

Andrzej Gorak

List of Publications by Year in descending order

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203
papers

5,036
citations

81743

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docs citations

237
times ranked

3037
citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling of reactive separation processes: reactive absorption and reactive distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2003, 42, 157-178.	1.8	187
2	Process intensification and process systems engineering: A friendly symbiosis. <i>Computers and Chemical Engineering</i> , 2008, 32, 3-11.	2.0	168
3	On the modelling and simulation of sour gas absorption by aqueous amine solutions. <i>Chemical Engineering Science</i> , 2003, 58, 3571-3578.	1.9	124
4	Sustainable process synthesis – intensification. <i>Computers and Chemical Engineering</i> , 2015, 81, 218-244.	2.0	110
5	Hybrid separation processes – Combination of reactive distillation with membrane separation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2007, 46, 790-799.	1.8	92
6	Reactive and membrane-assisted distillation: Recent developments and perspective. <i>Chemical Engineering Research and Design</i> , 2013, 91, 1978-1997.	2.7	89
7	Kinetics of the Gas-Liquid Reaction between Carbon Dioxide and Hydroxide Ions. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 5952-5957.	1.8	86
8	Review of the application of ionic liquids as solvents for chitin. <i>Journal of Polymer Engineering</i> , 2012, 32, .	0.6	84
9	Rate-based modelling and simulation of reactive separations in gas/vapour-liquid systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005, 44, 617-629.	1.8	79
10	Catalytic distillation in structured packings: Methyl acetate synthesis. <i>AIChE Journal</i> , 2001, 47, 1067-1076.	1.8	78
11	Determination of gas-liquid reaction kinetics with a stirred cell reactor. <i>Separation and Purification Technology</i> , 2003, 31, 163-175.	3.9	78
12	Intensified Reaction and Separation Systems. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2011, 2, 431-451.	3.3	78
13	Recovery of n-butanol using ionic liquid-based pervaporation membranes. <i>Separation and Purification Technology</i> , 2012, 97, 108-114.	3.9	77
14	Liquid Flow on Structured Packing: CFD Simulation and Experimental Study. <i>Chemical Engineering and Technology</i> , 2003, 26, 580-584.	0.9	75
15	Investigation of ethyl acetate reactive distillation process. <i>Chemical Engineering Science</i> , 2001, 56, 6185-6193.	1.9	74
16	Transesterification of dimethyl carbonate with ethanol in a pilot-scale reactive distillation column. <i>Chemical Engineering Journal</i> , 2012, 180, 309-322.	6.6	70
17	A guide on the industrial application of rotating packed beds. <i>Chemical Engineering Research and Design</i> , 2018, 134, 443-462.	2.7	70
18	Transesterification of Dimethyl Carbonate with Ethanol To Form Ethyl Methyl Carbonate and Diethyl Carbonate: A Comprehensive Study on Chemical Equilibrium and Reaction Kinetics. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 11073-11086.	1.8	66

