

Rajamani Krishna

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4686357/publications.pdf>

Version: 2024-02-01

399
papers

45,013
citations

950

115
h-index

2506

196
g-index

408
all docs

408
docs citations

408
times ranked

19528
citing authors

#	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	Highly selective gas separation by two isostructural boron cluster pillared MOFs. <i>Separation and Purification Technology</i> , 2022, 283, 120220.	3.9	32
3	Collaborative pore partition and pore surface fluorination within a metal-organic framework for high-performance C ₂ H ₂ /CO ₂ separation. <i>Chemical Engineering Journal</i> , 2022, 432, 134433.	6.6	39
4	Comprehensive Pore Tuning in an Ultrastable Fluorinated Anion Cross-Linked Cage-Like MOF for Simultaneous Benchmark Propyne Recovery and Propylene Purification. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	58
5	Highlighting the Anti-Synergy between Adsorption and Diffusion in Cation-Exchanged Faujasite Zeolites. <i>ACS Omega</i> , 2022, 7, 13050-13056.	1.6	8
6	Metal-Organic Framework Based Hydrogen-Bonding Nanotrap for Efficient Acetylene Storage and Separation. <i>Journal of the American Chemical Society</i> , 2022, 144, 1681-1689.	6.6	172
7	Titanium-Oxo Cluster Assisted Fabrication of a Defect-Rich Ti-MOF Membrane Showing Versatile Gas Separation Performance. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
8	Titanium-Oxo Cluster Assisted Fabrication of a Defect-Rich Ti-MOF Membrane Showing Versatile Gas Separation Performance. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	17
9	Pore-Nanospace Engineering of Mixed-Ligand Metal-Organic Frameworks for High Adsorption of Hydrofluorocarbons and Hydrochlorofluorocarbons. <i>Chemistry of Materials</i> , 2022, 34, 5116-5124.	3.2	11
10	Two-Dimensional Metal-Organic Framework with Ultrahigh Water Stability for Separation of Acetylene from Carbon Dioxide and Ethylene. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33429-33437.	4.0	29
11	One-Step Ethylene Purification from Ternary Mixtures in a Metal-Organic Framework with Customized Pore Chemistry and Shape. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
12	A robust heterometallic ultramicroporous MOF with ultrahigh selectivity for propyne/propylene separation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2850-2856.	5.2	22
13	High Adsorption Capacity and Selectivity of SO ₂ over CO ₂ in a Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2021, 60, 4-8.	1.9	22
14	Ultrafine tuning of the pore size in zeolite A for efficient propyne removal from propylene. <i>Chinese Journal of Chemical Engineering</i> , 2021, 37, 217-221.	1.7	5
15	Constructing a robust gigantic drum-like hydrophobic [Co ₂₄ U ₆] nanocage in a metal-organic framework for high-performance SO ₂ removal in humid conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4075-4081.	5.2	9
16	Robust 4d-5f Bimetal-Organic Framework for Efficient Removal of Trace SO ₂ from SO ₂ /CO ₂ and SO ₂ /CO ₂ /N ₂ Mixtures. <i>Inorganic Chemistry</i> , 2021, 60, 1310-1314.	1.9	14
17	A Robust Cage-Based Metal-Organic Framework Showing Ultrahigh SO ₂ Uptake for Efficient Removal of Trace SO ₂ from SO ₂ /CO ₂ and SO ₂ /CO ₂ /N ₂ Mixtures. <i>Inorganic Chemistry</i> , 2021, 60, 3447-3451.	1.9	19
18	A stable metal-organic framework with well-matched pore cavity for efficient acetylene separation. <i>AIChE Journal</i> , 2021, 67, e17152.	1.8	20

#	ARTICLE	IF	CITATIONS
19	Synergistically enhance confined diffusion by continuum intersecting channels in zeolites. <i>Science Advances</i> , 2021, 7, .	4.7	17
20	A Rodâ€Packing Hydrogenâ€Bonded Organic Framework with Suitable Pore Confinement for Benchmark Ethane/Ethylene Separation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10304-10310.	7.2	104
21	A Rodâ€Packing Hydrogenâ€Bonded Organic Framework with Suitable Pore Confinement for Benchmark Ethane/Ethylene Separation. <i>Angewandte Chemie</i> , 2021, 133, 10392-10398.	1.6	29
22	Thermal resistance effect on anomalous diffusion of molecules under confinement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	24
23	Realization of Ethylene Production from Its Quaternary Mixture through Metalâ€Organic Framework Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22514-22520.	4.0	13
24	Optimal Pore Chemistry in an Ultramicroporous Metalâ€Organic Framework for Benchmark Inverse CO ₂ /C ₂ H ₂ Separation. <i>Angewandte Chemie</i> , 2021, 133, 17335-17341.	1.6	16
25	Robust metalâ€organic framework with multiple traps for trace Xe/Kr separation. <i>Science Bulletin</i> , 2021, 66, 1073-1079.	4.3	55
26	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
27	Optimal Pore Chemistry in an Ultramicroporous Metalâ€Organic Framework for Benchmark Inverse CO ₂ /C ₂ H ₂ Separation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17198-17204.	7.2	93
28	Propane-Trapping Ultramicroporous Metalâ€Organic Framework in the Low-Pressure Area toward the Purification of Propylene. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 35990-35996.	4.0	39
29	Interpenetration Symmetry Control Within Ultramicroporous Robust Boron Cluster Hybrid MOFs for Benchmark Purification of Acetylene from Carbon Dioxide. <i>Angewandte Chemie</i> , 2021, 133, 23047.	1.6	19
30	Interpenetration Symmetry Control Within Ultramicroporous Robust Boron Cluster Hybrid MOFs for Benchmark Purification of Acetylene from Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22865-22870.	7.2	103
31	A robust metal-organic framework showing two distinct pores for effective separation of xenon and krypton. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111350.	2.2	7
32	Efficient propyne/propadiene separation by microporous crystalline physiadsorbents. <i>Nature Communications</i> , 2021, 12, 5768.	5.8	26
33	Efficient Purification of Ethylene from C ₂ Hydrocarbons with an C ₂ H ₆ /C ₂ H ₂ -Selective Metalâ€Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 962-969.	4.0	69
34	Synthesis of Cu(I) doped mesoporous carbon for selective capture of ethylene from reaction products of oxidative coupling of methane (OCM). <i>Microporous and Mesoporous Materials</i> , 2021, 328, 111488.	2.2	8
35	Separation of propylene from propane and nitrogen by Ag(I)-doped nanoporous carbons obtained from hydrothermally treated lignin. <i>Diamond and Related Materials</i> , 2021, 121, 108750.	1.8	1
36	Constructing redox-active microporous hydrogen-bonded organic framework by imide-functionalization: Photochromism, electrochromism, and selective adsorption of C ₂ H ₂ over CO ₂ . <i>Chemical Engineering Journal</i> , 2020, 383, 123117.	6.6	63

#	ARTICLE	IF	CITATIONS
37	Mixed Metal-Organic Framework with Multiple Binding Sites for Efficient C ₂ H ₂ /CO ₂ Separation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4396-4400.	7.2	313
38	Microporous Metal-Organic Framework with a Completely Reversed Adsorption Relationship for C ₂ Hydrocarbons at Room Temperature. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6105-6111.	4.0	63
39	Selective Ethane/Ethylene Separation in a Robust Microporous Hydrogen-Bonded Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 633-640.	6.6	183
40	Metrics for Evaluation and Screening of Metal-Organic Frameworks for Applications in Mixture Separations. <i>ACS Omega</i> , 2020, 5, 16987-17004.	1.6	56
41	Boosting Selective Adsorption of Xe over Kr by Double-Accessible Open-Metal Site in Metal-Organic Framework: Experimental and Theoretical Research. <i>Inorganic Chemistry</i> , 2020, 59, 11793-11800.	1.9	34
42	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
43	Tuning Gate-Opening of a Flexible Metal-Organic Framework for Ternary Gas Sieving Separation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22756-22762.	7.2	173
44	Tuning Gate-Opening of a Flexible Metal-Organic Framework for Ternary Gas Sieving Separation. <i>Angewandte Chemie</i> , 2020, 132, 22944-22950.	1.6	33
45	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
46	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
47	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
48	A Chemically Stable Hofmann-Type Metal-Organic Framework with Sandwich-Like Binding Sites for Benchmark Acetylene Capture. <i>Advanced Materials</i> , 2020, 32, e1908275.	11.1	236
49	Dependence of zeolite topology on alkane diffusion inside <sc> diverse channels </sc>. <i>AIChE Journal</i> , 2020, 66, e16269.	1.8	22
50	A robust Thiazole framework for highly efficient purification of C ₂ H ₄ from a C ₂ H ₄ /C ₂ H ₂ /C ₂ H ₆ mixture. <i>Nature Communications</i> , 2020, 11, 3163.	5.8	192
51	Using transient breakthrough experiments for screening of adsorbents for separation of C ₂ H ₄ /CO ₂ mixtures. <i>Separation and Purification Technology</i> , 2020, 241, 116706.	3.9	23
52	Separation of ethane-ethylene and propane-propylene by Ag(I) doped and sulfurized microporous carbon. <i>Microporous and Mesoporous Materials</i> , 2020, 299, 110099.	2.2	40
53	Rational Design of Microporous MOFs with Anionic Boron Cluster Functionality and Cooperative Dihydrogen Binding Sites for Highly Selective Capture of Acetylene. <i>Angewandte Chemie</i> , 2020, 132, 17817-17822.	1.6	28
54	Rational Design of Microporous MOFs with Anionic Boron Cluster Functionality and Cooperative Dihydrogen Binding Sites for Highly Selective Capture of Acetylene. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17664-17669.	7.2	110

