

# Eugeny Kenig

## List of Publications by Year in descending order

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186  
papers

4,902  
citations

94269

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110170

64  
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196  
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196  
docs citations

196  
times ranked

3181  
citing authors

#	ARTICLE	IF	CITATIONS
1	CO <sub>2</sub> Alkanolamine Reaction Kinetics: A Review of Recent Studies. Chemical Engineering and Technology, 2007, 30, 1467-1474.	0.9	590
2	Dividing wall columns in chemical process industry: A review on current activities. Separation and Purification Technology, 2011, 80, 403-417.	3.9	344
3	Modelling of reactive separation processes: reactive absorption and reactive distillation. Chemical Engineering and Processing: Process Intensification, 2003, 42, 157-178.	1.8	187
4	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
5	Reactive Distillation in a Dividing Wall Column: A Rate-Based Modeling and Simulation. Industrial & Engineering Chemistry Research, 2007, 46, 3709-3719.	1.8	127
6	On the modelling and simulation of sour gas absorption by aqueous amine solutions. Chemical Engineering Science, 2003, 58, 3571-3578.	1.9	124
7	Reactive absorption in chemical process industry: A review on current activities. Chemical Engineering Journal, 2012, 213, 371-391.	6.6	108
8	Kinetics of the Gas-Liquid Reaction between Carbon Dioxide and Hydroxide Ions. Industrial & Engineering Chemistry Research, 2002, 41, 5952-5957.	1.8	86
9	Absorption of $\text{CO}_2$ into aqueous blends of alkanolamines prepared from renewable resources. Chemical Engineering Science, 2007, 62, 7344-7350.		
10	Micro-separation of fluid systems: A state-of-the-art review. Separation and Purification Technology, 2013, 120, 245-264.	3.9	86
11	Kinetics of Carbon Dioxide Removal by Aqueous Alkaline Amino Acid Salts. Industrial & Engineering Chemistry Research, 2010, 49, 11067-11072.	1.8	82
12	Rate-based modelling and simulation of reactive separations in gas/vapour-liquid systems. Chemical Engineering and Processing: Process Intensification, 2005, 44, 617-629.	1.8	79
13	Investigation of ethyl acetate reactive distillation process. Chemical Engineering Science, 2001, 56, 6185-6193.	1.9	74
14	Acceleration of CO <sub>2</sub> Reaction with N,N-Diethylethanolamine in Aqueous Solutions by Piperazine. Industrial & Engineering Chemistry Research, 2008, 47, 34-38.	1.8	74
15	Secondary amines for CO <sub>2</sub> capture: A kinetic investigation using N-ethylmonoethanolamine. Chemical Engineering Journal, 2012, 207-208, 718-724.	6.6	74
16	Reactive absorption: Optimal process design via optimal modelling. Chemical Engineering Science, 2001, 56, 343-350.	1.9	65
17	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
18	The Envirostat – a new bioreactor concept. Lab on A Chip, 2009, 9, 576-585.	3.1	58

