

Jasper M Van Baten

List of Publications by Year in descending order

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6185
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#	ARTICLE	IF	CITATIONS
1	Using the spreading pressure to inter-relate the characteristics of unary, binary and ternary mixture permeation across microporous membranes. <i>Journal of Membrane Science</i> , 2022, 643, 120049.	4.1	6
2	Highlighting the Anti-Synergy between Adsorption and Diffusion in Cation-Exchanged Faujasite Zeolites. <i>ACS Omega</i> , 2022, 7, 13050-13056.	1.6	8
3	Synergistically enhance confined diffusion by continuum intersecting channels in zeolites. <i>Science Advances</i> , 2021, 7, .	4.7	17
4	How Reliable Is the Ideal Adsorbed Solution Theory for the Estimation of Mixture Separation Selectivities in Microporous Crystalline Adsorbents?. <i>ACS Omega</i> , 2021, 6, 15499-15513.	1.6	19
5	Water/Alcohol Mixture Adsorption in Hydrophobic Materials: Enhanced Water Ingress Caused by Hydrogen Bonding. <i>ACS Omega</i> , 2020, 5, 28393-28402.	1.6	18
6	Using Molecular Simulations for Elucidation of Thermodynamic Nonidealities in Adsorption of CO ₂ -Containing Mixtures in NaX Zeolite. <i>ACS Omega</i> , 2020, 5, 20535-20542.	1.6	10
7	Using Molecular Simulations to Unravel the Benefits of Characterizing Mixture Permeation in Microporous Membranes in Terms of the Spreading Pressure. <i>ACS Omega</i> , 2020, 5, 32769-32780.	1.6	4
8	Simultaneous interlayer and intralayer space control in two-dimensional metal-organic frameworks for acetylene/ethylene separation. <i>Nature Communications</i> , 2020, 11, 6259.	5.8	85
9	Elucidation of Selectivity Reversals for Binary Mixture Adsorption in Microporous Adsorbents. <i>ACS Omega</i> , 2020, 5, 9031-9040.	1.6	14
10	Elucidating Traffic Junction Effects in MFI Zeolite Using Kinetic Monte Carlo Simulations. <i>ACS Omega</i> , 2019, 4, 10761-10766.	1.6	4
11	Highlighting the origins and consequences of thermodynamic non-idealities in mixture separations using zeolites and metal-organic frameworks. <i>Microporous and Mesoporous Materials</i> , 2018, 267, 274-292.	2.2	27
12	Using Molecular Dynamics simulations for elucidation of molecular traffic in ordered crystalline microporous materials. <i>Microporous and Mesoporous Materials</i> , 2018, 258, 151-169.	2.2	17
13	Investigating the non-idealities in adsorption of CO ₂ -bearing mixtures in cation-exchanged zeolites. <i>Separation and Purification Technology</i> , 2018, 206, 208-217.	3.9	34
14	Screening metal-organic frameworks for separation of pentane isomers. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8380-8387.	1.3	15
15	Highlighting diffusional coupling effects in zeolite catalyzed reactions by combining the Maxwell-Stefan and Langmuir-Hinshelwood formulations. <i>Reaction Chemistry and Engineering</i> , 2017, 2, 324-336.	1.9	12
16	Commensurate-incommensurate adsorption and diffusion in ordered crystalline microporous materials. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 20320-20337.	1.3	16
17	Taylor-Made Modeling and Solution of Novel Process Units by Modular CAPE-OPEN-based Flowsheeting. <i>Computer Aided Chemical Engineering</i> , 2016, , 787-792.	0.3	5
18	Describing diffusion in fluid mixtures at elevated pressures by combining the Maxwell-Stefan formulation with an equation of state. <i>Chemical Engineering Science</i> , 2016, 153, 174-187.	1.9	29

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19	A molecular reconstruction feed characterization and CAPE OPEN implementation strategy to develop a tool for modeling HDT reactors for light petroleum cuts. <i>Computer Aided Chemical Engineering</i> , 2015, , 359-364.	0.3	4
20	CAPE&OPEN: Interoperability in Industrial Flowsheet Simulation Software. <i>Chemie-Ingenieur-Technik</i> , 2014, 86, 1052-1064.	0.4	23
21	Uncommon Synergy between Adsorption and Diffusion of Hexane Isomer Mixtures in MFI Zeolite Induced by Configurational Entropy Effects. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2660-2665.	1.5	41