#	ARTICLE	IF	CITATIONS
55	Highlighting Thermodynamic Coupling Effects in the Immersion Precipitation Process for Formation of Polymeric Membranes. ACS Omega, 2020, 5, 2819-2828.	1.6	1
56	Mixed Metal-Organic Framework with Multiple Binding Sites for Efficient C ₂ H ₂ /CO ₂ Separation. Angewandte Chemie, 2020, 132, 4426-4430.	1.6	46
57	Pore-Space-Partition-Enabled Exceptional Ethane Uptake and Ethane-Selective Ethane-Ethylene Separation. Journal of the American Chemical Society, 2020, 142, 2222-2227.	6.6	199
58	Understanding How Ligand Functionalization Influences CO ₂ and N ₂ Adsorption in a Sodalite Metal-Organic Framework. Chemistry of Materials, 2020, 32, 1526-1536.	3.2	19
59	Elucidation of Selectivity Reversals for Binary Mixture Adsorption in Microporous Adsorbents. ACS Omega, 2020, 5, 9031-9040.	1.6	14
60	An Ultramicroporous Metal-Organic Framework for High Sieving Separation of Propylene from Propane. Journal of the American Chemical Society, 2020, 142, 17795-17801.	6.6	186
61	A multifunctional double walled zirconium metal-organic framework: high performance for CO ₂ adsorption and separation and detecting explosives in the aqueous phase. Journal of Materials Chemistry A, 2020, 8, 17106-17112.	5.2	23
62	Thermodynamically Consistent Methodology for Estimation of Diffusivities of Mixtures of Guest Molecules in Microporous Materials. ACS Omega, 2019, 4, 13520-13529.	1.6	13
63	Maxwell-Stefan modelling of mixture desorption kinetics in microporous crystalline materials. Separation and Purification Technology, 2019, 229, 115790.	3.9	5
64	Enhanced Gas Uptake in a Microporous Metal-Organic Framework <i>via</i> a Sorbate Induced-Fit Mechanism. Journal of the American Chemical Society, 2019, 141, 17703-17712.	6.6	152
65	Enhancing C ₂ H ₂ /C ₂ H ₄ separation by incorporating low-content sodium in covalent organic frameworks. Inorganic Chemistry Frontiers, 2019, 6, 2921-2926.	3.0	24
66	Highlighting Thermodynamic Coupling Effects in Alcohol/Water Pervaporation across Polymeric Membranes. ACS Omega, 2019, 4, 15255-15264.	1.6	8
67	A metal-organic framework with suitable pore size and dual functionalities for highly efficient post-combustion CO ₂ capture. Journal of Materials Chemistry A, 2019, 7, 3128-3134.	5.2	124
68	Elucidating Traffic Junction Effects in MFI Zeolite Using Kinetic Monte Carlo Simulations. ACS Omega, 2019, 4, 10761-10766.	1.6	4
69	Highlighting non-idealities in C ₂ H ₄ /CO ₂ mixture adsorption in 5A zeolite. Separation and Purification Technology, 2019, 227, 115730.	3.9	19
70	Thermodynamic Insights into the Characteristics of Unary and Mixture Permeances in Microporous Membranes. ACS Omega, 2019, 4, 9512-9521.	1.6	9
71	Dual Strategic Approach to Prepare Defluorinated Triazole-Embedded Covalent Triazine Frameworks with High Gas Uptake Performance. Chemistry of Materials, 2019, 31, 3929-3940.	3.2	36
72	Robust Microporous Metal-Organic Frameworks for Highly Efficient and Simultaneous Removal of Propyne and Propadiene from Propylene. Angewandte Chemie, 2019, 131, 10315-10320.	1.6	16

#	ARTICLE	IF	CITATIONS
73	Induced Fit of C_2H_2 in a Flexible MOF Through Cooperative Action of Open Metal Sites. <i>Angewandte Chemie</i> , 2019, 131, 8603-8607.	1.6	52
74	Robust Microporous Metal-Organic Frameworks for Highly Efficient and Simultaneous Removal of Propyne and Propadiene from Propylene. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10209-10214.	7.2	69
75	Induced Fit of C_2H_2 in a Flexible MOF Through Cooperative Action of Open Metal Sites. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8515-8519.	7.2	208
76	Water-Stable Europium 1,3,6,8-Tetrakis(4-carboxylphenyl)pyrene Framework for Efficient C_2H_2/CO_2 Separation. <i>Inorganic Chemistry</i> , 2019, 58, 5089-5095.	1.9	71
77	Pore Space Partition within a Metal-Organic Framework for Highly Efficient C_2H_2/CO_2 Separation. <i>Journal of the American Chemical Society</i> , 2019, 141, 4130-4136.	6.6	338
78	Highlighting the Influence of Thermodynamic Coupling on Kinetic Separations with Microporous Crystalline Materials. <i>ACS Omega</i> , 2019, 4, 3409-3419.	1.6	14
79	Microporous Metal-Organic Framework with Dual Functionalities for Efficient Separation of Acetylene from Light Hydrocarbon Mixtures. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4897-4902.	3.2	65
80	Elucidation and characterization of entropy effects in mixture separations with micro-porous crystalline adsorbents. <i>Separation and Purification Technology</i> , 2019, 215, 227-241.	3.9	20
81	Diffusing uphill with James Clerk Maxwell and Josef Stefan. <i>Chemical Engineering Science</i> , 2019, 195, 851-880.	1.9	32
82	Newly designed 1,2,3-triazole functionalized covalent triazine frameworks with exceptionally high uptake capacity for both CO_2 and H_2 . <i>Journal of Materials Chemistry A</i> , 2019, 7, 1055-1068.	5.2	57
83	Preparation of benzodiimidazole-containing covalent triazine frameworks for enhanced selective CO_2 capture and separation. <i>Microporous and Mesoporous Materials</i> , 2019, 276, 213-222.	2.2	15
84	Dynamic Adsorption of CO_2/N_2 on Cation-Exchanged Chabazite SSZ-13: A Breakthrough Analysis. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14287-14291.	4.0	27
85	Adjusting the proportions of extra-framework K^+ and Cs^+ cations to construct a μ -molecular gate on ZK-5 for CO_2 removal. <i>Microporous and Mesoporous Materials</i> , 2018, 268, 50-57.	2.2	18
86	The Maxwell-Stefan description of mixture permeation across nanoporous graphene membranes. <i>Chemical Engineering Research and Design</i> , 2018, 133, 316-325.	2.7	16
87	Guest-dependent pressure induced gate-opening effect enables effective separation of propene and propane in a flexible MOF. <i>Chemical Engineering Journal</i> , 2018, 346, 489-496.	6.6	87
88	Beyond Crystal Engineering: Significant Enhancement of C_2H_2/CO_2 Separation by Constructing Composite Material. <i>Inorganic Chemistry</i> , 2018, 57, 3679-3682.	1.9	35
89	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
90	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