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19	Termolecular Kinetic Model for CO <sub>2</sub> –Alkanolamine Reactions: An Overview. <i>Chemical Engineering and Technology</i> , 2010, 33, 1577-1581.	0.9	58
20	Kinetics of Removal of Carbon Dioxide by Aqueous Solutions of <i>N,N</i> -Diethylethanolamine and Piperazine. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2138-2143.	4.6	57
21	Determination of the geometric design parameters of pillow-plate heat exchangers. <i>Applied Thermal Engineering</i> , 2015, 91, 1168-1175.	3.0	56
22	An experimental study on the numbering-up of microchannels for liquid mixing. <i>Lab on A Chip</i> , 2015, 15, 179-187.	3.1	53
23	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
24	GAS–LIQUID REACTION KINETICS: A REVIEW OF DETERMINATION METHODS. <i>Chemical Engineering Communications</i> , 2007, 194, 1543-1565.	1.5	51
25	Kinetics of carbon dioxide removal by aqueous diamines. <i>Chemical Engineering Journal</i> , 2011, 169, 144-150.	6.6	48
26	Activated DEEA solutions for CO <sub>2</sub> capture—A study of equilibrium and kinetic characteristics. <i>Chemical Engineering Science</i> , 2013, 100, 234-241.	1.9	48
27	Investigation of liquid flow morphology inside a structured packing using X-ray tomography. <i>Chemical Engineering Science</i> , 2013, 102, 451-460.	1.9	48
28	Numerical investigation of turbulent forced convection heat transfer in pillow plates. <i>International Journal of Heat and Mass Transfer</i> , 2016, 94, 516-527.	2.5	47
29	Rigorous dynamic modelling of complex reactive absorption processes. <i>Chemical Engineering Science</i> , 1999, 54, 5195-5203.	1.9	45
30	A Study on CO <sub>2</sub> Absorption Kinetics by Aqueous Solutions of <i>N,N</i> -Diethylethanolamine and <i>N</i> -Ethylethanolamine. <i>Chemical Engineering and Technology</i> , 2009, 32, 556-563.	0.9	45
31	On the combination of CFD and rate-based modelling in the simulation of reactive separation processes. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005, 44, 631-644.	1.8	42
32	A Numerical Study on Liquid Mixing in Multichannel Micromixers. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 390-401.	1.8	42
33	Dynamic Modelling of Reactive Absorption with the Maxwell-Stefan Approach. <i>Chemical Engineering Research and Design</i> , 1999, 77, 633-638.	2.7	41
34	Rigorous modelling of NO <sub>x</sub> absorption in tray and packed columns. <i>Chemical Engineering Science</i> , 2005, 60, 6462-6471.	1.9	40
35	Investigation of pillow-plate condensers for the application in distillation columns. <i>Chemical Engineering Research and Design</i> , 2015, 99, 67-74.	2.7	40
36	Hydrodynamic-analogy-based model for efficiency of structured packing columns. <i>AIChE Journal</i> , 2006, 52, 3055-3066.	1.8	38

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37	Heat transfer enhancement in pillow-plate heat exchangers with dimpled surfaces: A numerical study. Applied Thermal Engineering, 2019, 153, 142-146.	3.0	38
38	The impact of Marangoni convection on fluid dynamics and mass transfer at deformable single rising droplets – A numerical study. Chemical Engineering Science, 2014, 116, 208-222.	1.9	37
39	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
40	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.	1.9	35
41	Rate-based analysis of reactive distillation sequences with different degrees of integration. Chemical Engineering Science, 2007, 62, 7327-7335.	1.9	34
42	Modeling of Reactive Absorption Using the Maxwell–Stefan Equations. Industrial & Engineering Chemistry Research, 1997, 36, 4325-4334.	1.8	33
43	Reaction Kinetics of CO <sub>2</sub> in Aqueous Methyl- and Dimethylmonoethanolamine Solutions. Industrial & Engineering Chemistry Research, 2012, 51, 1592-1600.	1.8	33
44	An integrated tool for synthesis and design of reactive distillation. Chemical Engineering Science, 1999, 54, 1347-1352.	1.9	32
45	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
46	Numerical investigation of carbon dioxide absorption in a falling-film micro-contactors. Chemical Engineering Science, 2010, 65, 1125-1133.	1.9	31
47	An approach for pillow plate heat exchangers design for single-phase applications. Applied Thermal Engineering, 2019, 147, 579-591.	3.0	31
48	Kinetics of carbonyl sulfide reaction with alkanolamines: A review. Chemical Engineering Journal, 2009, 148, 207-211.	6.6	30
49	A systematic CFD-based method to investigate and optimise novel structured packings. Chemical Engineering Science, 2015, 122, 452-464.	1.9	29
50	Mikrotrenntechnik: Entwicklungsstand und Perspektiven. Chemie-Ingenieur-Technik, 2010, 82, 215-228.	0.4	28
51	Numerical analysis of mass transfer in packed-bed reactors with irregular particle arrangements. Chemical Engineering Science, 2012, 81, 77-83.	1.9	28
52	Investigation of heat transfer and hydraulic resistance in small-scale pillow-plate heat exchangers. Energy, 2019, 181, 1213-1224.	4.5	28
53	Complementary modelling of fluid separation processes. Chemical Engineering Research and Design, 2008, 86, 1059-1072.	2.7	27
54	A CFD-based approach to the interfacial mass transfer at free gas–liquid interfaces. Chemical Engineering Science, 2011, 66, 3301-3308.	1.9	27