22	Separation of Hexane Isomers in a Metal-Organic Framework with Triangular Channels. <i>Science</i> , 2013, 340, 960-964.	6.0	589
23	Investigating the influence of diffusional coupling on mixture permeation across porous membranes. <i>Journal of Membrane Science</i> , 2013, 430, 113-128.	4.1	44
24	Influence of adsorption thermodynamics on guest diffusivities in nanoporous crystalline materials. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7994.	1.3	70
25	Investigating the Relative Influences of Molecular Dimensions and Binding Energies on Diffusivities of Guest Species Inside Nanoporous Crystalline Materials. <i>Journal of Physical Chemistry C</i> , 2012, 116, 23556-23568.	1.5	63
26	Evaluating Process Sustainability Using Flowsheet Monitoring. <i>Chemical Engineering and Technology</i> , 2012, 35, 1405-1411.	0.9	2
27	Investigating the validity of the Bosanquet formula for estimation of diffusivities in mesopores. <i>Chemical Engineering Science</i> , 2012, 69, 684-688.	1.9	48
28	A comparison of the CO ₂ capture characteristics of zeolites and metal-organic frameworks. <i>Separation and Purification Technology</i> , 2012, 87, 120-126.	3.9	147
29	Hindering effects in diffusion of CO ₂ /CH ₄ mixtures in ZIF-8 crystals. <i>Journal of Membrane Science</i> , 2012, 397-398, 87-91.	4.1	59
30	In silico screening of metal-organic frameworks in separation applications. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 10593.	1.3	300
31	Investigating the Validity of the Knudsen Prescription for Diffusivities in a Mesoporous Covalent Organic Framework. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 7083-7087.	1.8	25
32	Maxwell-Stefan modeling of slowing-down effects in mixed gas permeation across porous membranes. <i>Journal of Membrane Science</i> , 2011, 383, 289-300.	4.1	78
33	Implementation of the waste reduction (WAR) algorithm utilizing flowsheet monitoring. <i>Computers and Chemical Engineering</i> , 2011, 35, 2680-2686.	2.0	21
34	Corrigendum to "CFD simulations of mass transfer from Taylor bubbles rising in circular capillaries" [Chem. Eng. Sci. 59 (2004) 2535-2545]. <i>Chemical Engineering Science</i> , 2011, 66, 4941.	1.9	1
35	Investigating the potential of MgMOF-74 membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2011, 377, 249-260.	4.1	85
36	A molecular dynamics investigation of the diffusion characteristics of cavity-type zeolites with 8-ring windows. <i>Microporous and Mesoporous Materials</i> , 2011, 137, 83-91.	2.2	91

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37	A molecular dynamics investigation of the unusual concentration dependencies of Fick diffusivities in silica mesopores. <i>Microporous and Mesoporous Materials</i> , 2011, 138, 228-234.	2.2	24
38	In-Depth Study of Mass Transfer in Nanoporous Materials by Micro-Imaging. <i>Chemie-Ingenieur-Technik</i> , 2011, 83, 2211-2218.	0.4	10
39	A thermodynamic equilibrium reactor model as a CAPE-OPEN unit operation. <i>Computers and Chemical Engineering</i> , 2011, 35, 1251-1256.	2.0	10
40	A simplified procedure for estimation of mixture permeances from unary permeation data. <i>Journal of Membrane Science</i> , 2011, 367, 204-210.	4.1	13
41	A rationalization of the Type IV loading dependence in the Kärger-Pfeifer classification of self-diffusivities. <i>Microporous and Mesoporous Materials</i> , 2011, 142, 745-748.	2.2	11
42	Influence of adsorption on the diffusion selectivity for mixture permeation across mesoporous membranes. <i>Journal of Membrane Science</i> , 2011, 369, 545-549.	4.1	31
43	Entropy-based separation of linear chain molecules by exploiting differences in the saturation capacities in cage-type zeolites. <i>Separation and Purification Technology</i> , 2011, 76, 325-330.	3.9	29
44	Comment on Comparative Molecular Simulation Study of CO ₂ /N ₂ and CH ₄ /N ₂ Separation in Zeolites and Metal-Organic Frameworks. <i>Langmuir</i> , 2010, 26, 2975-2978.	1.6	39