#	ARTICLE	IF	CITATIONS
91	A Maxwell-Stefan-Glueckauf description of transient mixture uptake in microporous adsorbents. Separation and Purification Technology, 2018, 191, 392-399.	3.9	19
92	Methodologies for screening and selection of crystalline microporous materials in mixture separations. Separation and Purification Technology, 2018, 194, 281-300.	3.9	91
93	Alkane/alkene mixture diffusion in silicalite-1 studied by MAS PFG NMR. Microporous and Mesoporous Materials, 2018, 257, 128-134.	2.2	23
94	MIL-100Cr with open Cr sites for a record N ₂ /O capture. Chemical Communications, 2018, 54, 14061-14064.	2.2	39
95	Occupancy Dependency of Maxwell-Stefan Diffusivities in Ordered Crystalline Microporous Materials. ACS Omega, 2018, 3, 15743-15753.	1.6	16
96	Enhancing CO ₂ Adsorption and Separation Properties of Aluminophosphate Zeolites by Isomorphous Heteroatom Substitutions. ACS Applied Materials & Interfaces, 2018, 10, 43570-43577.	4.0	30
97	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. Angewandte Chemie - International Edition, 2018, 57, 15183-15188.	7.2	124
98	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. Angewandte Chemie, 2018, 130, 15403-15408.	1.6	98
99	Molecular Sieving of Ethane from Ethylene through the Molecular Cross-Section Size Differentiation in Gallate-based Metal-Organic Frameworks. Angewandte Chemie, 2018, 130, 16252-16257.	1.6	72
100	Molecular Sieving of Ethane from Ethylene through the Molecular Cross-Section Size Differentiation in Gallate-based Metal-Organic Frameworks. Angewandte Chemie - International Edition, 2018, 57, 16020-16025.	7.2	202
101	Molecular sieving of ethylene from ethane using a rigid metal-organic framework. Nature Materials, 2018, 17, 1128-1133.	13.3	532
102	Ethane/ethylene separation in a metal-organic framework with iron-peroxo sites. Science, 2018, 362, 443-446.	6.0	763
103	Exploring the Effect of Ligand-Originated MOF Isomerism and Methoxy Group Functionalization on Selective Acetylene/Methane and Carbon Dioxide/Methane Adsorption Properties in Two NbO-Type MOFs. ACS Applied Materials & Interfaces, 2018, 10, 20559-20568.	4.0	52
104	Nickel-4-(3,5-dicarboxyphenyl)-2,2',6',2''-terpyridine Framework: Efficient Separation of Ethylene from Acetylene/Ethylene Mixtures with a High Productivity. Inorganic Chemistry, 2018, 57, 9489-9494.	1.9	30
105	Enhancing Gas Sorption and Separation Performance via Bisbenzimidazole Functionalization of Highly Porous Covalent Triazine Frameworks. ACS Applied Materials & Interfaces, 2018, 10, 26678-26686.	4.0	52
106	Investigating the non-idealities in adsorption of CO ₂ -bearing mixtures in cation-exchanged zeolites. Separation and Purification Technology, 2018, 206, 208-217.	3.9	34
107	Screening metal-organic frameworks for separation of pentane isomers. Physical Chemistry Chemical Physics, 2017, 19, 8380-8387.	1.3	15
108	A New Isomeric Porous Coordination Framework Showing Single-Crystal to Single-Crystal Structural Transformation and Preferential Adsorption of 1,3-Butadiene from C ₄ Hydrocarbons. Crystal Growth and Design, 2017, 17, 2166-2171.	1.4	31

#	ARTICLE	IF	CITATIONS
109	Highlighting diffusional coupling effects in zeolite catalyzed reactions by combining the Maxwell-Stefan and Langmuir-Hinshelwood formulations. Reaction Chemistry and Engineering, 2017, 2, 324-336.	1.9	12
110	Significant Enhancement of C ₂ H ₂ /C ₂ H ₄ Separation by a Photochromic Diarylethene Unit: A Temperature- and Light-Responsive Separation Switch. Angewandte Chemie, 2017, 129, 8008-8014.	1.6	22
111	Significant Enhancement of C ₂ H ₂ /C ₂ H ₄ Separation by a Photochromic Diarylethene Unit: A Temperature- and Light-Responsive Separation Switch. Angewandte Chemie - International Edition, 2017, 56, 7900-7906.	7.2	145
112	Ultrahigh and Selective SO ₂ Uptake in Inorganic Anion-Pillared Hybrid Porous Materials. Advanced Materials, 2017, 29, 1606929.	11.1	183
113	Flexible Robust Metal-Organic Framework for Efficient Removal of Propyne from Propylene. Journal of the American Chemical Society, 2017, 139, 7733-7736.	6.6	242
114	Highlighting multiplicity in the Gilliland solution to the Maxwell-Stefan equations describing diffusion distillation. Chemical Engineering Science, 2017, 164, 63-70.	1.9	4
115	Pre-design and synthesis of a five-fold interpenetrated pcu-type porous coordination polymer and its CO ₂ /CO separation. CrystEngComm, 2017, 19, 6927-6931.	1.3	9
116	Highly selective adsorption of <i>p</i> -xylene over other C ₈ aromatic hydrocarbons by Co-CUK-1: a combined experimental and theoretical assessment. Dalton Transactions, 2017, 46, 16096-16101.	1.6	20
117	Resolving steady-state multiplicities for diffusion with surface chemical reaction by invoking the Prigogine principle of minimum entropy production. Chemical Engineering Research and Design, 2017, 128, 231-239.	2.7	2
118	Two Analogous Polyhedron-Based MOFs with High Density of Lewis Basic Sites and Open Metal Sites: Significant CO ₂ Capture and Gas Selectivity Performance. ACS Applied Materials & Interfaces, 2017, 9, 32820-32828.	4.0	57
119	Screening metal-organic frameworks for mixture separations in fixed-bed adsorbers using a combined selectivity/capacity metric. RSC Advances, 2017, 7, 35724-35737.	1.7	137
120	Efficient separation of ethylene from acetylene/ethylene mixtures by a flexible-robust metal-organic framework. Journal of Materials Chemistry A, 2017, 5, 18984-18988.	5.2	88
121	Commensurate-incommensurate adsorption and diffusion in ordered crystalline microporous materials. Physical Chemistry Chemical Physics, 2017, 19, 20320-20337.	1.3	16
122	An Ideal Molecular Sieve for Acetylene Removal from Ethylene with Record Selectivity and Productivity. Advanced Materials, 2017, 29, 1704210.	11.1	310
123	Fine-tuning optimal porous coordination polymers using functional alkyl groups for CH ₄ purification. Journal of Materials Chemistry A, 2017, 5, 17874-17880.	5.2	32
124	Using the Maxwell-Stefan formulation for highlighting the influence of interspecies (1 st) friction on binary mixture permeation across microporous and polymeric membranes. Journal of Membrane Science, 2017, 540, 261-276.	4.1	38
125	Flow Enhancement of Shear-Thinning Liquids in Capillaries Subjected to Longitudinal Vibrations. Chemie-Ingenieur-Technik, 2017, 89, 1360-1366.	0.4	3
126	Flexible Metal-Organic Frameworks with Discriminatory Gate-Opening Effect for the Separation of Acetylene from Ethylene/Acetylene Mixtures. European Journal of Inorganic Chemistry, 2016, 2016, 4457-4462.	1.0	42

