during fossil fuel derived energy production. *Energy*, **2019**, 177, 565-573	7.9	8
162	Ultimate Reaction Selectivities and Screening-Level Metrics for Conceptual Design. *Computer Aided Chemical Engineering*, **2019**, 329-334	0.6	
161	Ultimate Reaction Selectivity Limits for Intensified Reactor–Separators. *Industrial & Engineering Chemistry Research*, **2019**, 58, 6042-6048	3.9	4
160	Ultimate bounds on reaction selectivity for batch reactors. *Chemical Engineering Science*, **2019**, 199, 652-660	4.4	6
159	Lithium–Sulfur Batteries: State of the Art and Future Directions. *ACS Applied Energy Materials*, **2018**, 1, 1783-1814	6.1	74
158	Nonequilibrium Kink Density from One-Dimensional Nucleation for Step Velocity Predictions. *Crystal Growth and Design*, **2018**, 18, 723-727	3.5	3
157	Ion dissolution mechanism and kinetics at kink sites on NaCl surfaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 656-661	11.5	37
156	Target bounds on reaction selectivity via Feinberg's CFSTR equivalence principle. *AICHE Journal*, **2018**, 64, 926-939	3.6	13
155	Polymorph Selection by Continuous Precipitation. *Crystal Growth and Design*, **2018**, 18, 4306-4319	3.5	10

154	Modeling Olanzapine Solution Growth Morphologies. *Crystal Growth and Design*, **2018**, 18, 905-911	3.5	21
153	In Silico Crystal Growth Rate Prediction for NaCl from Aqueous Solution. *Crystal Growth and Design*, **2018**, 18, 6302-6306	3.5	12
152	New Tricks of the Trade for Crystal Structure Refinement. *ACS Central Science*, **2017**, 3, 726-733	16.8	8
151	Modeling Step Velocities and Edge Surface Structures during Growth of Non-Centrosymmetric Crystals. *Crystal Growth and Design*, **2017**, 17, 2066-2080	3.5	11
150	Modeling layered crystal growth at increasing supersaturation by connecting growth regimes. *AICHE Journal*, **2017**, 63, 1338-1352	3.6	24
149	Steady State Morphologies of Paracetamol Crystal from Different Solvents. *Crystal Growth and Design*, **2017**, 17, 659-670	3.5	24
148	A tribute to professor Roger Sargent: Intellectual leader of process systems engineering. *AICHE Journal*, **2016**, 62, 2951-2958	3.6	4
147	Predicting the Effect of Solvent on the Crystal Habit of Small Organic Molecules. *Crystal Growth and Design*, **2016**, 16, 2590-2604	3.5	39
146	Polymorph selection by continuous crystallization. *AICHE Journal*, **2016**, 62, 3505-3514	3.6	18
145	Energetic and entropic components of the Tolman length for mW and TIP4P/2005 water nanodroplets. *Journal of Chemical Physics*, **2016**, 145, 204703	3.9	20
144	Critical length of a one-dimensional nucleus. *Journal of Chemical Physics*, **2016**, 145, 211916	3.9	4
143	A design aid for crystal growth engineering. *Progress in Materials Science*, **2016**, 82, 1-38	42.2	48
142	Rate Expressions for Kink Attachment and Detachment During Crystal Growth. *Crystal Growth and Design*, **2016**, 16, 3313-3322	3.5	28
141	Designing Robust Crystallization Processes in the Presence of Parameter Uncertainty Using Attainable Regions. *Industrial & Engineering Chemistry Research*, **2015**, 54, 10350-10363	3.9	22
140	Separation of conglomerate forming enantiomers using a novel continuous preferential crystallization process. *AICHE Journal*, **2015**, 61, 2810-2823	3.6	27
139	Crystallization of selective polymorph using relationship between supersaturation and solubility. *AICHE Journal*, **2015**, 61, 1372-1379	3.6	12
138	Regions of attainable particle sizes in continuous and batch crystallization processes. *Chemical Engineering Science*, **2014**, 106, 167-180	4.4	91
137	Materials science. Imaging crystallization. *Science*, **2014**, 344, 705-6	33.3	15

136	A mechanistic growth model for inorganic crystals: Solid-state interactions. *AICHE Journal*, **2014**, 60, 3707-3719	3.6	12
135	Kink Rate Model for the General Case of Organic Molecular Crystals. *Crystal Growth and Design*, **2014**, 14, 2460-2467	3.5	16