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55	Experimental and numerical investigation of a free rising droplet. Chemical Engineering and Processing: Process Intensification, 2011, 50, 718-727.	1.8	27
56	Kinetics of carbon dioxide removal by ethylenediamine and diethylenetriamine in aqueous solutions. Canadian Journal of Chemical Engineering, 2014, 92, 2021-2028.	0.9	27
57	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
58	A CFD model for mass transfer and interfacial phenomena on single droplets. AIChE Journal, 2006, 52, 4071-4078.	1.8	26
59	Experimental and numerical investigation of binary coalescence: Liquid bridge building and internal flow fields. Physics of Fluids, 2012, 24, 062108.	1.6	26
60	CFD-based Study on Hydrodynamics and Mass Transfer in Fixed Catalyst Beds. Chemical Engineering and Technology, 2005, 28, 31-36.	0.9	25
61	The influence of Marangoni convection on fluid dynamics of oscillating single rising droplets. Chemical Engineering Science, 2014, 117, 114-124.	1.9	23
62	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
63	Advanced rate-based simulation tool for reactive distillation. AIChE Journal, 2004, 50, 322-342.	1.8	22
64	Experimentelle Untersuchung des konvektiven Wärmeübergangs und Druckverlustes in einphasig durchströmten Thermoblechen. Chemie-Ingenieur-Technik, 2015, 87, 226-234.	0.4	22
65	Recent Advances in Experimental Techniques for Flow and Mass Transfer Analyses in Thermal Separation Systems. Chemie-Ingenieur-Technik, 2020, 92, 926-948.	0.4	22
66	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
67	Isobaric Expansion Engines: New Opportunities in Energy Conversion for Heat Engines, Pumps and Compressors. Energies, 2018, 11, 154.	1.6	21
68	Mikrodestillation von Mehrkomponentensystemen. Chemie-Ingenieur-Technik, 1996, 68, 272-276.	0.4	20
69	Hydrodynamic analogy approach for modelling of reactive stripping with structured catalyst supports. Chemical Engineering Science, 2010, 65, 298-303.	1.9	20
70	Determination of Characteristic Geometrical Parameters for the Design of Pillow-Plate Heat Exchangers. Chemie-Ingenieur-Technik, 2014, 86, 1214-1222.	0.4	20
71	Influence of Viscosity on Liquid Flow Inside Structured Packings. Industrial & Engineering Chemistry Research, 2015, 54, 2803-2815.	1.8	20
72	On the coupled condensation-evaporation in pillow-plate condensers: Investigation of cooling medium evaporation. Applied Thermal Engineering, 2017, 124, 1471-1480.	3.0	18