#	ARTICLE	IF	CITATIONS
127	Extraordinary Separation of Acetylene-Containing Mixtures with Microporous Metal-Organic Frameworks with Open O Donor Sites and Tunable Robustness through Control of the Helical Chain Secondary Building Units. <i>Chemistry - A European Journal</i> , 2016, 22, 5676-5683.	1.7	113
128	Bimodal Functionality in a Porous Covalent Triazine Framework by Rational Integration of an Electron-Rich and -Deficient Pore Surface. <i>Chemistry - A European Journal</i> , 2016, 22, 4931-4937.	1.7	36
129	Investigating the Validity of the Knudsen Diffusivity Prescription for Mesoporous and Macroporous Materials. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 4749-4759.	1.8	22
130	Diffusing uphill with James Clerk Maxwell and Josef Stefan. <i>Current Opinion in Chemical Engineering</i> , 2016, 12, 106-119.	3.8	23
131	Highlighting Diffusional Coupling Effects in Ternary Liquid Extraction and Comparisons with Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 1053-1063.	1.8	14
132	Pore chemistry and size control in hybrid porous materials for acetylene capture from ethylene. <i>Science</i> , 2016, 353, 141-144.	6.0	1,088
133	Harnessing Lewis acidic open metal sites of metal-organic frameworks: the foremost route to achieve highly selective benzene sorption over cyclohexane. <i>Chemical Communications</i> , 2016, 52, 8215-8218.	2.2	76
134	UTSA-74: A MOF-74 Isomer with Two Accessible Binding Sites per Metal Center for Highly Selective Gas Separation. <i>Journal of the American Chemical Society</i> , 2016, 138, 5678-5684.	6.6	489
135	Two heterovalent copper-organic frameworks with multiple secondary building units: high performance for gas adsorption and separation and CO_2 sorption and release. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15081-15087.	5.2	52
136	A Porous Zirconium-Based Metal-Organic Framework with the Potential for the Separation of Butene Isomers. <i>Chemistry - A European Journal</i> , 2016, 22, 14988-14997.	1.7	57
137	Kr/Xe Separation over a Chabazite Zeolite Membrane. <i>Journal of the American Chemical Society</i> , 2016, 138, 9791-9794.	6.6	103
138	Nitrogen-rich microporous carbons for highly selective separation of light hydrocarbons. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13957-13966.	5.2	64
139	Potential of microporous metal-organic frameworks for separation of hydrocarbon mixtures. <i>Energy and Environmental Science</i> , 2016, 9, 3612-3641.	15.6	530
140	Highlighting coupling effects in ionic diffusion. <i>Chemical Engineering Research and Design</i> , 2016, 114, 1-12.	2.7	7
141	Describing mixture permeation across polymeric membranes by a combination of Maxwell-Stefan and Flory-Huggins models. <i>Polymer</i> , 2016, 103, 124-131.	1.8	31
142	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
143	A versatile synthesis of metal-organic framework-derived porous carbons for CO_2 capture and gas separation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 19095-19106.	5.2	43
144	Redox-Active Metal-Organic Composites for Highly Selective Oxygen Separation Applications. <i>Advanced Materials</i> , 2016, 28, 3572-3577.	11.1	55

#	ARTICLE	IF	CITATIONS
145	Tracing the origins of transient overshoots for binary mixture diffusion in microporous crystalline materials. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15482-15495.	1.3	35
146	An Adsorbate Discriminatory Gate Effect in a Flexible Porous Coordination Polymer for Selective Adsorption of CO ₂ over C ₂ H ₂ . <i>Journal of the American Chemical Society</i> , 2016, 138, 3022-3030.	6.6	359
147	Light Hydrocarbon Adsorption Mechanisms in Two Calcium-Based Microporous Metal Organic Frameworks. <i>Chemistry of Materials</i> , 2016, 28, 1636-1646.	3.2	87
148	Adsorptive separation of C ₂ /C ₃ /C ₄ -hydrocarbons on a flexible Cu-MOF: The influence of temperature, chain length and bonding character. <i>Microporous and Mesoporous Materials</i> , 2016, 224, 392-399.	2.2	18
149	Exploiting the gate opening effect in a flexible MOF for selective adsorption of propyne from C ₁ /C ₂ /C ₃ hydrocarbons. <i>Journal of Materials Chemistry A</i> , 2016, 4, 751-755.	5.2	81
150	High acetylene/ethylene separation in a microporous zinc(II) metal-organic framework with low binding energy. <i>Chemical Communications</i> , 2016, 52, 1166-1169.	2.2	67
151	A Rod-Packing Microporous Hydrogen-Bonded Organic Framework for Highly Selective Separation of C ₂ H ₂ /CO ₂ at Room Temperature. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 574-577.	7.2	289
152	Adsorptive Separation of Acetylene from Light Hydrocarbons by Mesoporous Iron Trimesate MIL-100(Fe). <i>Chemistry - A European Journal</i> , 2015, 21, 18431-18438.	1.7	51
153	Entropic Separation of Styrene/Ethylbenzene Mixtures by Exploitation of Subtle Differences in Molecular Configurations in Ordered Crystalline Nanoporous Adsorbents. <i>Langmuir</i> , 2015, 31, 3771-3778.	1.6	46
154	Direct Observation of Xe and Kr Adsorption in a Xe-Selective Microporous Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2015, 137, 7007-7010.	6.6	179
155	Microporous metal-organic framework with dual functionalities for highly efficient removal of acetylene from ethylene/acetylene mixtures. <i>Nature Communications</i> , 2015, 6, 7328.	5.8	404
156	Tailor-Made Pore Surface Engineering in Covalent Organic Frameworks: Systematic Functionalization for Performance Screening. <i>Journal of the American Chemical Society</i> , 2015, 137, 7079-7082.	6.6	351
157	Methodologies for evaluation of metal-organic frameworks in separation applications. <i>RSC Advances</i> , 2015, 5, 52269-52295.	1.7	139
158	Polyfuran-Derived Microporous Carbons for Enhanced Adsorption of CO ₂ and CH ₄ . <i>Langmuir</i> , 2015, 31, 9845-9852.	1.6	32
159	Serpentine diffusion trajectories and the Ouzo effect in partially miscible ternary liquid mixtures. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27428-27436.	1.3	23
160	Nitrogen-doped porous carbons for highly selective CO ₂ capture from flue gases and natural gas upgrading. <i>Materials Today Communications</i> , 2015, 4, 156-165.	0.9	33
161	A combined theoretical and experimental analysis on transient breakthroughs of C ₂ H ₆ /C ₂ H ₄ in fixed beds packed with ZIF-7. <i>Microporous and Mesoporous Materials</i> , 2015, 208, 55-65.	2.2	59
162	Utilizing transient breakthroughs for evaluating the potential of Kureha carbon for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2015, 269, 135-147.	6.6	22

#	ARTICLE	IF	CITATIONS
163	Selective Adsorption of Water from Mixtures with 1-Alcohols by Exploitation of Molecular Packing Effects in CuBTC. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3658-3666.	1.5	29
164	A stable metal-organic framework with suitable pore sizes and rich uncoordinated nitrogen atoms on the internal surface of micropores for highly efficient CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7361-7367.	5.2	86
165	Two-Dimensional Covalent Organic Frameworks for Carbon Dioxide Capture through Channel-Wall Functionalization. <i>Angewandte Chemie</i> , 2015, 127, 3029-3033.	1.6	129
166	Two-Dimensional Covalent Organic Frameworks for Carbon Dioxide Capture through Channel-Wall Functionalization. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2986-2990.	7.2	572
167	Highly selective adsorption of ethylene over ethane in a MOF featuring the combination of open metal site and π -complexation. <i>Chemical Communications</i> , 2015, 51, 2714-2717.	2.2	151
168	Reprint of: Transient breakthroughs of CO ₂ /CH ₄ and C ₃ H ₆ /C ₃ H ₈ mixtures in fixed beds packed with Ni-MOF-74. <i>Chemical Engineering Science</i> , 2015, 124, 109-117.	1.9	30
169	A microporous metal-organic framework with rare lvt topology for highly selective C ₂ H ₂ /C ₂ H ₄ separation at room temperature. <i>Chemical Communications</i> , 2015, 51, 5610-5613.	2.2	61
170	Separation of polar compounds using a flexible metal-organic framework. <i>Chemical Communications</i> , 2015, 51, 8421-8424.	2.2	41
171	Uphill diffusion in multicomponent mixtures. <i>Chemical Society Reviews</i> , 2015, 44, 2812-2836.	18.7	106
172	Separation of benzene from mixtures with water, methanol, ethanol, and acetone: highlighting hydrogen bonding and molecular clustering influences in CuBTC. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 20114-20124.	1.3	20
173	Hydroquinone and Quinone-Grafted Porous Carbons for Highly Selective CO ₂ Capture from Flue Gases and Natural Gas Upgrading. <i>Environmental Science & Technology</i> , 2015, 49, 9364-9373.	4.6	46
174	Exploiting Framework Flexibility of a Metal-Organic Framework for Selective Adsorption of Styrene over Ethylbenzene. <i>Inorganic Chemistry</i> , 2015, 54, 4403-4408.	1.9	50
175	Natural Gas Purification Using a Porous Coordination Polymer with Water and Chemical Stability. <i>Inorganic Chemistry</i> , 2015, 54, 4279-4284.	1.9	133
176	Exceptional Hydrophobicity of a Large-Pore Metal-Organic Zeolite. <i>Journal of the American Chemical Society</i> , 2015, 137, 7217-7223.	6.6	270
177	The accessibility of nitrogen sites makes a difference in selective CO ₂ adsorption of a family of isostructural metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19417-19426.	5.2	80
178	A π -electron deficient diaminotriazine functionalized MOF for selective sorption of benzene over cyclohexane. <i>Chemical Communications</i> , 2015, 51, 15386-15389.	2.2	64
179	Entropic Separations of Mixtures of Aromatics by Selective Face-to-Face Molecular Stacking in One-Dimensional Channels of Metal-Organic Frameworks and Zeolites. <i>ChemPhysChem</i> , 2015, 16, 532-535.	1.0	17
180	Potential of Metal-Organic Frameworks for Separation of Xenon and Krypton. <i>Accounts of Chemical Research</i> , 2015, 48, 211-219.	7.6	330

