Eugeny Kenig

List of Publications by Year
in descending order

186	4,902	94269 37	110170 64
papers	citations	h-index	g-index

196	196	196	3181
all docs	docs citations	times ranked	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.	1.8	2
2	Modelling and simulation of zero-gravity distillation units with metal foams. Chemical Engineering Science, 2022, 247, 117097.	1.9	2
3	Modelling film and rivulet flows on microstructured surfaces using CFD methods. Chemical Engineering Science, 2022, 251, 117414.	1.9	2
4	A front-tracking method for two-phase flow simulation with no spurious currents. Journal of Computational Physics, 2022, 456, 111006.	1.9	3
5	A PLIC-based method for species mass transfer at free fluid interfaces. Chemical Engineering Science, 2022, 251, 117357.	1.9	1
6	Droplet formation â€“ a numerical investigation of liquid-liquid systems with consideration of Marangoni convection. International Journal of Heat and Mass Transfer, 2022, 188, 122465.	2.5	2
7	Flow in Pillow-Plate Channels for High-Speed Turbomachinery Heat Exchangers. International Journal of Turbomachinery, Propulsion and Power, 2022, 7, 12.	0.5	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.	1.9	2
9	A new hydrodynamic analogy model for the determination of transport phenomena in random packings. Chemical Engineering Science, 2021, 233, 116246.	1.9	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.	2.7	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.	4.3	37
12	Model based random packing optimisation for absorption processes using the hydrodynamic analogy concept. Chemical Engineering Science, 2021, 242, 116670.	1.9	2
13	On the design of heat exchanger equipment for novel-type isobaric expansion engines. Applied Thermal Engineering, 2020, 167, 114382.	3.0	10
14	CFD Simulation of Film and Rivulet Flows on Microstructured Surfaces. Computer Aided Chemical Engineering, 2020, 48, 61-66.	0.3	2
15	Theoretical limits on the heat regeneration degree. International Journal of Heat and Mass Transfer, 2020, 161, 120282.	2.5	6
16	Numerische Simulation von Gravidestillationsapparaten zur Trennung eines binÃren Ethanol/Wasserâ€Gemisches. Chemie-Ingenieur-Technik, 2020, 92, 1297-1298.	0.4	0
17	Development of Realâ€Time Models for Chemical Absorption/Desorption Loops. Chemie-Ingenieur-Technik, 2020, 92, 1962-1967.	0.4	1
18	Recent Advances in Experimental Techniques forÂFlow and Mass Transfer Analyses in Thermal Separation Systems. Chemie-Ingenieur-Technik, 2020, 92, 926-948.	0.4	22

#	Article	IF	Citations
19	Modeling and Simulation of an Industrial Formaldehyde Absorption System. Industrial & Engineering Chemistry Research, 2020, 59, 5996-6006.	1.8	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, .	0.5	3
21	Kinetics of Carbon Dioxide Removal Using -Acetylglucosamine. ACS Omega, 2020, 5, 27043-27049.	1.6	0
22	Kinetics of Carbon Dioxide Removal Using N-Acetylglucosamine. ACS Omega, 2020, 5, 27043-27049.	1.6	5
23	An approach for pillow plate heat exchangers design for single-phase applications. Applied Thermal Engineering, 2019, 147, 579-591.	3.0	31
24	A hydrodynamic analogy based modelling approach for zero-gravity distillation with metal foams. Chemical Engineering Research and Design, 2019, 147, 615-623.	2.7	6
25	Investigation of heat transfer and hydraulic resistance in small-scale pillow-plate heat exchangers. Energy, 2019, 181, 1213-1224.	4.5	28
26	Optimization of Piecewise Conical Nozzles: Theory and Application. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	3
27	Comparative assessment of different image processing methods to determine the gasâ€“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.	2.7	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.	1.9	10
29	Rateâ€based Modellierung von CO₂â€Absorptionskolonnen mit Anstaupackungen. Chemie-Ingenieur-Technik, 2019, 91, 125-138.	0.4	0
30	Heat transfer enhancement in pillow-plate heat exchangers with dimpled surfaces: A numerical study. Applied Thermal Engineering, 2019, 153, 142-146.	3.0	38
31	Methode zur Erfassung von Stofftransport an fluiden PhasengrenzflÄchen. Chemie-Ingenieur-Technik, 2019, 91, 1623-1632.	0.4	1
32	Tomographische Untersuchung der Fluiddynamik viskoser Systeme in Packungskolonnen. Chemie-Ingenieur-Technik, 2019, 91, 1892-1896.	0.4	3
33	Analysis of crystallization fouling in electric water heating. Heliyon, 2019, 5, e02695.	1.4	8
34	Experimental Investigation of the Froth Height in Columns with Sandwich Packings. Chemie-Ingenieur-Technik, 2019, 91, 139-144.	0.4	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.	2.7	15