134	Attainable Regions in Crystallization Processes. *Computer Aided Chemical Engineering*, **2014**, 34, 465-470	0.6	3
133	A mechanistic growth model for inorganic crystals: Growth mechanism. *AICHE Journal*, **2014**, 60, 3720-3734	3.6	17
132	Size-Dependent Surface Free Energy and Tolman-Corrected Droplet Nucleation of TIP4P/2005 Water. *Journal of Physical Chemistry Letters*, **2013**, 4, 4267-72	6.4	54
131	Reformulating multidimensional population balances for predicting crystal size and shape. *AICHE Journal*, **2013**, 59, 3468-3474	3.6	8
130	Needle-Shaped Crystals: Causality and Solvent Selection Guidance Based on Periodic Bond Chains. *Crystal Growth and Design*, **2013**, 13, 3341-3352	3.5	63
129	Engineering Crystal Morphology. *Annual Review of Materials Research*, **2013**, 43, 359-386	12.8	91
128	Effect of Structurally Similar Additives on Crystal Habit of Organic Molecular Crystals at Low Supersaturation. *Crystal Growth and Design*, **2013**, 13, 1412-1428	3.5	38
127	Homogeneous nucleation of methane hydrates: unrealistic under realistic conditions. *Journal of the American Chemical Society*, **2012**, 134, 19544-7	16.4	188
126	Predictive Modeling of Supersaturation-Dependent Crystal Shapes. *Crystal Growth and Design*, **2012** , 12, 656-669	3.5	63
125	Crystal shape modification through cycles of dissolution and growth: Attainable regions and experimental validation. *AICHE Journal*, **2012**, 58, 1465-1474	3.6	39
124	Multisite models to determine the distribution of kink sites adjacent to low-energy edges. *Physical Review E*, **2012**, 85, 021604	2.4	15
123	Spiral Growth Model for Faceted Crystals of Non-Centrosymmetric Organic Molecules Grown from Solution. *Crystal Growth and Design*, **2011**, 11, 2780-2802	3.5	59
122	A new framework and a simpler method for the development of batch crystallization recipes. *AICHE Journal*, **2011**, 57, 606-617	3.6	17
121	Analytical Design and Operation of Systems with Crystallization, Filtration, and Recycling. *Industrial & Engineering Chemistry Research*, **2011**, 50, 1196-1205	3.9	4
120	Reinterpreting edge energies calculated from crystal growth experiments. *Journal of Crystal Growth*, **2011**, 327, 117-126	1.6	13
119	Communication: Bubbles, crystals, and laser-induced nucleation. *Journal of Chemical Physics*, **2011**, 134, 171102	3.9	45

118	A simulation test of the optical Kerr mechanism for laser-induced nucleation. *Journal of Chemical Physics*, **2011**, 134, 154501	3.9	29
117	A stochastic model for the critical length of a spiral edge. *Journal of Crystal Growth*, **2010**, 312, 785-792	1.6	15
116	Reducing the mean size of API crystals by continuous manufacturing with product classification and recycle. *Chemical Engineering Science*, **2010**, 65, 5770-5780	4.4	44
115	Plantwide dynamics and control of processes with crystallization. *Computers and Chemical Engineering*, **2010**, 34, 112-121	4	14
114	Predicting crystal growth by spiral motion. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2009**, 465, 1145-1171	2.4	58
113	A New Model for the Effect of Molecular Imposters on the Shape of Faceted Molecular Crystals. *Crystal Growth and Design*, **2009**, 9, 2637-2645	3.5	43
112	Effect of Competing Reversible Reactions on Optimal Operating Policies for Plants with Recycle. *Industrial & Engineering Chemistry Research*, **2009**, 48, 8037-8047	3.9	12
111	Estimating diffusivity along a reaction coordinate in the high friction limit: Insights on pulse times in laser-induced nucleation. *Journal of Chemical Physics*, **2009**, 131, 224112	3.9	26
110	Crystal Shape Engineering. *Industrial & Engineering Chemistry Research*, **2008**, 47, 9812-9833	3.9	250
109	The Evolution of Crystal Shape During Dissolution: Predictions and Experiments. *Crystal Growth and Design*, **2008**, 8, 1100-1101	3.5	39
