

# Eugeny Kenig

## List of Publications by Year in descending order

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186  
papers

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all docs

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docs citations

196  
times ranked

3181  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new tomography-based approach for the fluid dynamic description of conventional structured packings and sandwich packings. Chemical Engineering and Processing: Process Intensification, 2022, 171, 108530.	3.6	2
2	Modelling and simulation of zero-gravity distillation units with metal foams. Chemical Engineering Science, 2022, 247, 117097.	3.8	2
3	Modelling film and rivulet flows on microstructured surfaces using CFD methods. Chemical Engineering Science, 2022, 251, 117414.	3.8	2
4	A front-tracking method for two-phase flow simulation with no spurious currents. Journal of Computational Physics, 2022, 456, 111006.	3.8	3
5	A PLIC-based method for species mass transfer at free fluid interfaces. Chemical Engineering Science, 2022, 251, 117357.	3.8	1
6	Droplet formation – a numerical investigation of liquid-liquid systems with consideration of Marangoni convection. International Journal of Heat and Mass Transfer, 2022, 188, 122465.	4.8	2
7	Flow in Pillow-Plate Channels for High-Speed Turbomachinery Heat Exchangers. International Journal of Turbomachinery, Propulsion and Power, 2022, 7, 12.	1.1	1
8	Determination of local fluid dynamic parameters in structured packings through X-ray tomography: Overcoming image resolution restrictions. Chemical Engineering Science, 2021, 229, 115997.	3.8	2
9	A new hydrodynamic analogy model for the determination of transport phenomena in random packings. Chemical Engineering Science, 2021, 233, 116246.	3.8	4
10	Modelling of a continuous distillation process with finite reflux ratio using the hydrodynamic analogy approach. Chemical Engineering Research and Design, 2021, 172, 99-108.	5.6	0
11	Modeling and improvement of a packed bed latent heat storage filled with non-spherical encapsulated PCM-Elements. Renewable Energy, 2021, 173, 1087-1097.	8.9	37
12	Model based random packing optimisation for absorption processes using the hydrodynamic analogy concept. Chemical Engineering Science, 2021, 242, 116670.	3.8	2
13	On the design of heat exchanger equipment for novel-type isobaric expansion engines. Applied Thermal Engineering, 2020, 167, 114382.	6.0	10
14	CFD Simulation of Film and Rivulet Flows on Microstructured Surfaces. Computer Aided Chemical Engineering, 2020, 48, 61-66.	0.5	2
15	Theoretical limits on the heat regeneration degree. International Journal of Heat and Mass Transfer, 2020, 161, 120282.	4.8	6
16	Numerische Simulation von Gravidestillationsapparaten zur Trennung eines binären Ethanol/Wasser-Gemisches. Chemie-Ingenieur-Technik, 2020, 92, 1297-1298.	0.8	0
17	Development of Real-Time Models for Chemical Absorption/Desorption Loops. Chemie-Ingenieur-Technik, 2020, 92, 1962-1967.	0.8	1
18	Recent Advances in Experimental Techniques for Flow and Mass Transfer Analyses in Thermal Separation Systems. Chemie-Ingenieur-Technik, 2020, 92, 926-948.	0.8	22