45	Highlighting pitfalls in the Maxwell-Stefan modeling of water-alcohol mixture permeation across pervaporation membranes. <i>Journal of Membrane Science</i> , 2010, 360, 476-482.	4.1	41
46	Novel MOF-Membrane for Molecular Sieving Predicted by IR-Diffusion Studies and Molecular Modeling. <i>Advanced Materials</i> , 2010, 22, 4741-4743.	11.1	222
47	In silico screening of zeolite membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2010, 360, 323-333.	4.1	280
48	Methane storage mechanism in the metal-organic framework Cu ₃ (btc) ₂ : An in situ neutron diffraction study. <i>Microporous and Mesoporous Materials</i> , 2010, 136, 50-58.	2.2	132
49	Reactor simulation of benzene ethylation and ethane dehydrogenation catalyzed by ZSM-5: A multiscale approach. <i>Chemical Engineering Science</i> , 2010, 65, 2472-2480.	1.9	33
50	Hydrogen Bonding Effects in Adsorption of Water-Alcohol Mixtures in Zeolites and the Consequences for the Characteristics of the Maxwell-Stefan Diffusivities. <i>Langmuir</i> , 2010, 26, 10854-10867.	1.6	127
51	Describing Mixture Diffusion in Microporous Materials under Conditions of Pore Saturation. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11557-11563.	1.5	28
52	Highlighting a Variety of Unusual Characteristics of Adsorption and Diffusion in Microporous Materials Induced by Clustering of Guest Molecules. <i>Langmuir</i> , 2010, 26, 8450-8463.	1.6	55
53	Comment on Modeling Adsorption and Self-Diffusion of Methane in LTA Zeolites: The Influence of Framework Flexibility. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18017-18021.	1.5	34
54	Mutual Slowing-Down Effects in Mixture Diffusion in Zeolites. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13154-13156.	1.5	34

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55	Investigating Cluster Formation in Adsorption of CO ₂ , CH ₄ , and Ar in Zeolites and Metal Organic Frameworks at Subcritical Temperatures. <i>Langmuir</i> , 2010, 26, 3981-3992.	1.6	74
56	Thermosensitive gating effect and selective gas adsorption in a porous coordination nanocage. <i>Chemical Communications</i> , 2010, 46, 7352.	2.2	91
57	Assessing Guest Diffusivities in Porous Hosts from Transient Concentration Profiles. <i>Physical Review Letters</i> , 2009, 102, 065901.	2.9	76
58	Adsorption and diffusion of alkanes in CuBTC crystals investigated using infra-red microscopy and molecular simulations. <i>Microporous and Mesoporous Materials</i> , 2009, 117, 22-32.	2.2	135
59	A Molecular Dynamics investigation of the influence of framework flexibility on self-diffusivity of ethane in Zn(tbip) frameworks. <i>Microporous and Mesoporous Materials</i> , 2009, 125, 97-100.	2.2	46
60	Diffusion of n-butane/iso-butane mixtures in silicalite-1 investigated using infrared (IR) microscopy. <i>Microporous and Mesoporous Materials</i> , 2009, 125, 11-16.	2.2	30
61	A molecular dynamics investigation of a variety of influences of temperature on diffusion in zeolites. <i>Microporous and Mesoporous Materials</i> , 2009, 125, 126-134.	2.2	40
62	An investigation of the characteristics of Maxwell–Stefan diffusivities of binary mixtures in silica nanopores. <i>Chemical Engineering Science</i> , 2009, 64, 870-882.	1.9	77
63	Unified Maxwell–Stefan description of binary mixture diffusion in micro- and meso-porous materials. <i>Chemical Engineering Science</i> , 2009, 64, 3159-3178.	1.9	119
64	Analysis of Diffusion Limitation in the Alkylation of Benzene over H-ZSM-5 by Combining Quantum Chemical Calculations, Molecular Simulations, and a Continuum Approach. <i>Journal of Physical Chemistry C</i> , 2009, 113, 235-246.	1.5	78
65	A molecular simulation study of commensurate–incommensurate adsorption of n-alkanes in cobalt formate frameworks. <i>Molecular Simulation</i> , 2009, 35, 1098-1104.	0.9	22
66	Segregation effects in adsorption of CO ₂ -containing mixtures and their consequences for separation selectivities in cage-type zeolites. <i>Separation and Purification Technology</i> , 2008, 61, 414-423.	3.9	129