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19	Reactive absorption: Optimal process design via optimal modelling. <i>Chemical Engineering Science</i> , 2001, 56, 343-350.	1.9	65
20	Investigation of different column configurations for the ethyl acetate synthesis via reactive distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2004, 43, 791-801.	1.8	63
21	Scale-up of reactive distillation columns with catalytic packings. <i>Chemical Engineering and Processing: Process Intensification</i> , 2004, 43, 383-395.	1.8	62
22	Standardization of Mass Transfer Measurements. <i>Chemical Engineering Research and Design</i> , 2007, 85, 40-49.	2.7	61
23	Process Analysis of Hybrid Separation Processes. <i>Chemical Engineering Research and Design</i> , 2006, 84, 595-600.	2.7	54
24	Investigation of gas stripping and pervaporation for improved feasibility of two-stage butanol production process. <i>Bioresource Technology</i> , 2013, 136, 102-108.	4.8	52
25	Review and analysis of micromixing in rotating packed beds. <i>Chemical Engineering Journal</i> , 2018, 345, 492-506.	6.6	52
26	A film model based approach for simulation of multicomponent reactive separation. <i>Chemical Engineering and Processing: Process Intensification</i> , 1995, 34, 97-103.	1.8	51
27	Modelling, design and flexibility analysis of rotating packed beds for distillation. <i>Chemical Engineering Research and Design</i> , 2015, 94, 72-89.	2.7	51
28	Biodiesel production from waste cooking oils through esterification: Catalyst screening, chemical equilibrium and reaction kinetics. <i>Chemical Engineering Research and Design</i> , 2016, 107, 52-62.	2.7	51
29	Dynamic catalytic distillation: Advanced simulation and experimental validation. <i>Computers and Chemical Engineering</i> , 1998, 22, S371-S378.	2.0	50
30	Highly integrated reactor-separator systems for the recycling of homogeneous catalysts. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 99, 124-131.	1.8	48
31	Design and optimization of a hybrid distillation/melt crystallization process. <i>AIChE Journal</i> , 2008, 54, 2925-2942.	1.8	46
32	Rigorous dynamic modelling of complex reactive absorption processes. <i>Chemical Engineering Science</i> , 1999, 54, 5195-5203.	1.9	45
33	Modelling of the reactive absorption of CO ₂ using mono-ethanolamine. <i>International Journal of Greenhouse Gas Control</i> , 2013, 17, 294-308.	2.3	45
34	Synthesis of dimethyl carbonate and propylene glycol in a pilot-scale reactive distillation column: Experimental investigation, modeling and process analysis. <i>Chemical Engineering Journal</i> , 2013, 234, 448-463.	6.6	45
35	Optimisation of industrial-scale n-butyl acrylate production using reactive distillation. <i>Chemical Engineering Science</i> , 2013, 100, 360-372.	1.9	44
36	Synthesis of dimethyl carbonate and propylene glycol by transesterification of propylene carbonate with methanol: Catalyst screening, chemical equilibrium and reaction kinetics. <i>Chemical Engineering Science</i> , 2013, 104, 347-360.	1.9	43

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37	Rigorous Modeling of Reactive Absorption Processes. <i>Chemical Engineering and Technology</i> , 2003, 26, 631-646.	0.9	42
38	Dynamic Modelling of Reactive Absorption with the Maxwell-Stefan Approach. <i>Chemical Engineering Research and Design</i> , 1999, 77, 633-638.	2.7	41
39	Extraction of 1,3-propanediol from aqueous solutions using different ionic liquid-based aqueous two-phase systems. <i>Separation and Purification Technology</i> , 2012, 97, 130-136.	3.9	41
40	Design of hybrid distillation/melt crystallisation processes for separation of close boiling mixtures. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 67, 16-24.	1.8	39
41	Modeling of homogeneous reactive separation processes in packed columns. <i>Chemical Engineering Science</i> , 1999, 54, 19-34.	1.9	38
42	Model-based design, control and optimisation of catalytic distillation processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2004, 43, 421-434.	1.8	38
43	Process analysis and optimisation of hybrid processes for the dehydration of ethanol. <i>Chemical Engineering Research and Design</i> , 2013, 91, 1171-1185.	2.7	38
44	Single stage aqueous two-phase extraction for monoclonal antibody purification from cell supernatant. <i>Fluid Phase Equilibria</i> , 2015, 385, 227-236.	1.4	38
45	Esterification of Acrylic Acid and <i>n</i> -Butanol in a Pilot-Scale Reactive Distillation Column—Experimental Investigation, Model Validation, and Process Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 16444-16456.	1.8	37
46	On the development of new column internals for reactive separations via integration of CFD and process simulation. <i>Catalysis Today</i> , 2003, 79-80, 479-485.	2.2	36
47	Multi-stage laccase extraction and separation using aqueous two-phase systems: Experiment and model. <i>Process Biochemistry</i> , 2014, 49, 1020-1031.	1.8	36
48	Continuous multi-stage extraction of <i>n</i> -butanol from aqueous solutions with 1-hexyl-3-methylimidazolium tetracyanoborate. <i>Separation and Purification Technology</i> , 2013, 120, 415-422.	3.9	35
49	Optimisation-based design method for membrane-assisted separation processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 67, 2-15.	1.8	34
50	Modeling of Reactive Absorption Using the Maxwell–Stefan Equations. <i>Industrial & Engineering Chemistry Research</i> , 1997, 36, 4325-4334.	1.8	33
51	Modelling of organic-solvent flux through a polyimide membrane. <i>Journal of Membrane Science</i> , 2013, 428, 554-561.	4.1	33
52	An integrated tool for synthesis and design of reactive distillation. <i>Chemical Engineering Science</i> , 1999, 54, 1347-1352.	1.9	32
53	Reactive distillation: Non-ideal flow behaviour of the liquid phase in structured catalytic packings. <i>Chemical Engineering Science</i> , 2002, 57, 1545-1549.	1.9	32
54	Single drop mass transfer in ternary and quaternary liquid–liquid extraction systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2003, 42, 825-840.	1.8	32