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19	Modeling and Simulation of an Industrial Formaldehyde Absorption System. Industrial & Engineering Chemistry Research, 2020, 59, 5996-6006.	3.7	4
20	On methods to reduce spurious currents within VOF solver frameworks. Part 1: a review of the static bubble/droplet. Chemical Product and Process Modeling, 2020, .	0.9	3
21	Kinetics of Carbon Dioxide Removal Using -Acetylglucosamine. ACS Omega, 2020, 5, 27043-27049.	3.5	0
22	Kinetics of Carbon Dioxide Removal Using $\alpha$ -Acetylglucosamine. ACS Omega, 2020, 5, 27043-27049.	3.5	5
23	An approach for pillow plate heat exchangers design for single-phase applications. Applied Thermal Engineering, 2019, 147, 579-591.	6.0	31
24	A hydrodynamic analogy based modelling approach for zero-gravity distillation with metal foams. Chemical Engineering Research and Design, 2019, 147, 615-623.	5.6	6
25	Investigation of heat transfer and hydraulic resistance in small-scale pillow-plate heat exchangers. Energy, 2019, 181, 1213-1224.	8.8	28
26	Optimization of Piecewise Conical Nozzles: Theory and Application. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	3
27	Comparative assessment of different image processing methods to determine the gas-liquid interfacial area in froth regimes of sandwich packings from ultrafast X-ray tomography image data. Chemical Engineering Research and Design, 2019, 147, 676-688.	5.6	7
28	An approach to separation efficiency modelling of structured packings based on X-ray tomography measurements: Application to aqueous viscous systems. Chemical Engineering Science, 2019, 204, 310-319.	3.8	10
29	Rate-based Modellierung von $\text{CO}_2$ -Absorptionskolonnen mit Anstaupackungen. Chemie-Ingenieur-Technik, 2019, 91, 125-138.	0.8	0
30	Heat transfer enhancement in pillow-plate heat exchangers with dimpled surfaces: A numerical study. Applied Thermal Engineering, 2019, 153, 142-146.	6.0	38
31	Methode zur Erfassung von Stofftransport an fluiden Phasengrenzflächen. Chemie-Ingenieur-Technik, 2019, 91, 1623-1632.	0.8	1
32	Tomographische Untersuchung der Fluidodynamik viskoser Systeme in Packungskolonnen. Chemie-Ingenieur-Technik, 2019, 91, 1892-1896.	0.8	3
33	Analysis of crystallization fouling in electric water heating. Heliyon, 2019, 5, e02695.	3.2	8
34	Experimental Investigation of the Froth Height in Columns with Sandwich Packings. Chemie-Ingenieur-Technik, 2019, 91, 139-144.	0.8	5
35	Single-Phase Flow and Condensation in Pillow-Plate Condensers. , 2018, , 247-265.		2
36	Optimization of structured packings using twisted tape inserts. Chemical Engineering Research and Design, 2018, 132, 1-8.	5.6	15

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37	Modelling and numerical simulation of coupled transport phenomena with phase change: Mixture evaporation from a rectangular capillary. Chemical Engineering Science, 2018, 181, 173-185.	3.8	5
38	Pillow-Plate Heat Exchangers: Fundamental Characteristics. , 2018, , 233-245.		3
39	Modelling and numerical simulation of coupled transport phenomena with phase change: Layer evaporation of a binary mixture. Chemical Engineering Science, 2018, 176, 367-376.	3.8	11
40	Optimization of Piece-Wise Conical Nozzles: Theory and Application. , 2018, , .		0
41	Numerical Evaluation of Different Turbulence Models for Single-Phase Flow in the Outer Pillow-Plate Channel. Computer Aided Chemical Engineering, 2018, 43, 397-402.	0.5	2
42	Isobaric Expansion Engines: New Opportunities in Energy Conversion for Heat Engines, Pumps and Compressors. Energies, 2018, 11, 154.	3.1	21
43	Thermal and hydraulic performance of pillow-plate heat exchangers. Computer Aided Chemical Engineering, 2018, 43, 181-186.	0.5	9
44	Experimental and numerical characterization of a new structured packing for CO <sub>2</sub> capture. AIChE Journal, 2018, 64, 4053-4065.	3.6	10
45	CLOWT: A Multifunctional Test Facility for the Investigation of Organic Vapor Flows. , 2018, , .		6
46	TRANSPORT PROCESSES AND SEPARATION IN ZERO-GRAVITY DISTILLATION. , 2018, , .		2
47	A comparative study of different amine-based solvents for CO <sub>2</sub> -capture using the rate-based approach. Chemical Engineering Science, 2017, 157, 221-231.	3.8	35
48	On the coupled condensation-evaporation in pillow-plate condensers: Investigation of cooling medium evaporation. Applied Thermal Engineering, 2017, 124, 1471-1480.	6.0	18
49	Closed Loop Organic Wind Tunnel (CLOWT): Design, Components and Control System. Energy Procedia, 2017, 129, 200-207.	1.8	14
50	New design equations for turbulent forced convection heat transfer and pressure loss in pillow-plate channels. International Journal of Thermal Sciences, 2017, 120, 459-468.	4.9	32
51	Incremental electrohydraulic forming - A new approach for the manufacture of structured multifunctional sheet metal blanks. AIP Conference Proceedings, 2017, , .	0.4	8
52	Water-cooled on-board charger with optimized cooling channel. , 2017, , .		6
53	Numerical Simulation of Two-phase Flow in Representative Elements of Structured Packings. Computer Aided Chemical Engineering, 2017, 40, 2089-2094.	0.5	4
54	Sandwich Packings: State of the Art. ChemBioEng Reviews, 2016, 3, 174-185.	4.4	4

