Stefano B Brandani

List of Publications by Year
in descending order

170 papers	6,422 citations	81900 39 h-index	76900 74 g-index
173 all docs	173 docs citations	173 times ranked	6056 citing authors

#	Article	IF	Citations
1	Carbon capture and storage update. Energy and Environmental Science, 2014, 7, 130-189.	30.8	1,765
2	Emerging CO2 capture systems. International Journal of Greenhouse Gas Control, 2015, 40, 126-166.	4.6	352
3	Process configuration studies of the amine capture process for coal-fired power plants. International Journal of Greenhouse Gas Control, 2013, 16, 29-40.	4.6	173
4	Understanding Carbon Dioxide Adsorption on Univalent Cation Forms of the Flexible Zeolite Rho at Conditions Relevant to Carbon Capture from Flue Gases. Journal of the American Chemical Society, 2012, 134, 17628-17642.	13.7	158
5	Performance-Based Screening of Porous Materials for Carbon Capture. Chemical Reviews, 2021, 121, 10666-10741.	47.7	115
6	Analysis of ZLC desorption curves for gaseous systems. Adsorption, 1996, 2, 133-143.	3.0	86
7	Adsorption Materials and Processes for Carbon Capture from Gas-Fired Power Plants: AMPGas. Industrial & Engineering Chemistry Research, 2016, 55, 3840-3851.	3.7	84
8	Triggered Gate Opening and Breathing Effects during Selective CO₂ Adsorption by Merlinoite Zeolite. Journal of the American Chemical Society, 2019, 141, 12744-12759.	13.7	82
9	Self-diffusion of propane and propylene in 5A and 13X zeolite crystals studied by the tracer ZLC method. Zeolites, 1995, 15, 624-631.	0.5	80
10	Analysis of ZLC desorption curves for liquid systems. Chemical Engineering Science, 1995, 50, 2055-2059.	3.8	79
11	Diffusion mechanism of CO2 in 13X zeolite beads. Adsorption, 2014, 20, 121-135.	3.0	77
12	Process simulation of a dual-stage Selexol process for 95% carbon capture efficiency at an integrated gasification combined cycle power plant. International Journal of Greenhouse Gas Control, 2015, 39, 17-26.	4.6	75
13	Net, excess and absolute adsorption and adsorption of helium. Adsorption, 2016, 22, 261-276.	3.0	75
14	Design of a H2 PSA for cogeneration of ultrapure hydrogen and power at an advanced integrated gasification combined cycle with pre-combustion capture. Adsorption, 2014, 20, 511-524.	3.0	71
15	Microwave swing regeneration of aqueous monoethanolamine for post-combustion CO 2 capture. Applied Energy, 2017, 192, 126-133.	10.1	71
16	Gas separation by adsorption: technological drivers and opportunities for improvement. Current Opinion in Chemical Engineering, 2019, 24, 131-142.	7.8	69
17	CO2 capture from syngas by an adsorption process at a biomass gasification CHP plant: Its comparison with amine-based CO2 capture. International Journal of Greenhouse Gas Control, 2015, 35, 71-81.	4.6	68
18	Process integration of a Ca-looping carbon capture process in a cement plant. International Journal of Greenhouse Gas Control, 2013, 19, 530-540.	4.6	64