#	ARTICLE	IF	CITATIONS
181	Evaluation of procedures for estimation of the isosteric heat of adsorption in microporous materials. <i>Chemical Engineering Science</i> , 2015, 123, 191-196.	1.9	28
182	Separating mixtures by exploiting molecular packing effects in microporous materials. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 39-59.	1.3	75
183	Separating Xylene Isomers by Commensurate Stacking of <i>p</i> -Xylene within Channels of MAF-8. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7774-7778.	7.2	93
184	Highly Selective Water Adsorption in a Lanthanum Metal-Organic Framework. <i>Chemistry - A European Journal</i> , 2014, 20, 7922-7925.	1.7	58
185	The Maxwell-Stefan description of mixture diffusion in nanoporous crystalline materials. <i>Microporous and Mesoporous Materials</i> , 2014, 185, 30-50.	2.2	176
186	High CO ₂ /N ₂ /O ₂ /CO separation in a chemically robust porous coordination polymer with low binding energy. <i>Chemical Science</i> , 2014, 5, 660-666.	3.7	181
187	Microimaging of transient guest profiles to monitor mass transfer in nanoporous materials. <i>Nature Materials</i> , 2014, 13, 333-343.	13.3	187
188	A new metal-organic framework with potential for adsorptive separation of methane from carbon dioxide, acetylene, ethylene, and ethane established by simulated breakthrough experiments. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2628.	5.2	91
189	Transient breakthroughs of CO ₂ /CH ₄ and C ₃ H ₆ /C ₃ H ₈ mixtures in fixed beds packed with Ni-MOF-74. <i>Chemical Engineering Science</i> , 2014, 117, 407-415.	1.9	49
190	A new MOF-5 homologue for selective separation of methane from C ₂ hydrocarbons at room temperature. <i>APL Materials</i> , 2014, 2, .	2.2	33
191	A microporous six-fold interpenetrated hydrogen-bonded organic framework for highly selective separation of C ₂ H ₄ /C ₂ H ₆ . <i>Chemical Communications</i> , 2014, 50, 13081-13084.	2.2	147
192	Enhanced CO ₂ sorption and selectivity by functionalization of a NbO-type metal-organic framework with polarized benzothiadiazole moieties. <i>Chemical Communications</i> , 2014, 50, 12105-12108.	2.2	103
193	The Adsorption and Simulated Separation of Light Hydrocarbons in Isorecticular Metal-Organic Frameworks Based on Dendritic Ligands with Different Aliphatic Side Chains. <i>Chemistry - A European Journal</i> , 2014, 20, 9073-9080.	1.7	40
194	Highly selective separation of small hydrocarbons and carbon dioxide in a metal-organic framework with open copper(ii) coordination sites. <i>RSC Advances</i> , 2014, 4, 23058.	1.7	35
195	Utilizing the Gate-Opening Mechanism in ZIF-7 for Adsorption Discrimination between N ₂ and CO ₂ . <i>Journal of Physical Chemistry C</i> , 2014, 118, 17831-17837.	1.5	51
196	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
197	Fluorocarbon adsorption in hierarchical porous frameworks. <i>Nature Communications</i> , 2014, 5, 4368.	5.8	104
198	A Survey of Separation Strategies Using Microporous Crystalline Materials. <i>Indian Chemical Engineer</i> , 2014, 56, 147-174.	0.9	1

#	ARTICLE	IF	CITATIONS
199	Experiments and simulations on separating a CO ₂ /CH ₄ mixture using K-KFI at low and high pressures. <i>Microporous and Mesoporous Materials</i> , 2014, 184, 21-27.	2.2	34
200	Introduction of π -Complexation into Porous Aromatic Framework for Highly Selective Adsorption of Ethylene over Ethane. <i>Journal of the American Chemical Society</i> , 2014, 136, 8654-8660.	6.6	383
201	Strong influence of the H ₂ binding energy on the Maxwell-Stefan diffusivity in NU-100, UiO-68, and IRMOF-16. <i>Microporous and Mesoporous Materials</i> , 2014, 185, 190-196.	2.2	8
202	Separation of Hexane Isomers in a Metal-Organic Framework with Triangular Channels. <i>Science</i> , 2013, 340, 960-964.	6.0	589
203	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
204	A cationic microporous metal-organic framework for highly selective separation of small hydrocarbons at room temperature. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9916.	5.2	83
205	Low-energy regeneration and high productivity in a lanthanide-hexacarboxylate framework for high-pressure CO ₂ /CH ₄ /H ₂ separation. <i>Chemical Communications</i> , 2013, 49, 6773.	2.2	66
206	A microporous metal-organic framework assembled from an aromatic tetracarboxylate for H ₂ purification. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2543.	5.2	62
207	Metal-Organic Framework with Functional Amide Groups for Highly Selective Gas Separation. <i>Crystal Growth and Design</i> , 2013, 13, 2670-2674.	1.4	67
208	Carbon Dioxide Capture from Air Using Amine-Grafted Porous Polymer Networks. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4057-4061.	1.5	153
209	Influence of adsorption thermodynamics on guest diffusivities in nanoporous crystalline materials. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 7994.	1.3	70
210	Expanded Organic Building Units for the Construction of Highly Porous Metal-Organic Frameworks. <i>Chemistry - A European Journal</i> , 2013, 19, 14886-14894.	1.7	66
211	Computer-Assisted Screening of Ordered Crystalline Nanoporous Adsorbents for Separation of Alkane Isomers. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11867-11871.	7.2	89
212	A robust doubly interpenetrated metal-organic framework constructed from a novel aromatic tricarboxylate for highly selective separation of small hydrocarbons. <i>Chemical Communications</i> , 2012, 48, 6493.	2.2	224
213	A microporous lanthanide-tricarboxylate framework with the potential for purification of natural gas. <i>Chemical Communications</i> , 2012, 48, 10856.	2.2	134
214	Cu-TDPAT, an <i>ir</i> -Type Dual-Functional Metal-Organic Framework Offering Significant Potential for Use in H ₂ and Natural Gas Purification Processes Operating at High Pressures. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16609-16618.	1.5	68
215	Microporous metal-organic framework with potential for carbon dioxide capture at ambient conditions. <i>Nature Communications</i> , 2012, 3, 954.	5.8	716
216	Microporous metal-organic frameworks for storage and separation of small hydrocarbons. <i>Chemical Communications</i> , 2012, 48, 11813.	2.2	297