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55	A CFD Study of the Thermo-Hydraulic Characteristics of Pillow-Plate Heat Exchangers. , 2016, , .		5
56	Kinetics of Carbon Dioxide Removal by <i>n</i> -Propyl- and <i>n</i> -Butylmonoethanolamine in Aqueous Solutions. Energy & Fuels, 2016, 30, 5077-5082.	5.1	4
57	Thermodynamics and Fluid Mechanics of a Closed Blade Cascade Wind Tunnel for Organic Vapors. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	17
58	Numerical investigation of turbulent forced convection heat transfer in pillow plates. International Journal of Heat and Mass Transfer, 2016, 94, 516-527.	4.8	47
59	On the Acceleration of CO <sub>2</sub> Reaction with <i>N</i> -Ethyl-diethanolamine in Aqueous Solutions by the Addition of Promoters. Industrial & Engineering Chemistry Research, 2016, 55, 38-44.	3.7	10
60	Thermodynamics and Fluid Mechanics of a Closed Blade Cascade Wind Tunnel for Organic Vapors. , 2015, , .		4
61	CFD-Untersuchung der Fluidodynamik und des Wärmeübergangs bei einphasiger Strömung im welligen Spalt zwischen Thermoblechen. Chemie-Ingenieur-Technik, 2015, 87, 216-225.	0.8	13
62	Absorption von CO <sub>2</sub> mittels wässriger Natronlauge – Experimente und Simulationen mit dem Ansatz der Hydrodynamischen Analogien. Chemie-Ingenieur-Technik, 2015, 87, 571-582.	0.8	2
63	Experimentelle Untersuchung des konvektiven Wärmeübergangs und Druckverlustes in einphasig durchströmten Thermoblechen. Chemie-Ingenieur-Technik, 2015, 87, 226-234.	0.8	22
64	Bestimmung der Lastgrenzen konventioneller Strukturpackungen und Anstaupackungen mithilfe des Wallis-Plots. Chemie-Ingenieur-Technik, 2015, 87, 1348-1356.	0.8	7
65	Rate-based modelling and simulation of distillation columns with sandwich packings. Chemical Engineering and Processing: Process Intensification, 2015, 98, 147-154.	3.6	5
66	Influence of Viscosity on Liquid Flow Inside Structured Packings. Industrial & Engineering Chemistry Research, 2015, 54, 2803-2815.	3.7	20
67	Model-based analysis of a gas/vapor-liquid microchannel membrane contactor. AIChE Journal, 2015, 61, 2240-2256.	3.6	11
68	An investigation of the influence of initial deformation on fluid dynamics of toluene droplets in water. International Journal of Multiphase Flow, 2015, 76, 144-157.	3.4	11
69	An experimental analysis of the topology and dynamics of a falling liquid film over the wavy surface of a vertical pillow plate. Chemical Engineering Science, 2015, 130, 129-134.	3.8	23
70	Investigation of pillow-plate condensers for the application in distillation columns. Chemical Engineering Research and Design, 2015, 99, 67-74.	5.6	40
71	Numerical Analysis of Residence Time Distribution in Packed Bed Reactors with Irregular Particle Arrangements. Chemical Product and Process Modeling, 2015, 10, 17-26.	0.9	12
72	Determination of the geometric design parameters of pillow-plate heat exchangers. Applied Thermal Engineering, 2015, 91, 1168-1175.	6.0	56