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55	Mass Transfer Studies in a Pilot Scale RPB with Different Packing Diameters. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 2258-2266.	1.8	32
56	Pervaporation of binary and ternary mixtures of acetone, isopropyl alcohol and water using polymeric membranes: Experimental characterisation and modelling. <i>Chemical Engineering Science</i> , 2014, 115, 95-114.	1.9	31
57	Characterisation of Organic Solvent Nanofiltration membranes in multi-component mixtures: Process design workflow for utilising targeted solvent modifications. <i>Chemical Engineering Science</i> , 2014, 115, 115-126.	1.9	31
58	Experimental model validation for n-propyl propionate synthesis in a reactive distillation column coupled with a liquid-liquid phase separator. <i>Chemical Engineering Science</i> , 2011, 66, 4889-4900.	1.9	30
59	Optimal operation of a semi-batch reactive distillation column. <i>Computers and Chemical Engineering</i> , 2000, 24, 1569-1575.	2.0	29
60	Pilot plant synthesis of n-propyl propionate via reactive distillation with decanter separator for reactant recovery. Experimental model validation and simulation studies. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 965-972.	1.8	29
61	Modification of chitin particles with chloride ionic liquids. <i>Materials Letters</i> , 2016, 164, 341-343.	1.3	29
62	Towards the Development of Advanced Packing Design for Distillation in Rotating Packed Beds. <i>Chemie-Ingenieur-Technik</i> , 2019, 91, 1663-1673.	0.4	29
63	Determination of catalytic packing characteristics for reactive distillation. <i>Catalysis Today</i> , 2001, 69, 75-85.	2.2	28
64	Dynamic simulation of industrial reactive absorption processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2003, 42, 955-964.	1.8	28
65	Synthesis of n-propyl propionate in a pilot-plant reactive distillation column: Experimental study and simulation. <i>Computers and Chemical Engineering</i> , 2012, 39, 118-128.	2.0	28
66	Modelling of homogeneously catalysed reactive distillation processes in packed columns: Experimental model validation. <i>Computers and Chemical Engineering</i> , 2013, 48, 74-88.	2.0	28
67	Dynamic modeling and simulation of reactive batch distillation. <i>Computers and Chemical Engineering</i> , 2001, 25, 169-176.	2.0	27
68	A systematic investigation of microwave-assisted reactive distillation: Influence of microwaves on separation and reaction. <i>Chemical Engineering and Processing: Process Intensification</i> , 2015, 93, 87-97.	1.8	27
69	Mass transfer measurements in absorption and desorption: Determination of mass transfer parameters. <i>Chemical Engineering Research and Design</i> , 2015, 104, 440-452.	2.7	27
70	Comparison of numerical and analytical solutions of a multicomponent reaction-mass-transfer problem in terms of the film model. <i>Chemical Engineering Science</i> , 2000, 55, 1483-1496.	1.9	26
71	Energy-efficient solvent regeneration in enzymatic reactive absorption for carbon dioxide capture. <i>Applied Energy</i> , 2017, 208, 263-276.	5.1	26
72	The inhibition of acrylic acid and acrylate ester polymerisation in a heterogeneously catalysed pilot-scale reactive distillation column. <i>Chemical Engineering Science</i> , 2013, 88, 95-107.	1.9	25