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73	Rigorous Modeling and Simulation of an Absorption~Stripping Loop for the Removal of Acid Gases. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 772-779.	1.8	17
74	Numerical simulation of rising droplets in liquid~liquid systems: A comparison of continuous and sharp interfacial force models. <i>International Journal of Heat and Fluid Flow</i> , 2014, 50, 16-26.	1.1	17
75	Thermodynamics and Fluid Mechanics of a Closed Blade Cascade Wind Tunnel for Organic Vapors. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	0.5	17
76	Influence of Operating Conditions and Column Configuration on the Performance of Reactive Distillation Columns with Liquid~Liquid Separators. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 725-732.	0.9	16
77	Modelling of combined direct-contact condensation and reactive absorption in packed columns. <i>Chemical Engineering Journal</i> , 2009, 146, 362-369.	6.6	15
78	Investigation of a microstructured high efficiency contactor. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 1244-1251.	1.8	15
79	A novel method to capture mass transfer phenomena at free fluid~fluid interfaces. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 68-76.	1.8	15
80	Optimization of structured packings using twisted tape inserts. <i>Chemical Engineering Research and Design</i> , 2018, 132, 1-8.	2.7	15
81	A Study on the Kelvin-Helmholtz Instability Using Two Different Computational Fluid Dynamics Methods. <i>Journal of Computational Multiphase Flows</i> , 2010, 2, 33-45.	0.8	14
82	Closed Loop Organic Wind Tunnel (CLOWT): Design, Components and Control System. <i>Energy Procedia</i> , 2017, 129, 200-207.	1.8	14
83	CFD-Untersuchung der Fluidodynamik und des WÄrme~bergangs bei einphasiger StrÄmung im welligen Spalt zwischen Thermoblechen. <i>Chemie-Ingenieur-Technik</i> , 2015, 87, 216-225.	0.4	13
84	Modelling of reactive stripping in monolith reactors. <i>Catalysis Today</i> , 2005, 105, 414-420.	2.2	12
85	Experimental and Theoretical Study of Reactive Stripping in Monolith Reactors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 4149-4157.	1.8	12
86	Investigation of multicomponent mass transfer in liquid~liquid extraction systems at microscale. <i>International Journal of Heat and Mass Transfer</i> , 2010, 53, 3758-3763.	2.5	12
87	Hydrodynamic analogy approach for modelling reactive absorption. <i>Chemical Engineering Journal</i> , 2014, 250, 342-353.	6.6	12
88	Numerical Analysis of Residence Time Distribution in Packed Bed Reactors with Irregular Particle Arrangements. <i>Chemical Product and Process Modeling</i> , 2015, 10, 17-26.	0.5	12
89	Model~based analysis of a gas/vapor~liquid microchannel membrane contactor. <i>AIChE Journal</i> , 2015, 61, 2240-2256.	1.8	11
90	An investigation of the influence of initial deformation on fluid dynamics of toluene droplets in water. <i>International Journal of Multiphase Flow</i> , 2015, 76, 144-157.	1.6	11

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91	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
92	Reactive Absorption. , 2005, , 265-311.		10
93	Modelling and simulation of a membrane microreactor using computational fluid dynamics. Computer Aided Chemical Engineering, 2008, , 751-756.	0.3	10
94	Beschreibung der Fluidodynamik von Anstaupackungen. Chemie-Ingenieur-Technik, 2012, 84, 36-45.	0.4	10
95	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.	1.8	10
96	Experimental and numerical characterization of a new structured packing for CO <sub>2</sub> capture. AIChE Journal, 2018, 64, 4053-4065.	1.8	10
97	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
98	On the design of heat exchanger equipment for novel-type isobaric expansion engines. Applied Thermal Engineering, 2020, 167, 114382.	3.0	10
99	Dynamic and steady state simulation of coke oven gas purification. Computers and Chemical Engineering, 1999, 23, S843-S846.	2.0	9
100	Modeling of Distillation Processes. , 2014, , 383-436.		9
101	Thermal and hydraulic performance of pillow-plate heat exchangers. Computer Aided Chemical Engineering, 2018, 43, 181-186.	0.3	9
102	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
103	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.	0.4	8
104	Incremental electrohydraulic forming - A new approach for the manufacture of structured multifunctional sheet metal blanks. AIP Conference Proceedings, 2017, , .	0.3	8
105	Analysis of crystallization fouling in electric water heating. Heliyon, 2019, 5, e02695.	1.4	8
106	Modeling of Reactive Distillation. , 0, , 323-363.		7
107	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
108	Bestimmung der Lastgrenzen konventioneller Strukturpackungen und Anstaupackungen mithilfe des Wallis-Plots. Chemie-Ingenieur-Technik, 2015, 87, 1348-1356.	0.4	7