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19	A Multiscale Study of MOFs as Adsorbents in H₂ PSA Purification. Industrial & Engineering Chemistry Research, 2013, 52, 9946-9957.	3.7	63
20	From Crystal to Adsorption Column: Challenges in Multiscale Computational Screening of Materials for Adsorption Separation Processes. Industrial & Engineering Chemistry Research, 2018, 57, 15491-15511.	3.7	61
21	A reference high-pressure CO2 adsorption isotherm for ammonium ZSM-5 zeolite: results of an interlaboratory study. Adsorption, 2018, 24, 531-539.	3.0	59
22	The effect of pore structure on the CO2 adsorption efficiency ofÂpolyamine impregnated porous carbons. Microporous and Mesoporous Materials, 2015, 208, 129-139.	4.4	58
23	Concentration dependence of self-diffusivity of methanol in NaX zeolite crystals. Zeolites, 1995, 15, 494-495.	0.5	57
24	Effects of nonlinear equilibrium on zero length column experiments. Chemical Engineering Science, 1998, 53, 2791-2798.	3.8	57
25	Diffusion, self-diffusion and counter-diffusion of benzene and p-xylene in silicalite. Microporous and Mesoporous Materials, 2000, 35-36, 283-300.	4.4	55
26	Diffusivities of n-Alkanes in 5A Zeolite Measured by Neutron Spin Echo, Pulsed-Field Gradient NMR, and Zero Length Column Techniques. Adsorption, 2005, 11, 403-407.	3.0	55
27	Multi-objective optimisation using surrogate models for the design of VPSA systems. Computers and Chemical Engineering, 2015, 82, 318-329.	3.8	50
28	ZLC Measurements under non-linear conditions. Chemical Engineering Science, 2000, 55, 1205-1212.	3.8	49
29	A stand-alone solar adsorption refrigerator for humanitarian aid. Solar Energy, 2014, 100, 172-178.	6.1	49
30	Molecular simulation and experiments of water adsorption in a high surface area activated carbon: Hysteresis, scanning curves and spatial organization of water clusters. Carbon, 2017, 118, 127-138.	10.3	49
31	Transport diffusion and self-diffusion of benzene in NaX and CaX zeolite crystals studied by ZLC and tracer ZLC methods. Microporous Materials, 1996, 7, 323-331.	1.6	48
32	Adsorption Kinetics and Dynamic Behavior of a Carbon Monolith. Adsorption, 2004, 10, 99-109.	3.0	48
33	Liquid phase sorption and diffusion of branched and cyclic hydrocarbons in silicalite. Microporous and Mesoporous Materials, 1998, 25, 81-93.	4.4	46
34	Cation Control of Molecular Sieving by Flexible Li-Containing Zeolite Rho. Journal of Physical Chemistry C, 2016, 120, 19652-19662.	3.1	45
35	A review of common practices in gravimetric and volumetric adsorption kinetic experiments. Adsorption, 2021, 27, 295-318.	3.0	45
36	Development of Mixed Matrix Membranes Containing Zeolites for Post-combustion Carbon Capture.. Energy Procedia, 2014, 63, 160-166.	1.8	43

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37	Inâ€...situ Synchrotron IR Microspectroscopy of CO₂ Adsorption on Single Crystals of the Functionalized MOF Sc₂(BDCâ€NH₂)₃. Angewandte Chemie - International Edition, 2014, 53, 13483-13487.	13.8	42
38	Cycle and performance analysis of a small-scale adsorption heat transformer for desalination and cooling applications. Chemical Engineering Journal, 2019, 378, 122104.	12.7	42
39	Novel solutions for closed-loop reverse electrodialysis: Thermodynamic characterisation and perspective analysis. Energy, 2019, 166, 674-689.	8.8	42
40	Analytical solution for ZLC desorption curves with bi-porous adsorbent particles. Chemical Engineering Science, 1996, 51, 3283-3288.	3.8	41
41	A multi-objective genetic algorithm for the design of pressure swing adsorption. Engineering Optimization, 2009, 41, 833-854.	2.6	40
42	Caâ€“Cu looping process for CO2 capture from a power plant and its comparison with Ca-looping, oxy-combustion and amine-based CO2 capture processes. International Journal of Greenhouse Gas Control, 2015, 43, 198-212.	4.6	40
43	An Adsorption Reverse Electrodialysis system for the generation of electricity from low-grade heat. Applied Energy, 2018, 231, 222-234.	10.1	40
44	Adsorption artificial tree for atmospheric carbon dioxide capture, purification and compression. Energy, 2018, 162, 1158-1168.	8.8	40
45	Title is missing!. Adsorption, 1998, 4, 17-24.	3.0	39
46	Kinetics of liquid phase batch adsorption experiments. Adsorption, 2021, 27, 353-368.	3.0	36
47	Exploring new sources of efficiency in process-driven materials screening for post-combustion carbon capture. Energy and Environmental Science, 2020, 13, 1018-1037.	30.8	35
48	CFD simulation of dynamic characteristics in liquidâ€“solid fluidized beds. Powder Technology, 2012, 227, 104-110.	4.2	32
49	Heat Effects in ZLC Experiments. Adsorption, 1998, 4, 275-285.	3.0	31
50	Diffusion of linear paraffins in NaCaA studied by the ZLC method. Microporous and Mesoporous Materials, 2006, 90, 278-283.	4.4	30
51	Development of a Semiautomated Zero Length Column Technique for Carbon Capture Applications: Rapid Capacity Ranking of Novel Adsorbents. Industrial & Engineering Chemistry Research, 2015, 54, 6772-6780.	3.7	30
52	The zero length column technique to measure adsorption equilibrium and kinetics: lessons learnt from 30 years of experience. Adsorption, 2021, 27, 319-351.	3.0	29
53	Carbon Dioxide Capture from Air: A Simple Analysis. Energy and Environment, 2012, 23, 319-328.	4.6	28
54	Automatic estimation of kinetic and isotherm parameters from ZLC experiments. Chemical Engineering Science, 2015, 126, 616-624.	3.8	28