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73	A systematic CFD-based method to investigate and optimise novel structured packings. Chemical Engineering Science, 2015, 122, 452-464.	3.8	29
74	An experimental study on the numbering-up of microchannels for liquid mixing. Lab on A Chip, 2015, 15, 179-187.	6.0	53
75	Numerical Optimization of a Piece-Wise Conical Contraction Zone of a High-Pressure Wind Tunnel. , 2015, , .		3
76	Numerical Investigations of Packed Bed Reactors with Irregular Particle Arrangements. Computer Aided Chemical Engineering, 2014, , 217-222.	0.5	4
77	Performance Predictions of Axial Turbines for Organic Rankine Cycle (ORC) Applications Based on Measurements of the Flow Through Two-Dimensional Cascades of Blades. , 2014, , .		5
78	Kinetics of carbon dioxide removal by ethylenediamine and diethylenetriamine in aqueous solutions. Canadian Journal of Chemical Engineering, 2014, 92, 2021-2028.	1.7	27
79	Determination of Characteristic Geometrical Parameters for the Design of Pillowâ€Plate Heat Exchangers. Chemie-Ingenieur-Technik, 2014, 86, 1214-1222.	0.8	20
80	Numerische Untersuchung der StrÃ¶mungs- und WÃ¶rmeÃ¼bergangscharakteristik von Thermoblechen. Chemie-Ingenieur-Technik, 2014, 86, 1619-1620.	0.8	1
81	Hydrodynamics of Apparatuses with Preformed Packing Bodies. Procedia Technology, 2014, 12, 375-381.	1.1	1
82	Hydrodynamic analogy approach for modelling reactive absorption. Chemical Engineering Journal, 2014, 250, 342-353.	12.7	12
83	The impact of Marangoni convection on fluid dynamics and mass transfer at deformable single rising droplets â€ A numerical study. Chemical Engineering Science, 2014, 116, 208-222.	3.8	37
84	Complementary Modelling of CO2 Capture by Reactive Absorption. Computer Aided Chemical Engineering, 2014, 33, 1243-1248.	0.5	1
85	Modeling of Distillation Processes. , 2014, , 383-436.		9
86	Numerical simulation of rising droplets in liquidâ€liquid systems: A comparison of continuous and sharp interfacial force models. International Journal of Heat and Fluid Flow, 2014, 50, 16-26.	2.4	17
87	A Numerical Study on Liquid Mixing in Multichannel Micromixers. Industrial & Engineering Chemistry Research, 2014, 53, 390-401.	3.7	42
88	The influence of Marangoni convection on fluid dynamics of oscillating single rising droplets. Chemical Engineering Science, 2014, 117, 114-124.	3.8	23
89	Hydrodynamicâ€Analogyâ€Based Modeling Approach for Distillative Separation of Organic Systems with Elevated Viscosity. Chemical Engineering and Technology, 2014, 37, 2065-2072.	1.5	7
90	Activated DEEA solutions for CO2 captureâ€A study of equilibrium and kinetic characteristics. Chemical Engineering Science, 2013, 100, 234-241.	3.8	48

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91	Marangonikonvektion an Einzeltropfen - eine numerische Untersuchung zu Fluidodynamik und Stofftransport. Chemie-Ingenieur-Technik, 2013, 85, 1389-1389.	0.8	0
92	Investigation of dynamic liquid distribution and hold-up in structured packings using ultrafast electron beam X-ray tomography. Chemical Engineering and Processing: Process Intensification, 2013, 66, 20-26.	3.6	21
93	Investigation of liquid flow morphology inside a structured packing using X-ray tomography. Chemical Engineering Science, 2013, 102, 451-460.	3.8	48
94	Micro-separation of fluid systems: A state-of-the-art review. Separation and Purification Technology, 2013, 120, 245-264.	7.9	86
95	Experimental and Numerical Investigation of a Rising Droplet. Chemie-Ingenieur-Technik, 2013, 85, 944-954.	0.8	2
96	Experimental and numerical investigation of binary coalescence: Liquid bridge building and internal flow fields. Physics of Fluids, 2012, 24, 062108.	4.0	26
97	Reactive absorption in chemical process industry: A review on current activities. Chemical Engineering Journal, 2012, 213, 371-391.	12.7	108
98	Numerical analysis of mass transfer in packed-bed reactors with irregular particle arrangements. Chemical Engineering Science, 2012, 81, 77-83.	3.8	28
99	Secondary amines for CO <sub>2</sub> capture: A kinetic investigation using N-ethylmonoethanolamine. Chemical Engineering Journal, 2012, 207-208, 718-724.	12.7	74
100	Reaction Kinetics of CO <sub>2</sub> in Aqueous Methyl- and Dimethylmonoethanolamine Solutions. Industrial & Engineering Chemistry Research, 2012, 51, 1592-1600.	3.7	33
101	Study on CO <sub>2</sub> Absorption Kinetics by Aqueous Solutions of <i>N,N</i> -Diethylethanolamine and <i>N</i> -Ethylethanolamine. Chemie-Ingenieur-Technik, 2012, 84, 475-483.	0.8	8
102	Beschreibung der Fluidodynamik von Anstaupackungen. Chemie-Ingenieur-Technik, 2012, 84, 36-45.	0.8	10
103	MODELING OF TRANSPORT PHENOMENA IN TWO-PHASE FILM-FLOW SYSTEMS: APPLICATION TO MONOLITH REACTORS. Chemical Engineering Communications, 2011, 198, 629-651.	2.6	5
104	Investigation of a microstructured high efficiency contactor. Chemical Engineering and Processing: Process Intensification, 2011, 50, 1244-1251.	3.6	15
105	A CFD-based approach to the interfacial mass transfer at free gas-liquid interfaces. Chemical Engineering Science, 2011, 66, 3301-3308.	3.8	27
106	Dividing wall columns in chemical process industry: A review on current activities. Separation and Purification Technology, 2011, 80, 403-417.	7.9	344
107	Complementary Modeling in Fluid Process Engineering. Chemie-Ingenieur-Technik, 2011, 83, 443-455.	0.8	3
108	Modeling and Simulation of a Falling-Film Microabsorber. Chemie-Ingenieur-Technik, 2011, 83, 1074-1083.	0.8	0