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109	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.	2.7	7
110	Water-cooled on-board charger with optimized cooling channel. , 2017, , .		6
111	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
112	Theoretical limits on the heat regeneration degree. International Journal of Heat and Mass Transfer, 2020, 161, 120282.	2.5	6
113	CLOWT: A Multifunctional Test Facility for the Investigation of Organic Vapor Flows. , 2018, , .		6
114	Combined heat and mass transfer for opposing film flows of liquid and gas. Journal of Engineering Physics, 1986, 51, 768-773.	0.0	5
115	47. Auslegung reaktiver Destillationsprozesse - Mglichkeiten und Grenzen. Chemie-Ingenieur-Technik, 1998, 70, 1096-1096.	0.4	5
116	Experimental and theoretical studies of the TAME synthesis by reactive distillation. Computer Aided Chemical Engineering, 2003, 14, 713-718.	0.3	5
117	Numerical Investigation of the Reactive Dividing Wall Column Exemplified by Methyl Acetate Hydrolysis. Chemie-Ingenieur-Technik, 2010, 82, 2109-2118.	0.4	5
118	MODELING OF TRANSPORT PHENOMENA IN TWO-PHASE FILM-FLOW SYSTEMS: APPLICATION TO MONOLITH REACTORS. Chemical Engineering Communications, 2011, 198, 629-651.	1.5	5
119	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
120	Rate-based modelling and simulation of distillation columns with sandwich packings. Chemical Engineering and Processing: Process Intensification, 2015, 98, 147-154.	1.8	5
121	A CFD Study of the Thermo-Hydraulic Characteristics of Pillow-Plate Heat Exchangers. , 2016, , .		5
122	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
123	Experimental Investigation of the Froth Height in Columns with Sandwich Packings. Chemie-Ingenieur-Technik, 2019, 91, 139-144.	0.4	5
124	Kinetics of Carbon Dioxide Removal Using N-Acetylglucosamine. ACS Omega, 2020, 5, 27043-27049.	1.6	5
125	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
126	Dynamische Simulation reaktiver Absorptionsprozesse am Beispiel einer Sauergaswsche: Modellentwicklung, -analyse und -optimierung. Chemie-Ingenieur-Technik, 2000, 72, 1224-1229.	0.4	4



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127	Towards Improvement of Reactive Separation Performance Using Computational Fluid Dynamics. Chemie-Ingenieur-Technik, 2001, 73, 773-773.	0.4	4
128	Numerical Investigations of Packed Bed Reactors with Irregular Particle Arrangements. Computer Aided Chemical Engineering, 2014, , 217-222.	0.3	4
129	Thermodynamics and Fluid Mechanics of a Closed Blade Cascade Wind Tunnel for Organic Vapors. , 2015, , .		4
130	Sandwich Packings: State of the Art. ChemBioEng Reviews, 2016, 3, 174-185.	2.6	4
131	Kinetics of Carbon Dioxide Removal by <i>n</i> -Propyl- and <i>n</i> -Butylmonoethanolamine in Aqueous Solutions. Energy & Fuels, 2016, 30, 5077-5082.	2.5	4
132	Numerical Simulation of Two-phase Flow in Representative Elements of Structured Packings. Computer Aided Chemical Engineering, 2017, 40, 2089-2094.	0.3	4
133	Modeling and Simulation of an Industrial Formaldehyde Absorption System. Industrial & Engineering Chemistry Research, 2020, 59, 5996-6006.	1.8	4
134	A new hydrodynamic analogy model for the determination of transport phenomena in random packings. Chemical Engineering Science, 2021, 233, 116246.	1.9	4
135	Multicomponent multiphase film-like systems: A modelling approach. Computers and Chemical Engineering, 1997, 21, S355-S360.	2.0	4
136	Two-phase multicomponent mass transport in a descending, straight-through flow of phases. Journal of Engineering Physics, 1990, 59, 896-906.	0.0	3
137	Ein rate-basiertes Ansatz zur Berechnung der Trennleistung von Anstaupackungen. Chemie-Ingenieur-Technik, 2009, 81, 1085-1085.	0.4	3
138	Complementary Modeling in Fluid Process Engineering. Chemie-Ingenieur-Technik, 2011, 83, 443-455.	0.4	3
139	Pillow-Plate Heat Exchangers: Fundamental Characteristics. , 2018, , 233-245.		3
140	Optimization of Piecewise Conical Nozzles: Theory and Application. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	3
141	Tomographische Untersuchung der Fluiddynamik viskoser Systeme in Packungskolonnen. Chemie-Ingenieur-Technik, 2019, 91, 1892-1896.	0.4	3
142	Numerical Optimization of a Piece-Wise Conical Contraction Zone of a High-Pressure Wind Tunnel. , 2015, , .		3
143	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
144	A front-tracking method for two-phase flow simulation with no spurious currents. Journal of Computational Physics, 2022, 456, 111006.	1.9	3