#	Article	IF	Citations
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.	1.9	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.	1.9	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.	0.3	2
42	Isobaric Expansion Engines: New Opportunities in Energy Conversion for Heat Engines, Pumps and Compressors. Energies, 2018, 11, 154.	1.6	21
43	Thermal and hydraulic performance of pillow-plate heat exchangers. Computer Aided Chemical Engineering, 2018, 43, 181-186.	0.3	9
44	Experimental and numerical characterization of a new structured packing for CO₂ capture. AICHE Journal, 2018, 64, 4053-4065.	1.8	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 CO2-capture using the rate-based approach. Chemical Engineering Science, 2017, 157, 221-231.	1.9	35
48	On the coupled condensation-evaporation in pillow-plate condensers: Investigation of cooling medium evaporation. Applied Thermal Engineering, 2017, 124, 1471-1480.	3.0	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.	2.6	32
51	Incremental electrohydraulic forming - A new approach for the manufacture of structured multifunctional sheet metal blanks. AIP Conference Proceedings, 2017, , .	0.3	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.	0.3	4
54	Sandwich Packings: State of the Art. ChemBioEng Reviews, 2016, 3, 174-185.	2.6	4

#	Article	IF	Citations
55	A CFD Study of the Thermo-Hydraulic Characteristics of Pillow-Plate Heat Exchangers. , 2016, , .		5
56	Kinetics of Carbon Dioxide Removal by n-Propyl- and n-Butylmonoethanolamine in Aqueous Solutions. Energy & Fuels, 2016, 30, 5077-5082.	2.5	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, .	0.5	17
58	Numerical investigation of turbulent forced convection heat transfer in pillow plates. International Journal of Heat and Mass Transfer, 2016, 94, 516-527.	2.5	47
59	On the Acceleration of CO₂ Reaction with N-Ethyldiethanolamine in Aqueous Solutions by the Addition of Promoters. Industrial & Engineering Chemistry Research, 2016, 55, 38-44.	1.8	10
60	Thermodynamics and Fluid Mechanics of a Closed Blade Cascade Wind Tunnel for Organic Vapors. , 2015, , .		4
61	CFD-Untersuchung der Fluiddynamik und des WÃrmeÃ¼bergangs bei einphasiger StrÃ¶mung im welligen Spalt zwischen Thermoblechen. Chemie-Ingenieur-Technik, 2015, 87, 216-225.	0.4	13
62	Absorption von CO₂ mittels wÃssriger Natronlauge â€“ Experimente und Simulationen mit dem Ansatz der Hydrodynamischen Analogien. Chemie-Ingenieur-Technik, 2015, 87, 571-582.	0.4	2
63	Experimentelle Untersuchung des konvektiven WÃrmeÃ¼bergangs und Druckverlustes inÂeinphasig durchstrÃ¶mten Thermoblechen. Chemie-Ingenieur-Technik, 2015, 87, 226-234.	0.4	22
64	Bestimmung der Lastgrenzen konventioneller Strukturpackungen und Anstaupackungen mithilfe des Wallis-Plots. Chemie-Ingenieur-Technik, 2015, 87, 1348-1356.	0.4	7
65	Rate-based modelling and simulation of distillation columns with sandwich packings. Chemical Engineering and Processing: Process Intensification, 2015, 98, 147-154.	1.8	5
66	Influence of Viscosity on Liquid Flow Inside Structured Packings. Industrial & Engineering Chemistry Research, 2015, 54, 2803-2815.	1.8	20
67	Modelâ€based analysis of a gas/vaporâ€“liquid microchannel membrane contactor. AICHE Journal, 2015, 61, 2240-2256.	1.8	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.	1.6	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.	1.9	23
70	Investigation of pillow-plate condensers for the application in distillation columns. Chemical Engineering Research and Design, 2015, 99, 67-74.	2.7	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.	0.5	12
72	Determination of the geometric design parameters of pillow-plate heat exchangers. Applied Thermal Engineering, 2015, 91, 1168-1175.	3.0	56