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55	Development of a Semiautomated Zero Length Column Technique for Carbon Capture Applications: Study of Diffusion Behavior of CO₂ in MOFs. Industrial & Engineering Chemistry Research, 2015, 54, 5777-5783.	3.7	28
56	Counterdiffusion ofp-Xylene/Benzene andp-Xylene/o-Xylene in Silicalite Studied by the Zero-Length Column Technique. Industrial & Engineering Chemistry Research, 2000, 39, 821-828.	3.7	26
57	Analysis of breakthrough dynamics in rectangular channels of arbitrary aspect ratio. AICHE Journal, 2005, 51, 1980-1990.	3.6	26
58	A new model for the prediction of the behaviour of fluidized beds. Powder Technology, 2006, 163, 80-87.	4.2	26
59	Measurement of Diffusion in Microporous Solids by Macroscopic Methods. , 2005, , 45-84.		26
60	CFD simulation of flow pattern and jet penetration depth in gas-fluidized beds with single and double jets. Chemical Engineering Science, 2012, 68, 108-119.	3.8	26
61	Design and experimental study of a small scale adsorption desalinator. Applied Energy, 2019, 253, 113584.	10.1	26
62	Evaluation of the main diffusion path in zeolites from ZLC desorption curves. Zeolites, 1997, 18, 282-285.	0.5	24
63	Measurement of Diffusion in Porous Solids by Zero Length Column (ZLC) Methods. Membrane Science and Technology, 2000, 6, 187-212.	0.5	24
64	Dynamics of Carbon Dioxide Breakthrough in a Carbon Monolith Over a Wide Concentration Range. Adsorption, 2005, 11, 473-477.	3.0	23
65	Analysis of thermal effects in infrared and interference microscopy: n-Butane-5A and methanolâ€“ferrierite systems. Microporous and Mesoporous Materials, 2007, 104, 18-25.	4.4	23
66	CO₂adsorption on different organo-modified SBA-15 silicas: a multidisciplinary study on the effects of basic surface groups. Physical Chemistry Chemical Physics, 2017, 19, 14114-14128.	2.8	22
67	Efficient Simulation and Acceleration of Convergence for a Dual Piston Pressure Swing Adsorption System. Industrial & Engineering Chemistry Research, 2013, 52, 8897-8905.	3.7	21
68	Exploring the opportunities for carbon capture in modular, small-scale steam methane reforming: An energetic perspective. International Journal of Hydrogen Energy, 2019, 44, 14732-14743.	7.1	21
69	Ionogels at the Water-Energy Nexus for Desalination Powered by Ultralow-Grade Heat. Environmental Science & Technology, 2020, 54, 3591-3598.	10.0	21
70	Computational fluid dynamics for dense gas-solid fluidized beds. Progress in Natural Science: Materials International, 2005, 15, 42-51.	4.4	20
71	CFD simulation of fluidization quality in the three-dimensional fluidized bed. Progress in Natural Science: Materials International, 2008, 18, 729-733.	4.4	20
72	A generalization of the Foscolo and Gibilaro particle-bed model to predict the fluid bed stability of some fresh FCC catalysts at elevated temperatures. Chemical Engineering Science, 2001, 56, 5401-5412.	3.8	19