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109	Kinetics of carbon dioxide removal by aqueous diamines. Chemical Engineering Journal, 2011, 169, 144-150.	12.7	48
110	A novel method to capture mass transfer phenomena at free fluid–fluid interfaces. Chemical Engineering and Processing: Process Intensification, 2011, 50, 68-76.	3.6	15
111	Experimental and numerical investigation of a free rising droplet. Chemical Engineering and Processing: Process Intensification, 2011, 50, 718-727.	3.6	27
112	A Study on the Kelvin-Helmholtz Instability Using Two Different Computational Fluid Dynamics Methods. Journal of Computational Multiphase Flows, 2010, 2, 33-45.	0.8	14
113	Mikrotrenntechnik: Entwicklungsstand und Perspektiven. Chemie-Ingenieur-Technik, 2010, 82, 215-228.	0.8	28
114	Numerical Investigation of the Reactive Dividing Wall Column Exemplified by Methyl Acetate Hydrolysis. Chemie-Ingenieur-Technik, 2010, 82, 2109-2118.	0.8	5
115	Termolecular Kinetic Model for CO <sub>2</sub> –Alkanolamine Reactions: An Overview. Chemical Engineering and Technology, 2010, 33, 1577-1581.	1.5	58
116	Investigation of multicomponent mass transfer in liquid–liquid extraction systems at microscale. International Journal of Heat and Mass Transfer, 2010, 53, 3758-3763.	4.8	12
117	Hydrodynamic analogy approach for modelling of reactive stripping with structured catalyst supports. Chemical Engineering Science, 2010, 65, 298-303.	3.8	20
118	Numerical investigation of carbon dioxide absorption in a falling-film micro-contactor. Chemical Engineering Science, 2010, 65, 1125-1133.	3.8	31
119	Kinetics of Removal of Carbon Dioxide by Aqueous Solutions of <i>N,N</i> -Diethylethanolamine and Piperazine. Environmental Science & Technology, 2010, 44, 2138-2143.	10.0	57
120	Kinetics of Carbon Dioxide Removal by Aqueous Alkaline Amino Acid Salts. Industrial & Engineering Chemistry Research, 2010, 49, 11067-11072.	3.7	82
121	Rigorous Modeling and Simulation of an Absorption–Stripping Loop for the Removal of Acid Gases. Industrial & Engineering Chemistry Research, 2010, 49, 772-779.	3.7	17
122	Activated DEEA Process for CO <sub>2</sub> Capture. , 2010, , 21-29.		2
123	CO <sub>2</sub> capture by Novel Amine Blends. , 2009, , 239-246.		2
124	Ein rate-based Ansatz zur Berechnung der Trennleistung von Anstaupackungen. Chemie-Ingenieur-Technik, 2009, 81, 1085-1085.	0.8	3
125	A Study on CO <sub>2</sub> Absorption Kinetics by Aqueous Solutions of <i>N,N</i> -Diethylethanolamine and <i>N</i> -Ethylethanolamine. Chemical Engineering and Technology, 2009, 32, 556-563.	1.5	45
126	Kinetics of carbonyl sulfide reaction with alkanolamines: A review. Chemical Engineering Journal, 2009, 148, 207-211.	12.7	30