#	ARTICLE	IF	CITATIONS
217	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
218	Metal-organic frameworks with potential for energy-efficient adsorptive separation of light hydrocarbons. <i>Energy and Environmental Science</i> , 2012, 5, 9107.	15.6	604
219	Interplay of Metalloligand and Organic Ligand to Tune Micropores within Isostructural Mixed-Metal Organic Frameworks (M ² MOFs) for Their Highly Selective Separation of Chiral and Achiral Small Molecules. <i>Journal of the American Chemical Society</i> , 2012, 134, 8703-8710.	6.6	326
220	Diffusion in porous crystalline materials. <i>Chemical Society Reviews</i> , 2012, 41, 3099.	18.7	239
221	Hydrocarbon Separations in a Metal-Organic Framework with Open Iron(II) Coordination Sites. <i>Science</i> , 2012, 335, 1606-1610.	6.0	1,635
222	Polyamine-ethered Porous Polymer Networks for Carbon Dioxide Capture from Flue Gas. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 7480-7484.	7.2	518
223	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
224	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
225	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
226	CO ₂ /CH ₄ , CH ₄ /H ₂ and CO ₂ /CH ₄ /H ₂ separations at high pressures using Mg ₂ (dobdc). <i>Microporous and Mesoporous Materials</i> , 2012, 151, 481-487.	2.2	123
227	Adsorptive separation of CO ₂ /CH ₄ /CO gas mixtures at high pressures. <i>Microporous and Mesoporous Materials</i> , 2012, 156, 217-223.	2.2	80
228	Reprint of: CO ₂ /CH ₄ , CH ₄ /H ₂ and CO ₂ /CH ₄ /H ₂ separations at high pressures using Mg ₂ (dobdc). <i>Microporous and Mesoporous Materials</i> , 2012, 157, 94-100.	2.2	34
229	A Microporous Metal-Organic Framework for Highly Selective Separation of Acetylene, Ethylene, and Ethane from Methane at Room Temperature. <i>Chemistry - A European Journal</i> , 2012, 18, 613-619.	1.7	204
230	High Separation Capacity and Selectivity of C ₂ Hydrocarbons over Methane within a Microporous Metal-Organic Framework at Room Temperature. <i>Chemistry - A European Journal</i> , 2012, 18, 1901-1904.	1.7	142
231	In silico screening of metal-organic frameworks in separation applications. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 10593.	1.3	300
232	Enhanced carbon dioxide capture upon incorporation of N,N'-dimethylethylenediamine in the metal-organic framework CuBTTri. <i>Chemical Science</i> , 2011, 2, 2022.	3.7	491
233	Screening Metal-Organic Frameworks by Analysis of Transient Breakthrough of Gas Mixtures in a Fixed Bed Adsorber. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12941-12950.	1.5	197
234	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

#	ARTICLE	IF	CITATIONS
235	Metal-Organic Frameworks as Adsorbents for Hydrogen Purification and Precombustion Carbon Dioxide Capture. <i>Journal of the American Chemical Society</i> , 2011, 133, 5664-5667.	6.6	465
236	Sulfonate-Grafted Porous Polymer Networks for Preferential CO ₂ Adsorption at Low Pressure. <i>Journal of the American Chemical Society</i> , 2011, 133, 18126-18129.	6.6	522
237	Evaluating metal-organic frameworks for post-combustion carbon dioxide capture via temperature swing adsorption. <i>Energy and Environmental Science</i> , 2011, 4, 3030.	15.6	901
238	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
239	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
240	Selective Binding of O ₂ over N ₂ in a Redox-Active Metal-Organic Framework with Open Iron(II) Coordination Sites. <i>Journal of the American Chemical Society</i> , 2011, 133, 14814-14822.	6.6	470
241	Investigating the potential of MgMOF-74 membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2011, 377, 249-260.	4.1	85
242	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
243	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
244	Molecular dynamics investigation of the self-diffusion of binary mixture diffusion in the metal-organic framework Zn(tbip) accounting for framework flexibility. <i>Microporous and Mesoporous Materials</i> , 2011, 143, 125-131.	2.2	10
245	In-Depth Study of Mass Transfer in Nanoporous Materials by Micro-imaging. <i>Chemie-Ingenieur-Technik</i> , 2011, 83, 2211-2218.	0.4	10
246	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
247	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
248	Ethene/ethane separation by the MOF membrane ZIF-8: Molecular correlation of permeation, adsorption, diffusion. <i>Journal of Membrane Science</i> , 2011, 369, 284-289.	4.1	386
249	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
250	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
251	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
252	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

#	ARTICLE	IF	CITATIONS
253	Investigating the reasons for the significant influence of lattice flexibility on self-diffusivity of ethane in Zn(tbp). <i>Microporous and Mesoporous Materials</i> , 2010, 130, 92-96.	2.2	39
254	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
255	In silico screening of zeolite membranes for CO ₂ capture. <i>Journal of Membrane Science</i> , 2010, 360, 323-333.	4.1	280
256	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
257	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
258	Distance and angular holonomic constraints in molecular simulations. <i>Journal of Chemical Physics</i> , 2010, 133, 034114.	1.2	16
259	Porous Polymer Networks: Synthesis, Porosity, and Applications in Gas Storage/Separation. <i>Chemistry of Materials</i> , 2010, 22, 5964-5972.	3.2	512
260	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
261	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
262	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
263	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
264	Mutual Slowing-Down Effects in Mixture Diffusion in Zeolites. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13154-13156.	1.5	34
265	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
266	Thermosensitive gating effect and selective gas adsorption in a porous coordination nanocage. <i>Chemical Communications</i> , 2010, 46, 7352.	2.2	91
267	Assessing Guest Diffusivities in Porous Hosts from Transient Concentration Profiles. <i>Physical Review Letters</i> , 2009, 102, 065901.	2.9	76
268	Design of the Reduction of Events with Darbepoetin alfa in Heart Failure (RED-HF): a Phase III, anaemia correction, morbidity-mortality trial. <i>European Journal of Heart Failure</i> , 2009, 11, 795-801.	2.9	107
269	Assessing Surface Permeabilities from Transient Guest Profiles in Nanoporous Host Materials. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3525-3528.	7.2	82
270	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

#	ARTICLE	IF	CITATIONS
271	A Molecular Dynamics investigation of the influence of framework flexibility on self-diffusivity of ethane in Zn(tbp) frameworks. <i>Microporous and Mesoporous Materials</i> , 2009, 125, 97-100.	2.2	46
272	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
273	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
274	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
275	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
276	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
277	Method for Analyzing Structural Changes of Flexible Metal–Organic Frameworks Induced by Adsorbates. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19317-19327.	1.5	71
278	Describing the Diffusion of Guest Molecules Inside Porous Structures. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19756-19781.	1.5	263
279	Transferable Force Field for Carbon Dioxide Adsorption in Zeolites. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8814-8820.	1.5	199
280	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
281	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
282	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
283	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
284	Diffusion of hydrocarbon mixtures in MFI zeolite: Influence of intersection blocking. <i>Chemical Engineering Journal</i> , 2008, 140, 614-620.	6.6	63
285	¹ H 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
286	Diffusion of alkane mixtures in MFI zeolite. <i>Microporous and Mesoporous Materials</i> , 2008, 107, 296-298.	2.2	20
287	A Simulation Study of Alkanes in Linde Type A Zeolites. <i>Adsorption Science and Technology</i> , 2007, 25, 417-427.	1.5	32
288	Interpreting Unary, Binary, and Ternary Mixture Permeation Across a SAPO-34 Membrane with Loading-Dependent Maxwell–Stefan Diffusivities. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5075-5082.	1.5	80

#	ARTICLE	IF	CITATIONS
289	Using molecular simulations for screening of zeolites for separation of CO ₂ /CH ₄ mixtures. Chemical Engineering Journal, 2007, 133, 121-131.	6.6	186
290	Mixture diffusion in zeolites studied by MAS PFG NMR and molecular simulation. Microporous and Mesoporous Materials, 2007, 105, 124-131.	2.2	76
291	A computational study of CO ₂ , N ₂ , and CH ₄ adsorption in zeolites. Adsorption, 2007, 13, 469-476.	1.4	159
292	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. Journal of Physical Chemistry B, 2006, 110, 2195-2201.	1.2	51
293	Scale Up of Slurry Bubble Reactors. Oil and Gas Science and Technology, 2006, 61, 443-458.	1.4	34
294	Entropy effects in adsorption and diffusion of alkane isomers in mordenite: An investigation using CBMC and MD simulations. Microporous and Mesoporous Materials, 2005, 84, 179-191.	2.2	59
295	A moving bed reactor concept for alkane isomerization. Chemical Engineering Journal, 2005, 109, 107-113.	6.6	13
296	Exploiting the Bjerknes force in bubble column reactors. Chemical Engineering Science, 2005, 60, 5962-5970.	1.9	21
297	Mass transfer from Taylor bubbles rising in single capillaries. Chemical Engineering Science, 2005, 60, 6430-6437.	1.9	199
298	Relation between Pore Sizes of Protein Crystals and Anisotropic Solute Diffusivities. Journal of the American Chemical Society, 2005, 127, 875-879.	6.6	56
299	Quantification of Binary Diffusion in Protein Crystals. Journal of Physical Chemistry B, 2005, 109, 10561-10566.	1.2	24
300	Diffusion of Alkane Mixtures in Zeolites: Validating the Maxwell-Stefan Formulation Using MD Simulations. Journal of Physical Chemistry B, 2005, 109, 6386-6396.	1.2	129
301	Hydrodynamics of Taylor Flow in Vertical Capillaries: Flow Regimes, Bubble Rise Velocity, Liquid Slug Length, and Pressure Drop. Industrial & Engineering Chemistry Research, 2005, 44, 4884-4897.	1.8	250
302	Adsorption of Xanthene Dyes by Lysozyme Crystals. Langmuir, 2005, 21, 1475-1480.	1.6	31
303	The Darken Relation for Multicomponent Diffusion in Liquid Mixtures of Linear Alkanes: An Investigation Using Molecular Dynamics (MD) Simulations. Industrial & Engineering Chemistry Research, 2005, 44, 6939-6947.	1.8	155
304	Analytic solution of the Maxwell-Stefan equations for multicomponent permeation across a zeolite membrane. Chemical Engineering Journal, 2004, 97, 37-45.	6.6	64
305	Modeling the occupancy dependence of diffusivities in zeolites. Microporous and Mesoporous Materials, 2004, 76, 233-246.	2.2	100
306	Effectiveness factor for zeolite catalysed isomerization reactions. Chemical Engineering Journal, 2004, 99, 105-116.	6.6	8