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73	Process simulation of a dual-stage Selexol unit for pre-combustion carbon capture at an IGCC power plant. Energy Procedia, 2014, 63, 1751-1755.	1.8	19
74	Sorption and Diffusion of SF6 in Silicalite Crystals. Adsorption, 1999, 5, 369-372.	3.0	18
75	Detailed Process Simulation of Pre-combustion IGCC Plants Using Coal-slurry and Dry Coal Gasifiers. Energy Procedia, 2013, 37, 2196-2203.	1.8	18
76	Process and Cost Analysis of a Biomass Power Plant with in Situ Calcium Looping CO₂ Capture Process. Industrial & Engineering Chemistry Research, 2014, 53, 10721-10733.	3.7	18
77	Sorption kinetics: measurement of surface resistance. Adsorption, 2021, 27, 787-799.	3.0	18
78	Solar powered adsorption desalination for Northern and Southern Europe. Energy, 2021, 232, 120942.	8.8	18
79	Analysis of the discontinuities in magnetized bubbling fluidized beds. Chemical Engineering Science, 1996, 51, 4631-4637.	3.8	17
80	Process Simulation of Aqueous MEA Plants for Post-combustion Capture from Coal-fired Power Plants. Energy Procedia, 2013, 37, 1523-1531.	1.8	17
81	Nonâ€Porous versus Mesoporous Siliceous Materials for CO₂ Capture. ChemistryOpen, 2019, 8, 719-727.	1.9	17
82	An experimental and modelling study of water vapour adsorption on SBA-15. Microporous and Mesoporous Materials, 2019, 282, 53-72.	4.4	17
83	A model for the interpretation of the bed collapse experiment. Powder Technology, 2005, 151, 37-43.	4.2	16
84	Testing the stability of novel adsorbents for carbon capture applications using the zero length column technique. Chemical Engineering Research and Design, 2018, 131, 406-413.	5.6	16
85	Moments Analysis of the Zero Length Column Method. Industrial & Engineering Chemistry Research, 1996, 35, 315-319.	3.7	15
86	Surrogate based Optimisation for Design of Pressure Swing Adsorption Systems. Computer Aided Chemical Engineering, 2012, 30, 1217-1221.	0.5	15
87	Efficient and Rapid Screening of Novel Adsorbents for Carbon Capture in the UK IGSCC Project. Energy Procedia, 2013, 37, 40-47.	1.8	15
88	Integration of multi-stage membrane carbon capture processes to coal-fired power plants using highly permeable polymers. Green Energy and Environment, 2016, 1, 211-221.	8.7	15
89	Accelerated degradation of MOFs under flue gas conditions. Faraday Discussions, 2016, 192, 181-195.	3.2	15
90	A Porous Carbon with Excellent Gas Storage Properties from Waste Polystyrene. Nanomaterials, 2019, 9, 726.	4.1	15

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91	Measurement of Intracrystalline Diffusion by Zero Length Column Tracer Exchange. Studies in Surface Science and Catalysis, 1994, , 1323-1330.	1.5	14
92	Diffusion in a unidimensional zeolite pore system: Propane in AlPO4-5. Microporous Materials, 1997, 8, 193-200.	1.6	14
93	Comparison of equations-of-state with Pâ€“Îâ€“T experimental data of binary mixtures rich in CO2 under the conditions of pipeline transport. Journal of Supercritical Fluids, 2014, 95, 474-490.	3.2	14
94	Robust algorithms for the solution of the ideal adsorbed solution theory equations. AICHE Journal, 2015, 61, 981-991.	3.6	14
95	Understanding CO2 adsorption in a flexible zeolite through a combination of structural, kinetic and modelling techniques. Separation and Purification Technology, 2021, 256, 117846.	7.9	14
96	Analysis of discontinuities arising from the one-dimensional equations of change for fluidization. Chemical Engineering Science, 1994, 49, 611-619.	3.8	13
97	Flowrate correction for the determination of isotherms and Darken thermodynamic factors from Zero Length Column (ZLC) experiments. Adsorption, 2011, 17, 687-694.	3.0	13
98	Analysis and Interpretation of Zero Length Column Response Curves. Chemie-Ingenieur-Technik, 2013, 85, 1714-1718.	0.8	13
99	Structural changes of synthetic paulingite (Na,H-ECR-18) upon dehydration and CO₂ adsorption. Zeitschrift Fur Kristallographie - Crystalline Materials, 2015, 230, 223-231.	0.8	13
100	A Simple Graphical Check of Consistency forÂZero Length Column Desorption Curves. Chemical Engineering and Technology, 2016, 39, 1194-1198.	1.5	13
101	The influence of particle size of amino-functionalized MCM-41 silicas on CO₂ adsorption. Physical Chemistry Chemical Physics, 2017, 19, 29449-29460.	2.8	13
102	A priori predictions of type I and type V isotherms by the rigid adsorbent lattice fluid. Adsorption, 2020, 26, 989-1000.	3.0	13
103	The Wong-Sandler mixing rules and EOS which are thermodynamically consistent at infinite pressure. Chemical Engineering Science, 1998, 53, 853-856.	3.8	12
104	Adsorption and diffusion of CO2 in CPO-27â€“Ni beads. Adsorption, 2020, 26, 711-721.	3.0	12
105	Monolithic Adsorbent-Based Rapid-Cycle Vacuum Pressure Swing Adsorption Process for Carbon Capture from Small-Scale Steam Methane Reforming. Industrial & Engineering Chemistry Research, 2020, 59, 7109-7120.	3.7	12
106	On the inapplicability of mixing rules based on the infinite pressure reference state for equations of state which use the hard-sphere repulsive term. Fluid Phase Equilibria, 1996, 121, 179-184.	2.5	11
107	A New Numerical Method for Accurate Simulation of Fast Cyclic Adsorption Processes. Adsorption, 2005, 11, 113-122.	3.0	11
108	On the Chromatographic Measurement of Equilibrium Isotherms Using Large Concentration Steps. Adsorption, 2005, 11, 231-235.	3.0	11