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73	Experimental investigations on the upper operating limit in rotating packed beds. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 121, 240-247.	1.8	25
74	Modification of chitin structure with tailored ionic liquids. <i>Carbohydrate Polymers</i> , 2018, 202, 397-403.	5.1	25
75	Analysis of Flow Patterns in High-Gravity Equipment Using Gamma-Ray Computed Tomography. <i>Chemie-Ingenieur-Technik</i> , 2019, 91, 1032-1040.	0.4	25
76	Dry Pressure Drop in Rotating Packed Beds—Systematic Experimental Studies. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 12395-12405.	1.8	24
77	Distillation Lines for Multicomponent Separation in Packed Columns: Theory and Comparison with Experiment. <i>Industrial & Engineering Chemistry Research</i> , 1997, 36, 5392-5398.	1.8	23
78	Application of supported ionic liquid membranes (SILMs) for biobutanol pervaporation. <i>Separation and Purification Technology</i> , 2015, 155, 83-88.	3.9	23
79	A novel approach for process retrofitting through process intensification: Ethylene oxide case study. <i>Chemical Engineering Research and Design</i> , 2017, 123, 295-316.	2.7	23
80	Enzymatic reactive absorption of CO ₂ in MDEA by means of an innovative biocatalyst delivery system. <i>Chemical Engineering Journal</i> , 2018, 334, 1195-1205.	6.6	23
81	Advanced rate-based simulation tool for reactive distillation. <i>AIChE Journal</i> , 2004, 50, 322-342.	1.8	22
82	n-Propyl Propionate Synthesis via Catalytic Distillation - Experimental Investigation in Pilot-Scale. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 891-899.	1.8	22
83	Optimization-Based Approach to Process Synthesis for Process Intensification: Synthesis of Reaction-Separation Processes. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 3639-3655.	1.8	22
84	On the reactant concentration and the reaction kinetics in the Villermaux-Dushman protocol. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 130, 332-341.	1.8	22
85	Recent Advances in Experimental Techniques for Flow and Mass Transfer Analyses in Thermal Separation Systems. <i>Chemie-Ingenieur-Technik</i> , 2020, 92, 926-948.	0.4	22
86	Mikrodestillation von Mehrkomponentensystemen. <i>Chemie-Ingenieur-Technik</i> , 1996, 68, 272-276.	0.4	20
87	Simulation of a human serum albumin downstream process incorporating ion-exchange membrane adsorbers. <i>Chemical Engineering and Processing: Process Intensification</i> , 2008, 47, 1128-1138.	1.8	20
88	Pilot scale testing and modeling of enzymatic reactive absorption in packed columns for CO ₂ capture. <i>International Journal of Greenhouse Gas Control</i> , 2017, 62, 100-112.	2.3	20
89	Computer aided design, analysis and experimental investigation of membrane assisted batch reaction-separation systems. <i>Computers and Chemical Engineering</i> , 2009, 33, 551-574.	2.0	19
90	Methodology for design and analysis of reactive distillation involving multielement systems. <i>Chemical Engineering Research and Design</i> , 2011, 89, 1295-1307.	2.7	19

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91	Reactive Distillation for Multiple-Reaction Systems: Optimisation Study Using an Evolutionary Algorithm. <i>Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa</i> , 2013, 34, 17-38.	0.7	19
92	Multistage aqueous two-phase extraction of a monoclonal antibody from cell supernatant. <i>Biotechnology Progress</i> , 2015, 31, 925-936.	1.3	19
93	Catalytic Distillation for TAME Synthesis with Structured Catalytic Packings. <i>Chemical Engineering Research and Design</i> , 2004, 82, 175-184.	2.7	18
94	Experimental study on multicomponent distillation in packed columns. <i>Chemical Engineering and Processing: Process Intensification</i> , 2001, 40, 235-243.	1.8	17
95	Prozessintensivierung: Reaktive und membranunterstützte Rektifikation. <i>Chemie-Ingenieur-Technik</i> , 2007, 79, 1581-1600.	0.4	17
96	Reactive distillation – experimental data for propyl propionate synthesis. <i>Chemical Papers</i> , 2008, 62, .	1.0	17
97	Demixing behavior of binary polymer mixtures. <i>Journal of Molecular Liquids</i> , 2015, 209, 42-49.	2.3	17
98	Evaluation of the Enzymatic Reactive Distillation for the Production of Chiral Compounds. <i>Chemie-Ingenieur-Technik</i> , 2016, 88, 147-157.	0.4	17
99	Partitioning of laccases derived from <i>Cerrena unicolor</i> and <i>Pleurotus sapidus</i> in polyethylene glycol – phosphate aqueous two-phase systems. <i>Process Biochemistry</i> , 2018, 67, 165-174.	1.8	17
100	Dynamic Performance Optimization of a Pilot-Scale Reactive Distillation Process by Economics Optimizing Control. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 12165-12181.	1.8	16
101	Dynamic rate-based model for multicomponent batch distillation. <i>AIChE Journal</i> , 1999, 45, 1953-1962.	1.8	15
102	Modelling of combined direct-contact condensation and reactive absorption in packed columns. <i>Chemical Engineering Journal</i> , 2009, 146, 362-369.	6.6	15
103	Investigation of a phosphate/1-butyl-3-methylimidazolium trifluoromethanesulfonate/water system for the extraction of 1,3-propanediol from fermentation broth. <i>RSC Advances</i> , 2013, 3, 148-156.	1.7	15
104	Comparison of downstream processing methods in purification of highly active laccase. <i>Bioprocess and Biosystems Engineering</i> , 2019, 42, 1635-1645.	1.7	15
105	Kinetics of chitin deacetylase activation by the ionic liquid [Bmim][Br]. <i>Journal of Biotechnology</i> , 2017, 251, 94-98.	1.9	14
106	On the reliability of lab-scale experiments for the determination of membrane specific flux measurements in organic solvent nanofiltration. <i>Chemical Engineering Research and Design</i> , 2019, 148, 271-279.	2.7	14
107	Liquid Distribution and Mixing in Rotating Packed Beds. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 5919-5928.	1.8	14
108	Experimental Study of Ternary Distillation in a Packed Column. <i>Separation Science and Technology</i> , 1985, 20, 33-61.	1.3	13