108	Nucleation and polymorph selection in a model colloidal fluid. *Physical Review E*, **2008**, 77, 041604	2.4	23
107	From form to function: Crystallization of active pharmaceutical ingredients. *AICHE Journal*, **2008**, 54, 1682-1688	3.6	205
106	Selectivity versus conversion and optimal operating policies for plants with recycle. *AICHE Journal*, **2008**, 54, 2597-2609	3.6	3
105	Feasible Products for Double-Feed Reactive Distillation Columns *Industrial & Engineering Chemistry Research*, **2007**, 46, 3255-3264	3.9	6
104	Faceted crystal shape evolution during dissolution or growth. *AICHE Journal*, **2007**, 53, 1337-1348	3.6	65
103	Manipulation of crystal shape by cycles of growth and dissolution. *AICHE Journal*, **2007**, 53, 1510-1517	3.6	30
102	Plantwide operation of processes with crystallization. *AICHE Journal*, **2007**, 53, 2885-2896	3.6	13
101	Shape evolution of 3-dimensional faceted crystals. *AICHE Journal*, **2006**, 52, 1906-1915	3.6	75

100	Choosing an operating policy for seeded batch crystallization. *AICHE Journal*, **2006**, 52, 2046-2054	3.6	56
99	Steady-State Operating Policies for Plants with Multiple Reactions of Equal Overall Order. *Industrial & Engineering Chemistry Research*, **2006**, 45, 8056-8062	3.9	4
98	Insight from Economically Optimal Steady-State Operating Policies for Dynamic Plantwide Control. *Industrial & Engineering Chemistry Research*, **2006**, 45, 1343-1353	3.9	15
97	Novel Reactor Temperature and Recycle Flow Rate Policies for Optimal Process Operation in the Plantwide Context. *Industrial & Engineering Chemistry Research*, **2005**, 44, 6729-6740	3.9	10
96	Natural gas conversion to liquid fuels in a zone reactor. *Catalysis Today*, **2005**, 106, 301-304	5.3	30
95	Selection of reference components in reaction invariants. *Chemical Engineering Science*, **2005**, 60, 7168-7171	4.1	7
94	Experimental study of feasibility in kinetically-controlled reactive distillation. *AICHE Journal*, **2005**, 51, 464-479	3.6	2
93	Effects of vapor□liquid mass transfer on feasibility of reactive distillation. *AICHE Journal*, **2004**, 50, 1795-1813	3.6	2
92	Simultaneous prediction of crystal shape and size for solution crystallization. *AICHE Journal*, **2004**, 50, 2101-2112	3.6	46
91	A dynamic model for evolution of crystal shape. *Journal of Crystal Growth*, **2004**, 267, 239-250	1.6	35
90	Importance of Process Chemistry in Selecting the Operating Policy for Plants with Recycle□ *Industrial & Engineering Chemistry Research*, **2004**, 43, 3957-3971	3.9	20
89	Evolution of Crystal Shape. *Crystal Growth and Design*, **2004**, 4, 109-112	3.5	36
88	Feasible Regions for Step-Growth Melt Polycondensation Systems. *Industrial & Engineering Chemistry Research*, **2004**, 43, 428-440	3.9	8
87	Distillation, Azeotropic, and Extractive **2004**,		1
86	Simultaneous kinetic resolution of chiral propylene oxide and propylene glycol in a continuous reactive distillation column. *Chemical Engineering Science*, **2003**, 58, 1289-1300	4.4	13
85	Reactive distillation for methyl acetate production. *Computers and Chemical Engineering*, **2003**, 27, 1855-1866	4	57
84	Synthesis of Azeotropic Distillation Systems with Recycles. *Industrial & Engineering Chemistry Research*, **2003**, 42, 1783-1794	3.9	18
83	Green chemical engineering aspects of reactive distillation. *Environmental Science & Technology*, **2003**, 37, 5325-9	10.3	48

82	Modeling Crystal Shape of Polar Organic Materials: Applications to Amino Acids. *Crystal Growth and Design*, **2003**, 3, 221-237	3.5	75
81	Design of reactive extraction systems for bioproduct recovery. *AICHE Journal*, **2002**, 48, 514-526	3.6	47
80	Feasible region for a countercurrent cascade of vapor-liquid CSTRS. *AICHE Journal*, **2002**, 48, 800-814	3.6	33
79	Feasibility and synthesis of hybrid reactive distillation systems. *AICHE Journal*, **2002**, 48, 2754-2768	3.6	14