#	Article	IF	Citations
73	A systematic CFD-based method to investigate and optimise novel structured packings. Chemical Engineering Science, 2015, 122, 452-464.	1.9	29
74	An experimental study on the numbering-up of microchannels for liquid mixing. Lab on A Chip, 2015, 15, 179-187.	3.1	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.	0.3	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.	0.9	27
79	Determination of Characteristic Geometrical Parameters for the Design of Pillowâ€Plate Heat Exchangers. Chemie-Ingenieur-Technik, 2014, 86, 1214-1222.	0.4	20
80	Numerische Untersuchung der StrÃ¶mungs- und WÃrmeÃ¼bergangscharakteristik von Thermoblechen. Chemie-Ingenieur-Technik, 2014, 86, 1619-1620.	0.4	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.	6.6	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.	1.9	37
84	Complementary Modelling of CO2 Capture by Reactive Absorption. Computer Aided Chemical Engineering, 2014, 33, 1243-1248.	0.3	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.	1.1	17
87	A Numerical Study on Liquid Mixing in Multichannel Micromixers. Industrial & Engineering Chemistry Research, 2014, 53, 390-401.	1.8	42
88	The influence of Marangoni convection on fluid dynamics of oscillating single rising droplets. Chemical Engineering Science, 2014, 117, 114-124.	1.9	23
89	Hydrodynamicâ€Analogyâ€Based Modeling Approach for Distillative Separation of Organic Systems with Elevated Viscosity. Chemical Engineering and Technology, 2014, 37, 2065-2072.	0.9	7
90	Activated DEEA solutions for CO2 captureâ€”A study of equilibrium and kinetic characteristics. Chemical Engineering Science, 2013, 100, 234-241.	1.9	48

#	Article	IF	Citations
91	Marangonikonvektion an Einzeltropfen - eine numerische Untersuchung zu Fluiddynamik und Stofftransport. Chemie-Ingenieur-Technik, 2013, 85, 1389-1389.	0.4	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.	1.8	21
93	Investigation of liquid flow morphology inside a structured packing using X-ray tomography. Chemical Engineering Science, 2013, 102, 451-460.	1.9	48
94	Micro-separation of fluid systems: A state-of-the-art review. Separation and Purification Technology, 2013, 120, 245-264.	3.9	86
95	Experimental and Numerical Investigation of a Rising Droplet. Chemie-Ingenieur-Technik, 2013, 85, 944-954.	0.4	2
96	Experimental and numerical investigation of binary coalescence: Liquid bridge building and internal flow fields. Physics of Fluids, 2012, 24, 062108.	1.6	26
97	Reactive absorption in chemical process industry: A review on current activities. Chemical Engineering Journal, 2012, 213, 371-391.	6.6	108
98	Numerical analysis of mass transfer in packed-bed reactors with irregular particle arrangements. Chemical Engineering Science, 2012, 81, 77-83.	1.9	28
99	Secondary amines for CO 2 capture: A kinetic investigation using N-ethylmonoethanolamine. Chemical Engineering Journal, 2012, 207-208, 718-724.	6.6	74
100	Reaction Kinetics of CO2in Aqueous Methyl- and Dimethylmonoethanolamine Solutions. Industrial & Engineering Chemistry Research, 2012, 51, 1592-1600.	1.8	33
101	Study on CO₂ Absorption Kinetics by Aqueous Solutions of N,Nâ€Diethylethanolamine and Nâ€Ethylethanolamine. Chemie-Ingenieur-Technik, 2012, 84, 475-483.	0.4	8
102	Beschreibung der Fluiddynamik von Anstaupackungen. Chemie-Ingenieur-Technik, 2012, 84, 36-45.	0.4	10
103	MODELING OF TRANSPORT PHENOMENA IN TWO-PHASE FILM-FLOW SYSTEMS: APPLICATION TO MONOLITH REACTORS. Chemical Engineering Communications, 2011, 198, 629-651.	1.5	5
104	Investigation of a microstructured high efficiency contactor. Chemical Engineering and Processing: Process Intensification, 2011, 50, 1244-1251.	1.8	15
105	A CFD-based approach to the interfacial mass transfer at free gasâ€“liquid interfaces. Chemical Engineering Science, 2011, 66, 3301-3308.	1.9	27
106	Dividing wall columns in chemical process industry: A review on current activities. Separation and Purification Technology, 2011, 80, 403-417.	3.9	344
107	Complementary Modeling in Fluid Process Engineering. Chemie-Ingenieur-Technik, 2011, 83, 443-455.	0.4	3
108	Modeling and Simulation of a Fallingâ€Film Microabsorber. Chemie-Ingenieur-Technik, 2011, 83, 1074-1083.	0.4	0