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109	Scaleâ€up strategy for the jetting fluidized bed using a CFD model based on twoâ€fluid theory. Canadian Journal of Chemical Engineering, 2009, 87, 204-210.	1.7	11
110	Pure and Binary Adsorption of Carbon Dioxide and Nitrogen on AQSOA FAM Z02. Journal of Chemical & Engineering Data, 2018, 63, 661-670.	1.9	11
111	Using a volumetric apparatus to identify and measure the mass transfer resistance in commercial adsorbents. Microporous and Mesoporous Materials, 2020, 304, 109277.	4.4	11
112	Measurement of water vapor adsorption isotherms in mesoporous materials using the zero length column technique. Chemical Engineering Science, 2020, 214, 115417.	3.8	11
113	Carbon dioxide mass transport in commercial carbon molecular sieves using a volumetric apparatus. Separation and Purification Technology, 2020, 245, 116862.	7.9	11
114	Cation Ordering and Exsolution in Copperâ€Containing Forms of the Flexible Zeolite Rho (Cu,Mâ€Rho;) Tj ETQq0 0 0 rgBT /Overlock 10 2021, 27, 13029-13039.	3.3	11
115	Mathematical description of pressure drop profile for the 1-valve and 2-valve bed collapse experiment. Chemical Engineering Science, 2011, 66, 973-981.	3.8	10
116	Characterisation of an Automated Dual Piston Pressure Swing Adsorption (DP-PSA) System. Energy Procedia, 2013, 37, 57-64.	1.8	10
117	End use and disposal of CO₂ â€“ storage or utilisation?: general discussion. Faraday Discussions, 2016, 192, 561-579.	3.2	10
118	Comparison of amine-impregnated mesoporous carbon with microporous activated carbon and 13X zeolite for biogas purification. Journal of Porous Materials, 2017, 24, 1473-1479.	2.6	10
119	Carbon nanotube/PVA aerogels impregnated with PEI: solid adsorbents for CO₂ capture. Sustainable Energy and Fuels, 2018, 2, 1630-1640.	4.9	10
120	Hiding extra-framework cations in zeolitesÂL and Y by internal ion exchange and its effect on CO₂ adsorption. Journal of Materials Chemistry A, 2020, 8, 3280-3292.	10.3	10
121	Adsorption reverse electrodialysis driven by power plant waste heat to generate electricity and provide cooling. International Journal of Energy Research, 2021, 45, 1971-1987.	4.5	10
122	Accurate blank corrections for zero length column experiments. Adsorption, 2021, 27, 129-145.	3.0	10
123	Two- and three-dimensional computational studies of liquidâ€“solid fluidization. Powder Technology, 2013, 235, 180-191.	4.2	9
124	The rigid adsorbent lattice fluid model for pure and mixed gas adsorption. AICHE Journal, 2019, 65, 1304-1314.	3.6	9
125	Combining the Nonuniform Structure and Flow Maldistribution for the Accurate Prediction of the Process Performance of Monolithic Adsorbent Systems. Industrial & Engineering Chemistry Research, 2020, 59, 3162-3172.	3.7	9
126	Measurement of Diffusion in Microporous Solids by Macroscopic Methods. , 1997, , 261-296.		9