78	Multiple steady states in reactive distillation: kinetic effects. *Computers and Chemical Engineering*, **2002**, 26, 81-93	4	72
77	Predicting the shape of organic crystals grown from polar solvents. *Chemical Engineering Science*, **2002**, 57, 1805-1813	4.4	35
76	Reaction Invariants and Mole Balances for Plant Complexes *Industrial & Engineering Chemistry Research*, **2002**, 41, 3771-3783	3.9	9
75	A systematic method for reaction invariants and mole balances for complex chemistries. *Computers and Chemical Engineering*, **2001**, 25, 1199-1217	4	23
74	Effect of chemical kinetics on feasible splits for reactive distillation. *AICHE Journal*, **2001**, 47, 590-601	3.6	31
73	Modeling the Crystal Shape of Polar Organic Materials: Prediction of Urea Crystals Grown from Polar and Nonpolar Solvents. *Crystal Growth and Design*, **2001**, 1, 455-461	3.5	46
72	Feasible products for kinetically controlled reactive distillation of ternary mixtures. *AICHE Journal*, **2000**, 46, 923-936	3.6	22
71	Modeling crystal shapes of organic materials grown from solution. *AICHE Journal*, **2000**, 46, 1348-1367	3.6	215
70	Simulation of kinetic effects in reactive distillation. *Computers and Chemical Engineering*, **2000**, 24, 2457-2472	4	53
69	Selectivity Targets for Batch Reactive Distillation *Industrial & Engineering Chemistry Research*, **2000**, 39, 1565-1575	3.9	17
68	Reactive Distillation. *Industrial & Engineering Chemistry Research*, **2000**, 39, 3953-3957	3.9	195
67	Bifurcation study of kinetic effects in reactive distillation. *AICHE Journal*, **1999**, 45, 546-556	3.6	46
66	A Novel Distillate Policy for Batch Reactive Distillation with Application to the Production of Butyl Acetate *Industrial & Engineering Chemistry Research*, **1999**, 38, 714-722	3.9	66
65	Computing All Homogeneous and Heterogeneous Azeotropes in Multicomponent Mixtures. *Industrial & Engineering Chemistry Research*, **1999**, 38, 4901-4912	3.9	20

64	Structure of Distillation Regions for Multicomponent Azeotropic Mixtures. *AICHE Journal*, **1998**, 44, 1382-1391	3.6	78
63	A new technique for predicting the shape of solution-grown organic crystals. *AICHE Journal*, **1998**, 44, 2501-2514	3.6	84
62	Design for Simultaneous Reaction and Liquid–liquid Extraction. *Industrial & Engineering Chemistry Research*, **1998**, 37, 4748-4755	3.9	33
61	Measurement of Residue Curve Maps and Heterogeneous Kinetics in Methyl Acetate Synthesis. *Industrial & Engineering Chemistry Research*, **1998**, 37, 1917-1928	3.9	115
60	Design Method for Kinetically Controlled, Staged Reactive Distillation Columns. *Industrial & Engineering Chemistry Research*, **1998**, 37, 2821-2834	3.9	109
59	Attainable regions for reaction with separation. *AICHE Journal*, **1997**, 43, 374-387	3.6	80
58	Thermodynamic behavior of reactive azeotropes. *AICHE Journal*, **1997**, 43, 2227-2238	3.6	49
57	Global Stability Analysis and Calculation of Liquid–liquid Equilibrium in Multicomponent Mixtures *Industrial & Engineering Chemistry Research*, **1996**, 35, 1395-1408	3.9	90
56	A Geometric Method for the Design of Liquid Extractors. *Industrial & Engineering Chemistry Research*, **1996**, 35, 2672-2681	3.9	22
55	A Geometric Design Method for Side-Stream Distillation Columns *Industrial & Engineering Chemistry Research*, **1996**, 35, 3653-3664	3.9	26
54	Calculation of residue curve maps for mixtures with multiple equilibrium chemical reactions. *Industrial & Engineering Chemistry Research*, **1995**, 34, 3195-3202	3.9	66
53	Synthesis of Reactive Distillation Systems with Multiple Equilibrium Chemical Reactions. *Industrial & Engineering Chemistry Research*, **1995**, 34, 2555-2565	3.9	95
52	Necessary and sufficient conditions for reactive azeotropes in multireaction mixtures. *AICHE Journal*, **1995**, 41, 2383-2392	3.6	42
51	Vapor-liquid phase equilibrium in systems with multiple chemical reactions. *Chemical Engineering Science*, **1995**, 50, 23-48	4.4	165