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109	TAAE synthesis from isoamylenes and ethanol by catalytic distillation: Pilot plant experiments and model validation. <i>Fuel Processing Technology</i> , 2012, 102, 1-10.	3.7	13
110	Optimal design of catalytic distillation columns: A case study on synthesis of TAAE. <i>Chemical Engineering Research and Design</i> , 2014, 92, 391-404.	2.7	13
111	Modeling of liquid-liquid equilibrium in the quinary system of water, acetone, n-butanol, ethanol, and ionic liquid. <i>Fluid Phase Equilibria</i> , 2014, 384, 114-121.	1.4	13
112	Laccase concentration by foam fractionation of <i>Cerrena unicolor</i> and <i>Pleurotus sapidus</i> culture supernatants. <i>Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa</i> , 2017, 38, 455-464.	0.7	13
113	Modification of Chitin Particles with Ionic Liquids Containing Ethyl Substituent in a Cation. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-9.	1.0	13
114	Enzyme-enhanced CO ₂ absorption process in rotating packed bed. <i>Chemical Papers</i> , 2019, 73, 861-869.	1.0	13
115	Evaluation of performance improvements through application of anisotropic foam packings in rotating packed beds. <i>Chemical Engineering Science</i> , 2021, 230, 116176.	1.9	13
116	Design of Hybrid Distillation/Melt Crystallization Processes for Separation of Close-Boiling Mixtures. <i>Chemie-Ingenieur-Technik</i> , 2012, 84, 2035-2047.	0.4	12
117	New ionic liquids for modification of chitin particles. <i>Research on Chemical Intermediates</i> , 2018, 44, 4841-4854.	1.3	12
118	Optimal operation processes of discrete-continuous biochemical processes. <i>Computers and Chemical Engineering</i> , 2000, 24, 1167-1173.	2.0	11
119	Different recycling concepts in the homogeneously catalysed synthesis of terpenyl amines. <i>Chemical Engineering and Processing: Process Intensification</i> , 2015, 98, 22-31.	1.8	11
120	Fuzzy dynamic programming in the synthesis of distillation column systems. <i>Computers and Chemical Engineering</i> , 1989, 13, 611-618.	2.0	10
121	Design and optimization of a nitric acid recovery plant from nitrous waste gases. <i>Computers and Chemical Engineering</i> , 1996, 20, S1425-S1430.	2.0	10
122	Reactive Absorption. , 2005, , 265-311.		10
123	Process intensification and process system engineering: a friendly symbiosis. <i>Computer Aided Chemical Engineering</i> , 2006, , 29-37.	0.3	10
124	Sustainable Process Synthesis-Intensification. <i>Computer Aided Chemical Engineering</i> , 2014, , 255-260.	0.3	10
125	Enzyme Accelerated Carbon Capture in different Contacting Equipment - A Comparative Study. <i>Energy Procedia</i> , 2017, 114, 795-812.	1.8	10
126	Dynamic and steady state simulation of coke oven gas purification. <i>Computers and Chemical Engineering</i> , 1999, 23, S843-S846.	2.0	9