#	Article	IF	Citations
109	Kinetics of carbon dioxide removal by aqueous diamines. Chemical Engineering Journal, 2011, 169, 144-150.	6.6	48
110	A novel method to capture mass transfer phenomena at free fluidâ€“fluid interfaces. Chemical Engineering and Processing: Process Intensification, 2011, 50, 68-76.	1.8	15
111	Experimental and numerical investigation of a free rising droplet. Chemical Engineering and Processing: Process Intensification, 2011, 50, 718-727.	1.8	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.	0.4	28
114	Numerical Investigation of the Reactive Dividing Wall Column Exemplified by Methyl Acetate Hydrolysis. Chemie-Ingenieur-Technik, 2010, 82, 2109-2118.	0.4	5
115	Termolecular Kinetic Model for CO₂â€Alkanolamine Reactions: An Overview. Chemical Engineering and Technology, 2010, 33, 1577-1581.	0.9	58
116	Investigation of multicomponent mass transfer in liquidâ€“liquid extraction systems at microscale. International Journal of Heat and Mass Transfer, 2010, 53, 3758-3763.	2.5	12
117	Hydrodynamic analogy approach for modelling of reactive stripping with structured catalyst supports. Chemical Engineering Science, 2010, 65, 298-303.	1.9	20
118	Numerical investigation of carbon dioxide absorption in a falling-film micro-contactor. Chemical Engineering Science, 2010, 65, 1125-1133.	1.9	31
119	Kinetics of Removal of Carbon Dioxide by Aqueous Solutions of N,N-Diethylethanolamine and Piperazine. Environmental Science & Technology, 2010, 44, 2138-2143.	4.6	57
120	Kinetics of Carbon Dioxide Removal by Aqueous Alkaline Amino Acid Salts. Industrial & Engineering Chemistry Research, 2010, 49, 11067-11072.	1.8	82
121	Rigorous Modeling and Simulation of an Absorptionâ€“Stripping Loop for the Removal of Acid Gases. Industrial & Engineering Chemistry Research, 2010, 49, 772-779.	1.8	17
122	Activated DEEA Process for CO2 Capture. , 2010, , 21-29.		2
123	CO2 capture by Novel Amine Blends. , 2009, , 239-246.		2
124	Ein rateâ€based Ansatz zur Berechnung der Trennleistung von Anstaupackungen. Chemie-Ingenieur-Technik, 2009, 81, 1085-1085.	0.4	3
125	A Study on CO₂ Absorption Kinetics by Aqueous Solutions of N,Nâ€Diethylethanolamine and Nâ€Ethylethanolamine. Chemical Engineering and Technology, 2009, 32, 556-563.	0.9	45
126	Kinetics of carbonyl sulfide reaction with alkanolamines: A review. Chemical Engineering Journal, 2009, 148, 207-211.	6.6	30