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145	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.	1.9	2
146	CO2 capture by Novel Amine Blends. , 2009, , 239-246.		2
147	Activated DEEA Process for CO2 Capture. , 2010, , 21-29.		2
148	Experimental and Numerical Investigation of a Rising Droplet. Chemie-Ingenieur-Technik, 2013, 85, 944-954.	0.4	2
149	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.	0.4	2
150	Single-Phase Flow and Condensation in Pillow-Plate Condensers. , 2018, , 247-265.		2
151	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
152	CFD Simulation of Film and Rivulet Flows on Microstructured Surfaces. Computer Aided Chemical Engineering, 2020, 48, 61-66.	0.3	2
153	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
154	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
155	Model based random packing optimisation for absorption processes using the hydrodynamic analogy concept. Chemical Engineering Science, 2021, 242, 116670.	1.9	2
156	Modelling and simulation of zero-gravity distillation units with metal foams. Chemical Engineering Science, 2022, 247, 117097.	1.9	2
157	TRANSPORT PROCESSES AND SEPARATION IN ZERO-GRAVITY DISTILLATION. , 2018, , .		2
158	Modelling film and rivulet flows on microstructured surfaces using CFD methods. Chemical Engineering Science, 2022, 251, 117414.	1.9	2
159	Droplet formation " 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
160	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
161	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
162	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.	1.9	1

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163	Numerische Untersuchung der Strömungs- und Wärmeübergangskarakteristik von Thermoblechen. Chemie-Ingenieur-Technik, 2014, 86, 1619-1620.	0.4	1
164	Hydrodynamics of Apparatuses with Preformed Packing Bodies. Procedia Technology, 2014, 12, 375-381.	1.1	1
165	Complementary Modelling of CO <sub>2</sub> Capture by Reactive Absorption. Computer Aided Chemical Engineering, 2014, 33, 1243-1248.	0.3	1
166	Methode zur Erfassung von Stofftransport an fluiden Phasengrenzflächen. Chemie-Ingenieur-Technik, 2019, 91, 1623-1632.	0.4	1
167	Development of Real-Time Models for Chemical Absorption/Desorption Loops. Chemie-Ingenieur-Technik, 2020, 92, 1962-1967.	0.4	1
168	A PLIC-based method for species mass transfer at free fluid interfaces. Chemical Engineering Science, 2022, 251, 117357.	1.9	1
169	Flow in Pillow-Plate Channels for High-Speed Turbomachinery Heat Exchangers. International Journal of Turbomachinery, Propulsion and Power, 2022, 7, 12.	0.5	1
170	Coupled simultaneous heat and mass transfer in multicomponent two-phase mixtures. Journal of Engineering Physics, 1985, 49, 1057-1063.	0.0	0
171	Multicomponent heat and mass transfer during the turbulent flow of liquid films. Journal of Engineering Physics, 1989, 57, 735-741.	0.0	0
172	Comments on linearization of equilibrium relationships in multicomponent mass transfer models. Chemical Engineering and Processing: Process Intensification, 1992, 31, 273-274.	1.8	0
173	Ein innovativer Ansatz zur Optimierung reaktiver Trennverfahren. Chemie-Ingenieur-Technik, 2005, 77, 46-53.	0.4	0
174	CFD modelling of mass transfer and interfacial phenomena on single droplets. Computer Aided Chemical Engineering, 2005, , 103-108.	0.3	0
175	Catalytic distillation. , 2006, , 95-147.		0
176	Rate-based design of integrated distillation sequences. Computer Aided Chemical Engineering, 2007, , 1053-1058.	0.3	0
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