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127	Modeling of single- and multi-stage extraction in the system of water, acetone, butanol, ethanol and ionic liquid. <i>Fluid Phase Equilibria</i> , 2016, 425, 365-373.	1.4	9
128	Techno-economic evaluation of an ultrasound-assisted Enzymatic Reactive Distillation process. <i>Computers and Chemical Engineering</i> , 2017, 105, 123-131.	2.0	9
129	Reactive mixing in rotating packed beds: On the packing's role and mixing modeling. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 143, 107596.	1.8	9
130	Simulation und Optimierung der Mehrstoff-Rektifikation. <i>Chemie-Ingenieur-Technik</i> , 1987, 59, 95-106.	0.4	8
131	Dynamic modelling and simulation of reactive batch distillation. <i>Computers and Chemical Engineering</i> , 1999, 23, S423-S426.	2.0	8
132	The Need for Standardization of Mass Transfer Measurements in Absorption and Desorption. <i>Chemie-Ingenieur-Technik</i> , 2012, 84, 1931-1938.	0.4	8
133	Design of reactive distillation processes for the production of butyl acrylate: Impact of bio-based raw materials. <i>Chinese Journal of Chemical Engineering</i> , 2015, 23, 1840-1850.	1.7	8
134	Deterministic global optimization in conceptual process design of distillation and melt crystallization. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 99, 132-142.	1.8	8
135	Energy efficiency as an example of cross-discipline collaboration in chemical engineering. <i>Chemical Engineering Research and Design</i> , 2017, 119, 183-187.	2.7	8
136	Aroma absorption in a rotating packed bed with a tailor-made archimedean spiral packing. <i>Chemical Engineering Science</i> , 2021, 231, 116334.	1.9	8
137	Simulation of a multicomponent extraction process by a nonequilibrium stage model incorporating a drop population model. <i>Computers and Chemical Engineering</i> , 1992, 16, S403-S410.	2.0	7
138	Model Optimization for the Dynamic Simulation of Reactive Absorption Processes. <i>Chemical Engineering and Technology</i> , 2001, 24, 979.	0.9	7
139	Residence time distribution study for the catalytic packing MULTIPAK®. <i>Chemical Papers</i> , 2006, 60, .	1.0	7
140	Modeling of Reactive Distillation. , 0, , 323-363.		7
141	Process Intensification in Fluid Separation Processes. <i>Chemie-Ingenieur-Technik</i> , 2011, 83, 935-951.	0.4	7
142	Conceptual Design of Post-Combustion CO ₂ Capture Processes - Packed Columns and Membrane Technologies. <i>Computer Aided Chemical Engineering</i> , 2015, , 1223-1228.	0.3	7
143	Dynamische Modellierung und Simulation von Membranreaktoren zur Estersynthese. <i>Chemie-Ingenieur-Technik</i> , 2000, 72, 867-871.	0.4	6
144	Modeling of counter current monoclonal antibody extraction using aqueous two-phase systems. <i>Computer Aided Chemical Engineering</i> , 2007, , 935-940.	0.3	6

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145	Computer-aided process design of affinity membrane adsorbers: a case study on antibodies capturing. Chemical Papers, 2008, 62, 458.	1.0	6
146	Experimental model validation of an integrated process for the removal of carbon dioxide from aqueous ammonia solutions. Chemical Engineering Research and Design, 2011, 89, 1252-1260.	2.7	6
147	Process design of integrated reaction and membrane separation by organic solvent nanofiltration using evolutionary algorithms. Computer Aided Chemical Engineering, 2012, , 727-731.	0.3	6
148	Purification of biomolecules combining ATPS and membrane chromatography. Food and Bioprocess Processing, 2014, 92, 152-160.	1.8	6
149	Methode zur Simulation der periodischen Rektifikation mit vollstÄndigem RÄ¼cklauf. Chemie-Ingenieur-Technik, 1988, 60, 555-557.	0.4	5
150	Erfahrungen mit den dynamischen Simulatoren DIVA, gPROMS und ABACUSS. Chemie-Ingenieur-Technik, 1997, 69, 650-653.	0.4	5
151	Experimental and theoretical studies of the TAME synthesis by reactive distillation. Computer Aided Chemical Engineering, 2003, 14, 713-718.	0.3	5
152	Experimental and theoretical investigation of multistage extraction of 1,3-Propanediol using the extraction system phosphate/n-butylÄ³-methylimidazolium trifluoromethanesulfonate/water. Biotechnology Progress, 2013, 29, 933-942.	1.3	5
153	Reactive distillation for production of n-butyl acrylate from bio-based raw materials. Computer Aided Chemical Engineering, 2013, , 223-228.	0.3	5
154	Dynamische Simulation reaktiver Absorptionsprozesse am Beispiel einer SauergaswÄsche: Modellentwicklung, -analyse und -optimierung. Chemie-Ingenieur-Technik, 2000, 72, 1224-1229.	0.4	4
155	Towards Improvement of Reactive Separation Performance Using Computational Fluid Dynamics. Chemie-Ingenieur-Technik, 2001, 73, 773-773.	0.4	4
156	Hybride Trennverfahren: Verschaltung von Reaktivrektifikation und Dampfpermeation. Chemie-Ingenieur-Technik, 2008, 80, 145-156.	0.4	4
157	Modeling, Simulation and Experimental Investigation of a Reactive Hybrid Process for the Production of Dimethyl Carbonate. Computer Aided Chemical Engineering, 2012, , 1241-1245.	0.3	4
158	Partitioning of cerrena unicolor laccase activity in an aqueous two-phase system. Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa, 2016, 37, 269-280.	0.7	4
159	Process Intensification in Practice: Ethylene Glycol Case Study. Lecture Notes on Multidisciplinary Industrial Engineering, 2018, , 17-34.	0.4	4
160	Continuous laccase concentration in an aqueous two-phase system. Chemical Papers, 2018, 72, 555-566.	1.0	4
161	Reactive Distillation. , 2018, , .		4
162	Grenzen einfacher Methoden zur Berechnung der Mehrstoff-Rektifikation in FÄ¼llkÄ¼rper-Kolonnen. Chemie-Ingenieur-Technik, 1986, 58, 916-917.	0.4	3