#	Article	IF	Citations
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.	6.6	130
128	Modelling of combined direct-contact condensation and reactive absorption in packed columns. Chemical Engineering Journal, 2009, 146, 362-369.	6.6	15
129	Modeling Fluid Separation Processes Using a Complementary Approach. Chemical Product and Process Modeling, 2009, 4, .	0.5	0
130	The Envirostat â€“ a new bioreactor concept. Lab on A Chip, 2009, 9, 576-585.	3.1	58
131	Complementary modelling of fluid separation processes. Chemical Engineering Research and Design, 2008, 86, 1059-1072.	2.7	27
132	Comments to the authorsâ€™ response to the Comments on â€œSimulations of chemical absorption in pilot-scale and industrial-scale packed columns by computational mass transferâ€•by Liu et al.. Chemical Engineering Science, 2008, 63, 4243.	1.9	1
133	Comments on â€œSimulations of chemical absorption in pilot-scale and industrial-scale packed columns by computational mass transferâ€•by Liu et al.. Chemical Engineering Science, 2008, 63, 4239-4240.	1.9	2
134	Acceleration of CO₂ Reaction with N,N-Diethylethanolamine in Aqueous Solutions by Piperazine. Industrial & Engineering Chemistry Research, 2008, 47, 34-38.	1.8	74
135	Modelling and simulation of a membrane microreactor using computational fluid dynamics. Computer Aided Chemical Engineering, 2008, , 751-756.	0.3	10
136	Rate-based design of integrated distillation sequences. Computer Aided Chemical Engineering, 2007, , 1053-1058.	0.3	0
137	Advanced Modeling of Reactive Separation Units with Structured Packings. Chemical Product and Process Modeling, 2007, 2, .	0.5	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.	0.3	1
139	GASâ€“LIQUID REACTION KINETICS: A REVIEW OF DETERMINATION METHODS. Chemical Engineering Communications, 2007, 194, 1543-1565.	1.5	51
140	Reactive Distillation in a Dividing Wall Column:Â Rate-Based Modeling and Simulation. Industrial & Engineering Chemistry Research, 2007, 46, 3709-3719.	1.8	127
141	Experimental and Theoretical Study of Reactive Stripping in Monolith Reactors. Industrial & Engineering Chemistry Research, 2007, 46, 4149-4157.	1.8	12
142	CO₂â€Alkanolamine Reaction Kinetics: A Review of Recent Studies. Chemical Engineering and Technology, 2007, 30, 1467-1474.	0.9	590
143	Absorption of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si14.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mi>CO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></ into aqueous blends of alkanolamines prepared from renewable resources. Chemical Engineering Science, 2007, 62, 7344-7350.	1.9	86
144	Rate-based analysis of reactive distillation sequences with different degrees of integration. Chemical Engineering Science, 2007, 62, 7327-7335.	1.9	34

#	Article	IF	Citations
145	Catalytic distillation. , 2006, , 95-147.		0
146	Hydrodynamic-analogy-based model for efficiency of structured packing columns. AICHE Journal, 2006, 52, 3055-3066.	1.8	38
147	A CFD model for mass transfer and interfacial phenomena on single droplets. AICHE Journal, 2006, 52, 4071-4078.	1.8	26
148	Reactive Absorption. , 2005, , 265-311.		10
149	Modelling of reactive stripping in monolith reactors. Catalysis Today, 2005, 105, 414-420.	2.2	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.	1.8	42
151	Rate-based modelling and simulation of reactive separations in gas/vapourâ€“liquid systems. Chemical Engineering and Processing: Process Intensification, 2005, 44, 617-629.	1.8	79
152	Rigorous modelling of NOx absorption in tray and packed columns. Chemical Engineering Science, 2005, 60, 6462-6471.	1.9	40
153	Ein innovativer Ansatz zur Optimierung reaktiver Trennverfahren. Chemie-Ingenieur-Technik, 2005, 77, 46-53.	0.4	0
154	CFD-based Study on Hydrodynamics and Mass Transfer in Fixed Catalyst Beds. Chemical Engineering and Technology, 2005, 28, 31-36.	0.9	25
155	Fluid separation modelling in the columns equipped with structured packings using the hydrodynamic analogy. Computer Aided Chemical Engineering, 2005, 20, 331-336.	0.3	1
156	CFD modelling of mass transfer and interfacial phenomena on single droplets. Computer Aided Chemical Engineering, 2005, , 103-108.	0.3	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.	1.8	63
158	Advanced rate-based simulation tool for reactive distillation. AICHE Journal, 2004, 50, 322-342.	1.8	22
159	Modelling of reactive separation processes: reactive absorption and reactive distillation. Chemical Engineering and Processing: Process Intensification, 2003, 42, 157-178.	1.8	187
160	On the modelling and simulation of sour gas absorption by aqueous amine solutions. Chemical Engineering Science, 2003, 58, 3571-3578.	1.9	124
161	Experimental and theoretical studies of the TAME synthesis by reactive distillation. Computer Aided Chemical Engineering, 2003, 14, 713-718.	0.3	5
162	Influence of Operating Conditions and Column Configuration on the Performance of Reactive Distillation Columns with Liquidâ€”Liquid Separators. Canadian Journal of Chemical Engineering, 2003, 81, 725-732.	0.9	16