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127	CFD-based analysis of the wall effect on the pressure drop in packed beds with moderate tube/particle diameter ratios in the laminar flow regime. Chemical Engineering Journal, 2009, 155, 404-410.	12.7	130
128	Modelling of combined direct-contact condensation and reactive absorption in packed columns. Chemical Engineering Journal, 2009, 146, 362-369.	12.7	15
129	Modeling Fluid Separation Processes Using a Complementary Approach. Chemical Product and Process Modeling, 2009, 4, .	0.9	0
130	The Envirostat – a new bioreactor concept. Lab on A Chip, 2009, 9, 576-585.	6.0	58
131	Complementary modelling of fluid separation processes. Chemical Engineering Research and Design, 2008, 86, 1059-1072.	5.6	27
132	Comments to the authors'™ response to the Comments on “Simulations of chemical absorption in pilot-scale and industrial-scale packed columns by computational mass transfer” by Liu et al.. Chemical Engineering Science, 2008, 63, 4243.	3.8	1
133	Comments on “Simulations of chemical absorption in pilot-scale and industrial-scale packed columns by computational mass transfer” by Liu et al.. Chemical Engineering Science, 2008, 63, 4239-4240.	3.8	2
134	Acceleration of CO <sub>2</sub> Reaction with N <sub>2</sub> -Diethylethanolamine in Aqueous Solutions by Piperazine. Industrial & Engineering Chemistry Research, 2008, 47, 34-38.	3.7	74
135	Modelling and simulation of a membrane microreactor using computational fluid dynamics. Computer Aided Chemical Engineering, 2008, , 751-756.	0.5	10
136	Rate-based design of integrated distillation sequences. Computer Aided Chemical Engineering, 2007, , 1053-1058.	0.5	0
137	Advanced Modeling of Reactive Separation Units with Structured Packings. Chemical Product and Process Modeling, 2007, 2, .	0.9	0
138	A study on hydrodynamics and mass transfer of moving liquid layers using computation fluid dynamics. Computer Aided Chemical Engineering, 2007, 24, 129-134.	0.5	1
139	GAS-“LIQUID REACTION KINETICS: A REVIEW OF DETERMINATION METHODS. Chemical Engineering Communications, 2007, 194, 1543-1565.	2.6	51
140	Reactive Distillation in a Dividing Wall Column: A Rate-Based Modeling and Simulation. Industrial & Engineering Chemistry Research, 2007, 46, 3709-3719.	3.7	127
141	Experimental and Theoretical Study of Reactive Stripping in Monolith Reactors. Industrial & Engineering Chemistry Research, 2007, 46, 4149-4157.	3.7	12
142	CO <sub>2</sub> -Alkanolamine Reaction Kinetics: A Review of Recent Studies. Chemical Engineering and Technology, 2007, 30, 1467-1474.	1.5	590
143	Absorption of $CO_2$ into aqueous blends of alkanolamines prepared from renewable resources. Chemical Engineering Science, 2007, 62, 7344-7350.	3.8	34
144	Rate-based analysis of reactive distillation sequences with different degrees of integration. Chemical Engineering Science, 2007, 62, 7327-7335.	3.8	34

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145	Catalytic distillation. , 2006, , 95-147.		0
146	Hydrodynamic-analogy-based model for efficiency of structured packing columns. AIChE Journal, 2006, 52, 3055-3066.	3.6	38
147	A CFD model for mass transfer and interfacial phenomena on single droplets. AIChE Journal, 2006, 52, 4071-4078.	3.6	26
148	Reactive Absorption. , 2005, , 265-311.		10
149	Modelling of reactive stripping in monolith reactors. Catalysis Today, 2005, 105, 414-420.	4.4	12
150	On the combination of CFD and rate-based modelling in the simulation of reactive separation processes. Chemical Engineering and Processing: Process Intensification, 2005, 44, 631-644.	3.6	42
151	Rate-based modelling and simulation of reactive separations in gas/vapour-liquid systems. Chemical Engineering and Processing: Process Intensification, 2005, 44, 617-629.	3.6	79
152	Rigorous modelling of NO <sub>x</sub> absorption in tray and packed columns. Chemical Engineering Science, 2005, 60, 6462-6471.	3.8	40
153	Ein innovativer Ansatz zur Optimierung reaktiver Trennverfahren. Chemie-Ingenieur-Technik, 2005, 77, 46-53.	0.8	0
154	CFD-based Study on Hydrodynamics and Mass Transfer in Fixed Catalyst Beds. Chemical Engineering and Technology, 2005, 28, 31-36.	1.5	25
155	Fluid separation modelling in the columns equipped with structured packings using the hydrodynamic analogy. Computer Aided Chemical Engineering, 2005, 20, 331-336.	0.5	1
156	CFD modelling of mass transfer and interfacial phenomena on single droplets. Computer Aided Chemical Engineering, 2005, , 103-108.	0.5	0
157	Investigation of different column configurations for the ethyl acetate synthesis via reactive distillation. Chemical Engineering and Processing: Process Intensification, 2004, 43, 791-801.	3.6	63
158	Advanced rate-based simulation tool for reactive distillation. AIChE Journal, 2004, 50, 322-342.	3.6	22
159	Modelling of reactive separation processes: reactive absorption and reactive distillation. Chemical Engineering and Processing: Process Intensification, 2003, 42, 157-178.	3.6	187
160	On the modelling and simulation of sour gas absorption by aqueous amine solutions. Chemical Engineering Science, 2003, 58, 3571-3578.	3.8	124
161	Experimental and theoretical studies of the TAME synthesis by reactive distillation. Computer Aided Chemical Engineering, 2003, 14, 713-718.	0.5	5
162	Influence of Operating Conditions and Column Configuration on the Performance of Reactive Distillation Columns with Liquid-Liquid Separators. Canadian Journal of Chemical Engineering, 2003, 81, 725-732.	1.7	16