#	ARTICLE	IF	CITATIONS
163	The weibull distribution to represent turbulent transfer. <i>AIChE Journal</i> , 1987, 33, 1394-1396.	1.8	3
164	A new model fo equimolar multicomponent mass transfer in a boundary layer. <i>Chemical Engineering Science</i> , 1989, 44, 433-435.	1.9	3
165	Linearization of equilibrium relationships in multicomponent mass transfer models. <i>Chemical Engineering and Processing: Process Intensification</i> , 1990, 27, 27-31.	1.8	3
166	Enzymatic Reactive Distillation for the Transesterification of Ethyl Butyrate: Model Validation and Process Analysis. <i>Computer Aided Chemical Engineering</i> , 2015, 37, 2135-2140.	0.3	3
167	Economic evaluation of rotating packed bed use for aroma absorption from bioreactor off-gas. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 154, 108011.	1.8	3
168	Anwendung der Fuzzy Logik in der Simulation thermischer Trennverfahren. <i>Chemie-Ingenieur-Technik</i> , 1994, 66, 94-96.	0.4	2
169	Modeling and experimental validation of both mass transfer and tray hydraulics in batch distillation. <i>Computers and Chemical Engineering</i> , 1996, 20, S575-S580.	2.0	2
170	Simulation and optimisation of the downstream process for purification of human serum albumin by using ion exchange membrane adsorbers. <i>Desalination</i> , 2006, 200, 468-469.	4.0	2
171	Optimierung der Herstellung von Biotensiden auf Basis nachwachsender Rohstoffe. <i>Chemie-Ingenieur-Technik</i> , 2010, 82, 1239-1243.	0.4	2
172	Simulation of Reactive Absorption: Model Validation for CO ₂ -MEA system. <i>Computer Aided Chemical Engineering</i> , 2011, 29, 61-65.	0.3	2
173	Reactive Distillation for Multiple Reaction Systems. <i>Chemie-Ingenieur-Technik</i> , 2013, 85, 550-563.	0.4	2
174	Integrated processing for the separation of biobutanol. Part A: experimental investigation and process modelling. <i>Green Processing and Synthesis</i> , 2013, 2, .	1.3	2
175	Application of Economics Optimizing Control to a Two-step Transesterification Reaction in a Pilot-Scale Reactive Distillation Column. <i>IFAC-PapersOnLine</i> , 2018, 51, 67-72.	0.5	2
176	Performance Evaluation of Rotating Packed Beds for Distillation Using Improved Packing Design. <i>Chemie-Ingenieur-Technik</i> , 2018, 90, 1312-1312.	0.4	2
177	Grand Challenges and Chemical Engineering Curriculum â€œ Developments at TU Dortmund University. <i>Universal Journal of Educational Research</i> , 2016, 4, 200-204.	0.1	2
178	Reactive Distillation: Non-Ideal Flow Behaviour of the Liquid Phase in Structured Catalytic Packings. <i>Chemie-Ingenieur-Technik</i> , 2001, 73, 773-774.	0.4	1
179	Modelling and simulation of a combined membrane/distillation process. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 743-748.	0.3	1
180	Reactive and hybrid separations of chemicals and bioactive substances: Modeling and optimization. <i>Computer Aided Chemical Engineering</i> , 2007, 24, 7-8.	0.3	1