#	Article	IF	Citations
163	Kinetics of the Gasâ"Liquid Reaction between Carbon Dioxide and Hydroxide Ions. Industrial & Engineering Chemistry Research, 2002, 41, 5952-5957.	1.8	86
164	Towards Improvement of Reactive Separation Performance Using Computational Fluid Dynamics. Chemie-Ingenieur-Technik, 2001, 73, 773-773.	0.4	4
165	Reactive absorption: Optimal process design via optimal modelling. Chemical Engineering Science, 2001, 56, 343-350.	1.9	65
166	Investigation of ethyl acetate reactive distillation process. Chemical Engineering Science, 2001, 56, 6185-6193.	1.9	74
167	Dynamische Simulation reaktiver Absorptionsprozesse am Beispiel einer SauergaswÃsche: Modellentwicklung, -analyse und -optimierung. Chemie-Ingenieur-Technik, 2000, 72, 1224-1229.	0.4	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.	1.9	26
169	Dynamic and steady state simulation of coke oven gas purification. Computers and Chemical Engineering, 1999, 23, S843-S846.	2.0	9
170	Rigorous dynamic modelling of complex reactive absorption processes. Chemical Engineering Science, 1999, 54, 5195-5203.	1.9	45
171	An integrated tool for synthesis and design of reactive distillation. Chemical Engineering Science, 1999, 54, 1347-1352.	1.9	32
172	Dynamic Modelling of Reactive Absorption with the Maxwell-Stefan Approach. Chemical Engineering Research and Design, 1999, 77, 633-638.	2.7	41
173	47. Auslegung reaktiver Destillationsprozesse - MÃ¶glichkeiten und Grenzen. Chemie-Ingenieur-Technik, 1998, 70, 1096-1096.	0.4	5
174	Modeling of Reactive Absorption Using the Maxwellâ"Stefan Equations. Industrial & Engineering Chemistry Research, 1997, 36, 4325-4334.	1.8	33
175	Multicomponent multiphase film-like systems: A modelling approach. Computers and Chemical Engineering, 1997, 21, S355-S360.	2.0	4
176	Mikrodestillation von Mehrkomponentensystemen. Chemie-Ingenieur-Technik, 1996, 68, 272-276.	0.4	20
177	A film model based approach for simulation of multicomponent reactive separation. Chemical Engineering and Processing: Process Intensification, 1995, 34, 97-103.	1.8	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.	2.5	4
179	Comments on linearization of equilibrium relationships in multicomponent mass transfer models. Chemical Engineering and Processing: Process Intensification, 1992, 31, 273-274.	1.8	0
180	Simultaneous mass and heat transfer with reactions in a multicomponent, laminar, falling liquid film. The Chemical Engineering Journal, 1992, 49, 119-126.	0.4	8

#	Article	IF	Citations
181	Two-phase multicomponent mass transport in a descending, straight-through flow of phases. Journal of Engineering Physics, 1990, 59, 896-906.	0.0	3
182	Multicomponent heat and mass transfer during the turbulent flow of liquid films. Journal of Engineering Physics, 1989, 57, 735-741.	0.0	0
183	Combined heat and mass transfer for opposing film flows of liquid and gas. Journal of Engineering Physics, 1986, 51, 768-773.	0.0	5
184	Coupled simultaneous heat and mass transfer in multicomponent two-phase mixtures. Journal of Engineering Physics, 1985, 49, 1057-1063.	0.0	0
185	Modeling of Reactive Distillation. , 0, , 323-363.		7
186	Analysis of Crystallization Fouling Durability of Novel Heating Elements for Electric Water Heating. Heat Transfer Engineering, 0, , 1-15.	1.2	0