67	Insights into diffusion of gases in zeolites gained from molecular dynamics simulations. <i>Microporous and Mesoporous Materials</i> , 2008, 109, 91-108.	2.2	164
68	Investigation of slowing-down and speeding-up effects in binary mixture permeation across SAPO-34 and MFI membranes. <i>Separation and Purification Technology</i> , 2008, 60, 230-236.	3.9	46
69	Separating n-alkane mixtures by exploiting differences in the adsorption capacity within cages of CHA, AFX and ERI zeolites. <i>Separation and Purification Technology</i> , 2008, 60, 315-320.	3.9	25
70	Inflection in the loading dependence of the Maxwell–Stefan diffusivity of iso-butane in MFI zeolite. <i>Chemical Physics Letters</i> , 2008, 459, 141-145.	1.2	44
71	Diffusion of hydrocarbon mixtures in MFI zeolite: Influence of intersection blocking. <i>Chemical Engineering Journal</i> , 2008, 140, 614-620.	6.6	63
72	Onsager coefficients for binary mixture diffusion in nanopores. <i>Chemical Engineering Science</i> , 2008, 63, 3120-3140.	1.9	95

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73	1H NMR signal broadening in spectra of alkane molecules adsorbed on MFI-type zeolites. <i>Solid State Nuclear Magnetic Resonance</i> , 2008, 33, 65-71.	1.5	12
74	Diffusion of alkane mixtures in MFI zeolite. <i>Microporous and Mesoporous Materials</i> , 2008, 107, 296-298.	2.2	20
75	Shape-selective n-alkane hydroconversion at exterior zeolite surfaces. <i>Journal of Catalysis</i> , 2008, 256, 95-107.	3.1	31
76	Incorporating the Loading Dependence of the Maxwell-Stefan Diffusivity in the Modeling of CH ₄ and CO ₂ Permeation Across Zeolite Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 2974-2986.	1.8	63
77	Loading Dependence of Self-Diffusivities of Gases in Zeolites. <i>Chemical Engineering and Technology</i> , 2007, 30, 1235-1241.	0.9	20
78	Influence of segregated adsorption on mixture diffusion in DDR zeolite. <i>Chemical Physics Letters</i> , 2007, 446, 344-349.	1.2	77
79	Using molecular simulations for screening of zeolites for separation of CO ₂ /CH ₄ mixtures. <i>Chemical Engineering Journal</i> , 2007, 133, 121-131.	6.6	186
80	Mixture diffusion in zeolites studied by MAS PFG NMR and molecular simulation. <i>Microporous and Mesoporous Materials</i> , 2007, 105, 124-131.	2.2	76
81	Screening of zeolite adsorbents for separation of hexane isomers: A molecular simulation study. <i>Separation and Purification Technology</i> , 2007, 55, 246-255.	3.9	52
82	A computational study of CO ₂ , N ₂ , and CH ₄ adsorption in zeolites. <i>Adsorption</i> , 2007, 13, 469-476.	1.4	159
83	Influence of Isotherm Inflection on the Loading Dependence of the Diffusivities of n-Hexane and n-Heptane in MFI Zeolite. Quasi-Elastic Neutron Scattering Experiments Supplemented by Molecular Simulations. <i>Journal of Physical Chemistry B</i> , 2006, 110, 2195-2201.	1.2	51
84	Describing Binary Mixture Diffusion in Carbon Nanotubes with the Maxwell-Stefan Equations. An Investigation Using Molecular Dynamics Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 2084-2093.	1.8	67
85	Response to comments on "Exploiting the Bjerknes force in bubble column reactors" by M.H.I. Baird. <i>Chemical Engineering Science</i> , 2006, 61, 6868.	1.9	0
86	Linking the loading dependence of the Maxwell-Stefan diffusivity of linear alkanes in zeolites with the thermodynamic correction factor. <i>Chemical Physics Letters</i> , 2006, 420, 545-549.	1.2	33
87	Diffusion of CH ₄ and CO ₂ in MFI, CHA and DDR zeolites. <i>Chemical Physics Letters</i> , 2006, 429, 219-224.	1.2	69
88	MD Simulations of Diffusivities in Methanol-n-hexane Mixtures Near the Liquid-liquid Phase Splitting Region. <i>Chemical Engineering and Technology</i> , 2006, 29, 516-519.	0.9	12
89	Validating the Darken Relation for Diffusivities in Fluid Mixtures of Varying Densities by Use of MD Simulations. <i>Chemical Engineering and Technology</i> , 2006, 29, 761-765.	0.9	13