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163	Kinetics of the Gas-Liquid Reaction between Carbon Dioxide and Hydroxide Ions. Industrial & Engineering Chemistry Research, 2002, 41, 5952-5957.	3.7	86
164	Towards Improvement of Reactive Separation Performance Using Computational Fluid Dynamics. Chemie-Ingenieur-Technik, 2001, 73, 773-773.	0.8	4
165	Reactive absorption: Optimal process design via optimal modelling. Chemical Engineering Science, 2001, 56, 343-350.	3.8	65
166	Investigation of ethyl acetate reactive distillation process. Chemical Engineering Science, 2001, 56, 6185-6193.	3.8	74
167	Dynamische Simulation reaktiver Absorptionsprozesse am Beispiel einer Sauergaswäsche: Modellentwicklung, -analyse und -optimierung. Chemie-Ingenieur-Technik, 2000, 72, 1224-1229.	0.8	4
168	Comparison of numerical and analytical solutions of a multicomponent reaction-mass-transfer problem in terms of the film model. Chemical Engineering Science, 2000, 55, 1483-1496.	3.8	26
169	Dynamic and steady state simulation of coke oven gas purification. Computers and Chemical Engineering, 1999, 23, S843-S846.	3.8	9
170	Rigorous dynamic modelling of complex reactive absorption processes. Chemical Engineering Science, 1999, 54, 5195-5203.	3.8	45
171	An integrated tool for synthesis and design of reactive distillation. Chemical Engineering Science, 1999, 54, 1347-1352.	3.8	32
172	Dynamic Modelling of Reactive Absorption with the Maxwell-Stefan Approach. Chemical Engineering Research and Design, 1999, 77, 633-638.	5.6	41
173	47. Auslegung reaktiver Destillationsprozesse - Möglichkeiten und Grenzen. Chemie-Ingenieur-Technik, 1998, 70, 1096-1096.	0.8	5
174	Modeling of Reactive Absorption Using the Maxwell-Stefan Equations. Industrial & Engineering Chemistry Research, 1997, 36, 4325-4334.	3.7	33
175	Multicomponent multiphase film-like systems: A modelling approach. Computers and Chemical Engineering, 1997, 21, S355-S360.	3.8	4
176	Mikrodestillation von Mehrkomponentensystemen. Chemie-Ingenieur-Technik, 1996, 68, 272-276.	0.8	20
177	A film model based approach for simulation of multicomponent reactive separation. Chemical Engineering and Processing: Process Intensification, 1995, 34, 97-103.	3.6	51
178	Coupled mass and heat transfer in a multicomponent turbulent falling liquid film. International Journal of Heat and Mass Transfer, 1993, 36, 3647-3657.	4.8	4
179	Comments on linearization of equilibrium relationships in multicomponent mass transfer models. Chemical Engineering and Processing: Process Intensification, 1992, 31, 273-274.	3.6	0
180	Simultaneous mass and heat transfer with reactions in a multicomponent, laminar, falling liquid film. The Chemical Engineering Journal, 1992, 49, 119-126.	0.3	8

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