50	Calculation of solid-liquid equilibrium and crystallization paths for melt crystallization processes. *Chemical Engineering Science*, **1995**, 50, 1679-1694	4.4	41
49	Theory of phase equilibria in multireaction systems. *Chemical Engineering Science*, **1995**, 50, 3201-3216	4.4	62
48	Design of three-component kinetically controlled reactive distillation columns using fixed-points methods. *Chemical Engineering Science*, **1994**, 49, 1947-1963	4.4	48
47	Minimum entrainer flows for extractive distillation: A bifurcation theoretic approach. *AICHE Journal* , **1994**, 40, 243-268	3.6	84

46	Effect of kinetics on residue curve maps for reactive distillation. *AICHE Journal*, **1994**, 40, 1814-1824	3.6	97
45	New tools for the design of kinetically controlled reactive distillation columns. *Computers and Chemical Engineering*, **1994**, 18, S1-S13	4	10
44	Design and operating targets for nonideal multicomponent batch distillation. *Industrial & Engineering Chemistry Research*, **1993**, 32, 293-301	3.9	14
43	Geometric nonlinear analysis of multicomponent nonideal distillation: a simple computer-aided design procedure. *Chemical Engineering Science*, **1993**, 48, 1367-1391	4.4	33
42	A new pressure-swing-distillation process for separating homogeneous azeotropic mixtures. *Industrial & Engineering Chemistry Research*, **1992**, 31, 346-357	3.9	127
41	Feasibility and separation sequencing in multicomponent batch distillation. *Chemical Engineering Science*, **1991**, 46, 1311-1326	4.4	72
40	Automatic screening of entrainers for homogeneous azeotropic distillation. *Industrial & Engineering Chemistry Research*, **1991**, 30, 760-772	3.9	82
39	Dynamics of heterogeneous azeotropic distillation columns. *AICHE Journal*, **1990**, 36, 39-52	3.6	47
38	Thermal integration of homogeneous azeotropic distillation sequences. *AICHE Journal*, **1990**, 36, 969-984	3.6	97
37	Geometric behavior and minimum flows for nonideal multicomponent distillation. *Chemical Engineering Science*, **1990**, 45, 1801-1822	4.4	110
36	Design and synthesis of heterogeneous azeotropic distillations Heterogeneous phase diagrams. *Chemical Engineering Science*, **1990**, 45, 1823-1836	4.4	56
35	Design and synthesis of heterogeneous azeotropic distillations. Residue curve maps. *Chemical Engineering Science*, **1990**, 45, 1837-1843	4.4	63
34	Design and synthesis of heterogeneous azeotropic distillations I. Column sequences. *Chemical Engineering Science*, **1990**, 45, 1845-1854	4.4	65
33	Patterns of composition change in multicomponent batch distillation. *Chemical Engineering Science*, **1990**, 45, 1207-1221	4.4	55
32	Wiped film reactor model for nylon 6,6 polymerization. *Industrial & Engineering Chemistry Research*, **1990**, 29, 2012-2020	3.9	14
31	Design and minimum reflux for heterogeneous azeotropic distillation columns. *AICHE Journal*, **1989**, 35, 1585-1591	3.6	32
30	Design/optimization of ternary heterogeneous azeotropic distillation sequences. *AICHE Journal*, **1989**, 35, 1592-1601	3.6	45
29	Optimal design and synthesis of homogeneous azeotropic distillation sequences. *Industrial & Engineering Chemistry Research*, **1989**, 28, 564-572	3.9	61

28	Approximate dynamic models for chemical process systems. *Industrial & Engineering Chemistry Research*, **1989**, 28, 546-552	3.9	19
27	Design and minimum-reflux calculations for single-feed multicomponent reactive distillation columns. *Chemical Engineering Science*, **1988**, 43, 1523-1537	4.4	139
26	The influence of equilibrium chemical reactions on vapor□quid phase diagrams. *Chemical Engineering Science*, **1988**, 43, 529-540	4.4	100
25	The simple distillation of homogeneous reactive mixtures. *Chemical Engineering Science*, **1988**, 43, 541-550	4.4	138