#	ARTICLE	IF	CITATIONS
307	CFD simulations of mass transfer from Taylor bubbles rising in circular capillaries. <i>Chemical Engineering Science</i> , 2004, 59, 2535-2545.	1.9	323
308	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
309	Nonequilibrium Molecular Dynamics Simulations of Diffusion of Binary Mixtures Containing Shortn-Alkanes in Faujasite. <i>Journal of Physical Chemistry B</i> , 2004, 108, 13481-13491.	1.2	108
310	United Atom Force Field for Alkanes in Nanoporous Materials. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12301-12313.	1.2	314
311	Understanding the Role of Sodium during Adsorption: A Force Field for Alkanes in Sodium-Exchanged Faujasites. <i>Journal of the American Chemical Society</i> , 2004, 126, 11377-11386.	6.6	255
312	A Strategy for Scaling Up the Fischer-Tropsch Bubble Column Slurry Reactor. <i>Topics in Catalysis</i> , 2003, 26, 21-28.	1.3	16
313	Modelling issues in zeolite based separation processes. <i>Separation and Purification Technology</i> , 2003, 33, 213-254.	3.9	191
314	Correlation Effects in Diffusion of CH ₄ /CF ₄ Mixtures in MFI Zeolite. A Study Linking MD Simulations with the Maxwell-Stefan Formulation. <i>Langmuir</i> , 2003, 19, 7977-7988.	1.6	177
315	Simulating Adsorption of Alkanes in Zeolites. , 2003, , .		1
316	Liquid Dispersion in Large Diameter Bubble Columns, with and without Internals. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 360-366.	0.9	51
317	2D Slurry Bubble Column Hydrodynamic Phenomena Clarified with a 3D Gas-Liquid Model. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 456-464.	0.9	2
318	Intensification of Slurry Bubble Columns by Vibration Excitement. <i>Canadian Journal of Chemical Engineering</i> , 2003, 81, 655-659.	0.9	6
319	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
320	Modeling Issues in Zeolite Applications. , 2003, , .		0
321	Entropy effects during sorption of alkanes in zeolites. <i>Chemical Society Reviews</i> , 2002, 31, 185-194.	18.7	193
322	Self-diffusivities in multicomponent mixtures in zeolites. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 1891-1898.	1.3	73
323	Influence of interphase mass transfer on the composition trajectories and crossing of boundaries in ternary azeotropic distillation. <i>Separation and Purification Technology</i> , 2002, 29, 1-13.	3.9	18
324	Verification of the Maxwell-Stefan theory for tracer diffusion in zeolites. <i>Chemical Engineering Journal</i> , 2002, 85, 7-15.	6.6	33

#	ARTICLE	IF	CITATIONS
325	Investigation of entropy effects during sorption of mixtures of alkanes in MFI zeolite. Chemical Engineering Journal, 2002, 88, 81-94.	6.6	109
326	Verification of the Maxwell–Stefan theory for diffusion of three-component mixtures in zeolites. Chemical Engineering Journal, 2002, 87, 1-9.	6.6	29
327	Monte Carlo simulations in zeolites. Current Opinion in Solid State and Materials Science, 2001, 5, 455-461.	5.6	38
328	Separation of linear, mono-methyl and di-methyl alkanes in the 5–7 carbon atom range by exploiting configurational entropy effects during sorption on silicalite-1. Physical Chemistry Chemical Physics, 2001, 3, 4390-4398.	1.3	60
329	Molecular simulations of adsorption and siting of light alkanes in silicalite-1. Physical Chemistry Chemical Physics, 2001, 3, 453-462.	1.3	70
330	Kinetic Monte Carlo simulations of transport diffusivities of binary mixtures in zeolites. Physical Chemistry Chemical Physics, 2001, 3, 3185-3191.	1.3	41
331	Verification of the Maxwell–Stefan theory for mixture diffusion in zeolites by comparison with MD simulations. Chemical Engineering Journal, 2001, 84, 207-214.	6.6	10
332	Comparative analysis of CFD models of dense gas–solid systems. AIChE Journal, 2001, 47, 1035-1051.	1.8	432
333	Using CFD for scaling up gas–solid bubbling fluidised bed reactors with Geldart A powders. Chemical Engineering Journal, 2001, 82, 247-257.	6.6	52
334	Gas hold-up in bubble columns: Operation with concentrated slurries versus high viscosity liquid. Canadian Journal of Chemical Engineering, 2000, 78, 442-448.	0.9	26
335	Modelling reactive distillation. Chemical Engineering Science, 2000, 55, 5183-5229.	1.9	643
336	Modelling sieve tray hydraulics using computational fluid dynamics. Chemical Engineering Journal, 2000, 77, 143-151.	6.6	83
337	Liquid phase dispersion in bubble columns operating in the churn-turbulent flow regime. Chemical Engineering Journal, 2000, 78, 43-51.	6.6	59
338	The generalized Maxwell–Stefan model for diffusion in zeolites. Chemical Engineering Science, 2000, 55, 2923-2930.	1.9	216
339	Three-phase Eulerian simulations of bubble column reactors operating in the churn-turbulent regime: a scale up strategy. Chemical Engineering Science, 2000, 55, 3275-3286.	1.9	122
340	Design and scale-up of the Fischer–Tropsch bubble column slurry reactor. Fuel Processing Technology, 2000, 64, 73-105.	3.7	230
341	Separation of hydrocarbon mixtures using zeolite membranes: a modelling approach combining molecular simulations with the Maxwell–Stefan theory. Separation and Purification Technology, 2000, 21, 111-136.	3.9	95
342	A Scale-Up Strategy for a Commercial Scale Bubble Column Slurry Reactor for Fischer-Tropsch Synthesis. Oil and Gas Science and Technology, 2000, 55, 359-393.	1.4	65