90	A Molecular Dynamic Investigation of the Diffusion of Methane-Ethane and Methane-Propane Mixtures in Zeolites. <i>Chemical Engineering and Technology</i> , 2006, 29, 1429-1437.	0.9	20

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91	Entropy effects in adsorption and diffusion of alkane isomers in mordenite: An investigation using CBMC and MD simulations. <i>Microporous and Mesoporous Materials</i> , 2005, 84, 179-191.	2.2	59
92	CFD simulations of wall mass transfer for Taylor flow in circular capillaries. <i>Chemical Engineering Science</i> , 2005, 60, 1117-1126.	1.9	116
93	Exploiting the Bjerknes force in bubble column reactors. <i>Chemical Engineering Science</i> , 2005, 60, 5962-5970.	1.9	21
94	Influence of isotherm inflection on the diffusivities of C5-C8 linear alkanes in MFI zeolite. <i>Chemical Physics Letters</i> , 2005, 407, 159-165.	1.2	32
95	Kinetic Monte Carlo Simulations of the Loading Dependence of Diffusion in Zeolites. <i>Chemical Engineering and Technology</i> , 2005, 28, 160-167.	0.9	25
96	Diffusion of Alkane Mixtures in Zeolites: Validating the Maxwell-Stefan Formulation Using MD Simulations. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6386-6396.	1.2	129
97	The Darken Relation for Multicomponent Diffusion in Liquid Mixtures of Linear Alkanes: An Investigation Using Molecular Dynamics (MD) Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 6939-6947.	1.8	155
98	Scale Effects on the Hydrodynamics of Bubble Columns Operating in the Heterogeneous Flow Regime. <i>Chemical Engineering Research and Design</i> , 2004, 82, 1043-1053.	2.7	16
99	CFD Modeling of a Bubble Column Reactor Carrying out a Consecutive A + B → C Reaction. <i>Chemical Engineering and Technology</i> , 2004, 27, 398-406.	0.9	6
100	CFD Modeling of Bubble Column Reactor Including the Influence of Gas Contraction. <i>Chemical Engineering and Technology</i> , 2004, 27, 1302-1308.	0.9	8
101	CFD simulations of mass transfer from Taylor bubbles rising in circular capillaries. <i>Chemical Engineering Science</i> , 2004, 59, 2535-2545.	1.9	323
102	On the Inflection in the Concentration Dependence of the Maxwell-Stefan Diffusivity of CF ₄ in MFI Zeolite. <i>Journal of Physical Chemistry B</i> , 2004, 108, 14820-14822.	1.2	26
103	Eulerian Simulation Strategy for Scaling up a Bubble Column Slurry Reactor for Fischer-Tropsch Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 4483-4493.	1.8	27
104	A Strategy for Scaling Up the Fischer-Tropsch Bubble Column Slurry Reactor. <i>Topics in Catalysis</i> , 2003, 26, 21-28.	1.3	16
105	Modelling Sieve Tray Hydraulics Using Computational Fluid Dynamics. <i>Chemical Engineering Research and Design</i> , 2003, 81, 27-38.	2.7	25
106	Comparison of Hydrodynamics and Mass Transfer in Airlift and Bubble Column Reactors Using CFD. <i>Chemical Engineering and Technology</i> , 2003, 26, 1074-1079.	0.9	19
107	Hydrodynamics of internal air-lift reactors: experiments versus CFD simulations. <i>Chemical Engineering and Processing: Process Intensification</i> , 2003, 42, 733-742.	1.8	74
108	Intensification of bubble columns by vibration excitement. <i>Catalysis Today</i> , 2003, 79-80, 181-188.	2.2	20

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109	Scale up studies on partitioned bubble column reactors with the aid of CFD simulations. <i>Catalysis Today</i> , 2003, 79-80, 219-227.	2.2	14
110	Scale-up strategy for bubble column slurry reactors using CFD simulations. <i>Catalysis Today</i> , 2003, 79-80, 259-265.	2.2	22
111	Mass transfer in bubble columns. <i>Catalysis Today</i> , 2003, 79-80, 67-75.	2.2	102
112	Using CFD to Describe the Hydrodynamics of Internal Air-Lift Reactors. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 660-668.	0.9	18
113	Scaling up Bubble Column Reactors with Highly Viscous Liquid Phase. <i>Chemical Engineering and Technology</i> , 2002, 25, 1015-1020.	0.9	15