24	Chaos in deterministic systems: Strange attractors, turbulence, and applications in chemical engineering. *Chemical Engineering Science*, **1988**, 43, 139-183	4.4	79
23	Design and minimum-reflux calculations for double-feed multicomponent reactive distillation columns. *Chemical Engineering Science*, **1988**, 43, 2377-2389	4.4	68
22	The interface between design and control. 3. Selecting a set of controlled variables. *Industrial & Engineering Chemistry Research*, **1988**, 27, 611-615	3.9	40
21	The interface between design and control. 1. Process controllability. *Industrial & Engineering Chemistry Research*, **1988**, 27, 597-605	3.9	64
20	The interface between design and control. 2. Process operability. *Industrial & Engineering Chemistry Research*, **1988**, 27, 606-611	3.9	31
19	Relative gain array for units in plants with recycle. *Industrial & Engineering Chemistry Research*, **1987**, 26, 1259-1262	3.9	37
18	Screening of process retrofit alternatives. *Industrial & Engineering Chemistry Research*, **1987**, 26, 2195-2204	3.9	21
17	Modeling of reactive distillation systems. *Industrial & Engineering Chemistry Research*, **1987**, 26, 983-989	3.9	50
16	A simple exact method for calculating tangent pinch points in multicomponent nonideal mixtures by bifurcation theory. *Chemical Engineering Science*, **1986**, 41, 3155-3160	4.4	23
15	Design and synthesis of homogeneous azeotropic distillations. 5. Columns with nonnegligible heat effects. *Industrial & Engineering Chemistry Fundamentals*, **1986**, 25, 279-289		22
14	Design and synthesis of homogeneous azeotropic distillations. 4. Minimum reflux calculations for multiple-feed columns. *Industrial & Engineering Chemistry Fundamentals*, **1986**, 25, 269-279		31
13	The presynthesis problem for homogeneous azeotropic distillation has a unique explicit solution. *Chemical Engineering Science*, **1985**, 40, 1885-1889	4.4	22
12	Properties of liquid-vapour composition surfaces for multicomponent mixtures with constant latent heat. *Chemical Engineering Science*, **1985**, 40, 1979-1980	4.4	11
11	On the dynamics of distillation processes□VI. batch distillation. *Chemical Engineering Science*, **1985**, 40, 2087-2093	4.4	34

10	Effect of overdesign on the operability of distillation columns. *Industrial & Engineering Chemistry Process Design and Development*, **1985**, 24, 593-598		10
9	Separation of closely boiling mixtures by reactive distillation. 2. Experiments. *Industrial & Engineering Chemistry Process Design and Development*, **1985**, 24, 1071-1073		21
8	Separation of closely boiling mixtures by reactive distillation. 1. Theory. *Industrial & Engineering Chemistry Process Design and Development*, **1985**, 24, 1062-1071		36
7	Design and synthesis of homogeneous azeotropic distillations. 3. The sequencing of columns for azeotropic and extractive distillations. *Industrial & Engineering Chemistry Fundamentals*, **1985**, 24, 474-485		134
6	Design and synthesis of homogeneous azeotropic distillations. 1. Problem formulation for a single column. *Industrial & Engineering Chemistry Fundamentals*, **1985**, 24, 454-463		107
5	Design and synthesis of homogeneous azeotropic distillations. 2. Minimum reflux calculations for nonideal and azeotropic columns. *Industrial & Engineering Chemistry Fundamentals*, **1985**, 24, 463-474		117
4	On the dynamics of distillation processes-V. *Chemical Engineering Science*, **1984**, 39, 883-892	4.4	26
3	An approximate model for binary azeotropic distillation design. *Chemical Engineering Science*, **1984**, 39, 11-19	4.4	12
2	Controlling thermally linked distillation columns. *Industrial & Engineering Chemistry Process Design and Development*, **1984**, 23, 483-490		13
1	Material stability of multicomponent mixtures and the multiplicity of solutions to phase-equilibrium equations. 1. Nonreacting mixtures. *Industrial & Engineering Chemistry Fundamentals*, **1983**, 22, 472-485		24