#	ARTICLE	IF	CITATIONS
343	Comparison of equilibrium stage and nonequilibrium stage models for reactive distillation. Chemical Engineering Journal, 2000, 76, 33-47.	6.6	125
344	Modeling of Diffusion in Zeolites. Reviews in Chemical Engineering, 2000, 16, .	2.3	228
345	Monte Carlo simulations of self- and transport-diffusivities of 2-methylhexane in silicalite. Physical Chemistry Chemical Physics, 2000, 2, 2389-2394.	1.3	62
346	Permeation of Hexane Isomers across ZSM-5 Zeolite Membranes. Industrial & Engineering Chemistry Research, 2000, 39, 2618-2622.	1.8	42
347	Fundamentals and selection of advanced Fischer-Tropsch reactors. Applied Catalysis A: General, 1999, 186, 55-70.	2.2	196
348	Modelling of a bubble column slurry reactor for Fischer-Tropsch synthesis. Catalysis Today, 1999, 52, 279-289.	2.2	273
349	Gas holdup and mass transfer in bubble column reactors operated at elevated pressure. Chemical Engineering Science, 1999, 54, 2237-2246.	1.9	198
350	Influence of scale on the hydrodynamics of bubble columns operating in the churn-turbulent regime: experiments vs. Eulerian simulations. Chemical Engineering Science, 1999, 54, 4903-4911.	1.9	161
351	Rise velocity of a swarm of large gas bubbles in liquids. Chemical Engineering Science, 1999, 54, 171-183.	1.9	142
352	Multicomponent reaction engineering model for Fe-catalyzed Fischer-Tropsch synthesis in commercial scale slurry bubble column reactors. Chemical Engineering Science, 1999, 54, 5013-5019.	1.9	62
353	CFD Simulations of Sieve Tray Hydrodynamics. Chemical Engineering Research and Design, 1999, 77, 639-646.	2.7	72
354	Molecular Simulations of Adsorption Isotherms for Linear and Branched Alkanes and Their Mixtures in Silicalite. Journal of Physical Chemistry B, 1999, 103, 1102-1118.	1.2	472
355	Effect of gas density on large-bubble holdup in bubble column reactors. AIChE Journal, 1998, 44, 2333-2336.	1.8	35
356	Eulerian simulations of bubbling behaviour in gas-solid fluidised beds. Computers and Chemical Engineering, 1998, 22, S299-S306.	2.0	133
357	Sorption-Induced Diffusion-Selective Separation of Hydrocarbon Isomers Using Silicalite. Journal of Physical Chemistry A, 1998, 102, 7727-7730.	1.1	118
358	Adsorption of Linear and Branched Alkanes in the Zeolite Silicalite-1. Journal of the American Chemical Society, 1998, 120, 5599-5600.	6.6	163
359	Improving the efficiency of the configurational-bias Monte Carlo algorithm. Molecular Physics, 1998, 94, 727-733.	0.8	212
360	Gas holdup in slurry bubble columns: Effect of column diameter and slurry concentrations. AIChE Journal, 1997, 43, 311-316.	1.8	165

#	ARTICLE	IF	CITATIONS
361	The Maxwell-Stefan approach to mass transfer. Chemical Engineering Science, 1997, 52, 861-911.	1.9	1,310
362	Characterization of regimes and regime transitions in bubble columns by chaos analysis of pressure signals. Chemical Engineering Science, 1997, 52, 4447-4459.	1.9	188
363	Size, structure and dynamics of "large" bubbles in a two-dimensional slurry bubble column. Chemical Engineering Science, 1996, 51, 4619-4629.	1.9	127
364	Gas holdup in bubble column reactors operating in the churn-turbulent flow regime. AIChE Journal, 1996, 42, 2627-2634.	1.8	151
365	Influence of increased gas density on hydrodynamics of bubble-column reactors. AIChE Journal, 1994, 40, 112-119.	1.8	58
366	Strategies for multiphase reactor selection. Chemical Engineering Science, 1994, 49, 4029-4065.	1.9	165
367	Problems and pitfalls in the use of the Fick formulation for intraparticle diffusion. Chemical Engineering Science, 1993, 48, 845-861.	1.9	173
368	Film model for mass transfer in non-ideal multicomponent fluid mixtures. The Chemical Engineering Journal, 1993, 52, 19-29.	0.4	2
369	Multiple solutions in reactive distillation for methyl tert-butyl ether synthesis. Industrial & Engineering Chemistry Research, 1993, 32, 1706-1709.	1.8	148
370	Influence of gas density on the stability of homogeneous flow in bubble columns. Industrial & Engineering Chemistry Research, 1993, 32, 747-750.	1.8	16
371	A model for gas holdup in bubble columns incorporating the influence of gas density on flow regime transitions. Chemical Engineering Science, 1991, 46, 2491-2496.	1.9	152
372	Multicomponent surface diffusion of adsorbed species: a description based on the generalized Maxwell-Stefan equations. Chemical Engineering Science, 1990, 45, 1779-1791.	1.9	240
373	Liquid-liquid equilibrium in the toluene-methyl ethyl ketone-water system. Fluid Phase Equilibria, 1989, 50, 339-346.	1.4	2
374	Use of an axial-dispersion model for kinetic description of hydrocracking. Chemical Engineering Science, 1989, 44, 703-712.	1.9	41
375	Use of additives to enhance the selectivity of liquid surfactant membranes. Journal of Membrane Science, 1989, 40, 329-342.	4.1	5
376	Mass-transfer efficiency of sieve tray extraction columns. Industrial & Engineering Chemistry Research, 1989, 28, 642-644.	1.8	9
377	Comments on "Simulation and optimization of an industrial ammonia reactor". Industrial & Engineering Chemistry Research, 1989, 28, 1266-1266.	1.8	3
378	Rapid hydrocarbon type separation of vacuum residues. Fresenius Zeitschrift für Analytische Chemie, 1988, 332, 358-361.	0.7	1

#	ARTICLE	IF	CITATIONS
379	SEPARATION-IRREVERSIBLE THERMO A UNIFIED THEORY OF SEPARATION PROCESSES BASED ON. Chemical Engineering Communications, 1987, 59, 33-64.	1.5	23
380	Effect of emulsion breakage on selectivity in the separation of hydrocarbon mixtures using aqueous surfactant membranes. Journal of Membrane Science, 1987, 34, 141-154.	4.1	18
381	Effect of surfactant type on selectivity for the separation of 1-methylnaphthalene from dodecane using liquid membranes. Journal of Membrane Science, 1987, 32, 19-30.	4.1	12
382	Simple gas chromatographic determination of the distribution of normal alkanes in the kerosene fraction of petroleum. Analyst, The, 1987, 112, 49.	1.7	6
383	A simplified procedure for the solution of the dusty gas model equations for steady-state transport in non-reacting systems. The Chemical Engineering Journal, 1987, 35, 75-81.	0.4	43
384	Diffusion in multicomponent electrolyte systems. The Chemical Engineering Journal, 1987, 35, 19-24.	0.4	35
385	Physical significance of the mass transfer coefficient. The Chemical Engineering Journal, 1987, 35, 67-68.	0.4	1
386	Condensation of vapor mixtures. 2. Comparison with experiment. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 98-101.	0.6	58
387	Condensation of vapor mixtures. 1. Nonequilibrium models and design procedures. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 83-97.	0.6	66
388	Comments on "Effect of vapor efflux from a spherical particle on heat transfer from a hot gas". Industrial & Engineering Chemistry Fundamentals, 1984, 23, 377-379.	0.7	3
389	Hydrodynamics and mass transfer in bubble columns in operating in the churn-turbulent regime. Industrial & Engineering Chemistry Process Design and Development, 1981, 20, 475-482.	0.6	89
390	A SIMPLIFIED FILM MODEL DESCRIPTION OF MULTICOMPONENT INTERPHASE MASS TRANSFER. Chemical Engineering Communications, 1979, 3, 29-39.	1.5	13
391	MASS AND ENERGY TRANSFER IN MULTICOMPONENT SYSTEMS. Chemical Engineering Communications, 1979, 3, 201-275.	1.5	151
392	A note on the film and penetration models for multicomponent mass transfer. Chemical Engineering Science, 1978, 33, 765-767.	1.9	14
393	Penetration depths in multicomponent mass transfer. Chemical Engineering Science, 1978, 33, 1495-1497.	1.9	6
394	Multicomponent Gaseous Diffusion in Porous Media in the Transition Region. A Matrix Method for Calculation of Steady-State Transport Rates. Industrial & Engineering Chemistry Fundamentals, 1977, 16, 228-232.	0.7	10
395	A film model analysis of non-equimolar distillation of multicomponent mixtures. Chemical Engineering Science, 1977, 32, 1197-1203.	1.9	21
396	Condensation of a binary vapour mixture in the presence of an inert gas. Chemical Engineering Science, 1977, 32, 741-745.	1.9	38

#	ARTICLE	IF	CITATIONS
397	A generalized film model for mass transfer in non-ideal fluid mixtures. Chemical Engineering Science, 1977, 32, 659-667.	1.9	50
398	A multicomponent film model incorporating a general matrix method of solution to the Maxwell-Stefan equations. AIChE Journal, 1976, 22, 383-389.	1.8	240
399	Comprehensive Pore Tuning in an Ultrastable Fluorinated Anion Cross-Linked Cage-Like MOF for Simultaneous Benchmark Propyne Recovery and Propylene Purification. Angewandte Chemie, 0, , .	1.6	7