#	ARTICLE	IF	CITATIONS
181	Optimierung von Proteinaufreinigungsprozessen basierend auf einem generischen Prozessmodell. Chemie-Ingenieur-Technik, 2008, 80, 97-106.	0.4	1
182	Prozessanalyse zum Einsatz von Membrantrennverfahren bei der Umesterung von Fettsäureestern. Chemie-Ingenieur-Technik, 2010, 82, 704-710.	0.4	1
183	Comment on "Conceptual design of single-feed hybrid reactive distillation columns", by R.M. Dragomir and M. Jobson, Chemical Engineering Science 60 (2005) 4377-4395. Chemical Engineering Science, 2012, 75, 289-291.	1.9	1
184	Organophile Nanofiltration - Herausforderungen und Lösungsansätze zur Anwendung eines innovativen Membrantrennverfahrens. Chemie-Ingenieur-Technik, 2014, 86, 602-610.	0.4	1
185	Model Discrimination for Multicomponent Distillation " A Geometrical Approach for Total Reflux. Chemie-Ingenieur-Technik, 2020, 92, 890-906.	0.4	1
186	Reply to "Comments on linearization of equilibrium relationships in multicomponent mass transfer models". Chemical Engineering and Processing: Process Intensification, 1992, 31, 274.	1.8	0
187	Chemical engineering dynamics, modelling with PC-simulation. Chemical Engineering and Processing: Process Intensification, 1995, 34, 565-566.	1.8	0
188	Ein innovativer Ansatz zur Optimierung reaktiver Trennverfahren. Chemie-Ingenieur-Technik, 2005, 77, 46-53.	0.4	0
189	Catalytic distillation. , 2006, , 95-147.		0
190	Affinitätsmembranadsorber zur Aufreinigung monoklonaler Antikörper. Chemie-Ingenieur-Technik, 2008, 80, 1280-1281.	0.4	0
191	Vom Konzept über Unit Operations zur Anlage. Chemie-Ingenieur-Technik, 2008, 80, 3-3.	0.4	0
192	Entwicklung eines Prozessmodells zur Aufreinigung von Proteinen mit Membranadsorbern. Chemie-Ingenieur-Technik, 2009, 81, 1250-1250.	0.4	0
193	Modellierung, Simulation und evolutionäre Optimierung von Membran-Rektifikation-Hybridprozessen. Chemie-Ingenieur-Technik, 2010, 82, 1364-1364.	0.4	0
194	Re-Design verfahrenstechnischer Prozesse zur Steigerung der Material- und Energieeffizienz in der chemischen Produktion. Chemie-Ingenieur-Technik, 2010, 82, 563-563.	0.4	0
195	Influencing the Pervaporative Recovery of n-Butanol by Using Ionic Liquids. Procedia Engineering, 2012, 44, 1343-1344.	1.2	0
196	Investigation of Mass Transfer in Organic Solvent Nanofiltration Membranes. Procedia Engineering, 2012, 44, 302-303.	1.2	0
197	Methode zur Auslegung energieeffizienter hybrider Trennverfahren für die Aufreinigung weit- und engsiedender Gemische. Chemie-Ingenieur-Technik, 2012, 84, 1268-1269.	0.4	0
198	Entwicklung einer standardisierten Methodik für Stofftransportmessungen in der Ab- und Desorption. Chemie-Ingenieur-Technik, 2012, 84, 1357-1358.	0.4	0

#	ARTICLE	IF	CITATIONS
199	Absorption von CO ₂ in hochviskosen Medien im Zentrifugalfeld. Chemie-Ingenieur-Technik, 2014, 86, 1453-1453.	0.4	0
200	Chemical engineering curricula and challenges resulting from global megatrends. Qscience Proceedings, 2015, , .	0.0	0
201	HiGee-Technologie - Untersuchung von Hydrodynamik und Stofftransport. Chemie-Ingenieur-Technik, 2016, 88, 1283-1283.	0.4	0
202	Thermische Trennverfahren, 3. Auflage. Von B. Lohrengel.. Chemie-Ingenieur-Technik, 2018, 90, 740-740.	0.4	0
203	CHAPTER 10. Enzymatic Reactive Absorption and Distillation. RSC Green Chemistry, 2018, , 210-248.	0.0	0