114	CFD Simulations of a Bubble Column Operating in the Homogeneous and Heterogeneous Flow Regimes. <i>Chemical Engineering and Technology</i> , 2002, 25, 1081-1086.	0.9	13
115	Gas and liquid phase mass transfer within KATAPAK-SÂ® structures studied using CFD simulations. <i>Chemical Engineering Science</i> , 2002, 57, 1531-1536.	1.9	51
116	Hydrodynamics of reactive distillation tray column with catalyst containing envelopes: experiments vs. CFD simulations. <i>Catalysis Today</i> , 2001, 66, 233-240.	2.2	19
117	A scale up strategy for bubble column slurry reactors. <i>Catalysis Today</i> , 2001, 66, 199-207.	2.2	31
118	Simulating the Rise Characteristics of Gas Bubbles in Liquids Using CFD. <i>Chemical Engineering and Technology</i> , 2001, 24, 427-430.	0.9	5
119	Scale Effects on the Hydrodynamics of Bubble Columns Operating in the Homogeneous Flow Regime. <i>Chemical Engineering and Technology</i> , 2001, 24, 451.	0.9	35
120	Hydrodynamics of Distillation Tray Column with Structured Catalyst Containing Envelopes: Experiments versus CFD Simulations. <i>Chemical Engineering and Technology</i> , 2001, 24, 1077.	0.9	6
121	Scaling up Bubble Column Reactors with the Aid of CFD. <i>Chemical Engineering Research and Design</i> , 2001, 79, 283-309.	2.7	92
122	Liquid-phase mass transfer within KATAPAK-SÂ® structures studied using computational fluid dynamics simulations. <i>Catalysis Today</i> , 2001, 69, 371-377.	2.2	26
123	Using CFD for scaling up gas-solid bubbling fluidised bed reactors with Geldart A powders. <i>Chemical Engineering Journal</i> , 2001, 82, 247-257.	6.6	52
124	Eulerian simulations for determination of the axial dispersion of liquid and gas phases in bubble columns operating in the churn-turbulent regime. <i>Chemical Engineering Science</i> , 2001, 56, 503-512.	1.9	53
125	Design and scale up of a bubble column slurry reactor for Fischer-Tropsch synthesis. <i>Chemical Engineering Science</i> , 2001, 56, 537-545.	1.9	80
126	Radial and axial dispersion of the liquid phase within a KATAPAK-SÂ® structure: experiments vs. CFD simulations. <i>Chemical Engineering Science</i> , 2001, 56, 813-821.	1.9	60

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127	Eulerian simulations of bubble columns operating at elevated pressures in the churn turbulent flow regime. <i>Chemical Engineering Science</i> , 2001, 56, 6249-6258.	1.9	55
128	Modelling sieve tray hydraulics using computational fluid dynamics. <i>Chemical Engineering Journal</i> , 2000, 77, 143-151.	6.6	83
129	Liquid phase dispersion in bubble columns operating in the churn-turbulent flow regime. <i>Chemical Engineering Journal</i> , 2000, 78, 43-51.	6.6	59
130	Three-phase Eulerian simulations of bubble column reactors operating in the churn-turbulent regime: a scale up strategy. <i>Chemical Engineering Science</i> , 2000, 55, 3275-3286.	1.9	122
131	Rise velocity of single circular-cap bubbles in two-dimensional beds of powders and liquids. <i>Chemical Engineering and Processing: Process Intensification</i> , 2000, 39, 433-440.	1.8	22
132	Wall effects on the rise of single gas bubbles in liquids. <i>International Communications in Heat and Mass Transfer</i> , 1999, 26, 781-790.	2.9	96
133	Rise characteristics of gas bubbles in a 2D rectangular column: VOF simulations vs experiments. <i>International Communications in Heat and Mass Transfer</i> , 1999, 26, 965-974.	2.9	71
134	Influence of scale on the hydrodynamics of bubble columns operating in the churn-turbulent regime: experiments vs. Eulerian simulations. <i>Chemical Engineering Science</i> , 1999, 54, 4903-4911.	1.9	161
135	Simulating the motion of gas bubbles in a liquid. <i>Nature</i> , 1999, 398, 208-208.	13.7	66
136	Rise velocity of a swarm of large gas bubbles in liquids. <i>Chemical Engineering Science</i> , 1999, 54, 171-183.	1.9	142
137	CFD Simulations of Sieve Tray Hydrodynamics. <i>Chemical Engineering Research and Design</i> , 1999, 77, 639-646.	2.7	72
138	Scale effects in fluidized multiphase reactors. <i>Powder Technology</i> , 1998, 100, 137-146.	2.1	32