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127	A Hybrid Carbon Capture System of Indirect Calcination and Amine Absorption for a Cement Plant. Energy Procedia, 2014, 63, 6428-6439.	1.8	8
128	Predictions of Stepped Isotherms in Breathing Adsorbents by the Rigid Adsorbent Lattice Fluid. Journal of Physical Chemistry C, 2019, 123, 14517-14529.	3.1	8
129	Liquid Phase Counter-Diffusion Measurements of Aromatics in Silicalite Using the ZLC Method. Adsorption, 2003, 9, 197-204.	3.0	7
130	Techno-Economic Study of Adsorption Processes for Pre-Combustion Carbon Capture at a Biomass CHP Plant. Energy Procedia, 2014, 63, 6738-6744.	1.8	7
131	A model for sound propagation between two adsorbing microporous plates. Journal of the Acoustical Society of America, 2014, 135, 2634-2645.	1.1	7
132	Common tangent plane in mixed-gas adsorption. Fluid Phase Equilibria, 2015, 392, 49-55.	2.5	7
133	Structural Chemistry, Flexibility, and CO₂ Adsorption Performance of Alkali Metal Forms of Merlinoite with a Framework Si/Al Ratio of 4.2. Journal of Physical Chemistry C, 2021, 125, 27403-27419.	3.1	7
134	A thermodynamic model for protein partitioning in reversed micellar systems. Chemical Engineering Science, 1994, 49, 3681-3686.	3.8	6
135	An algorithm for the regression of the UNIQUAC interaction parameters in liquidâ€“liquid equilibrium for single- and multi-temperature experimental data. Fluid Phase Equilibria, 2014, 374, 79-85.	2.5	6
136	Net, excess and absolute adsorption in mixed gas adsorption. Adsorption, 2017, 23, 569-576.	3.0	6
137	Activity coefficient models for accurate prediction of adsorption azeotropes. Adsorption, 2021, 27, 1191-1206.	3.0	6
138	CFD Simulation of Fluid Dynamics in a Gas-Solid Jetting Fluidized Bed. International Journal of Chemical Reactor Engineering, 2007, 5, .	1.1	5
139	Modeling of Magnetic-Field-Assisted Fluidization: Model Development and CFD Simulation of Magnetically Stabilized Fluidized Beds. KONA Powder and Particle Journal, 2015, 32, 217-226.	1.7	5
140	Development of an equilibrium theory solver applied to pressure swing adsorption cycles used in carbon capture processes. Computers and Chemical Engineering, 2016, 94, 18-27.	3.8	5
141	CCS â€“ A technology for now: general discussion. Faraday Discussions, 2016, 192, 125-151.	3.2	5
142	The speed, direction and stability of concentration shocks in a fluidised bed. Chemical Engineering Science, 1998, 53, 1233-1238.	3.8	4
143	Comments on â€œAn Analytical Solution for the Analysis of Zero-Length-Column Experiments with Heat Effectsâ€• Industrial & Engineering Chemistry Research, 2003, 42, 2033-2033.	3.7	4
144	Dual-piston pressure swing adsorption system: Instrumentation and characterisation with pure gas experiments. Chemical Engineering Science, 2020, 214, 115423.	3.8	4

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145	Direct measurement of the mass transport coefficient of water in silica-gel using the zero length column technique. Energy, 2022, 239, 121945.	8.8	4
146	A novel adsorption differential volumetric apparatus to measure mass transfer in nanoporous materials. Separation and Purification Technology, 2022, 283, 120210.	7.9	4
147	Water Adsorption on AQSOA-FAM-Z02 Beads. Journal of Chemical & Engineering Data, 2022, 67, 1723-1731.	1.9	4
148	Jump conditions for one-dimensional two-phase shock waves in fluidised beds: The effect of the jump in fluid pressure. Chemical Engineering Science, 1996, 51, 4639-4647.	3.8	3
149	Simple new EOS mixing rules which incorporate lattice fluid excess functions. Chemical Engineering Science, 1998, 53, 1041-1047.	3.8	3
150	A Simplified Model for Acoustic Measurement of Diffusion in Microporous Solids. Adsorption, 2005, 11, 433-436.	3.0	3
151	Diffusion of n-alkanes in zeolites: the benefit of observation over different length scales. Studies in Surface Science and Catalysis, 2007, 170, 981-987.	1.5	3
152	Development of a Flowsheet Design Framework of Multi-Step PSA Cycles for CO2 Capture. Computer Aided Chemical Engineering, 2009, , 849-854.	0.5	3
153	Prediction ability of a new minimum bubbling criterion. Advanced Powder Technology, 2013, 24, 1-13.	4.1	3
154	Work of separation in CO 2 capture: Applicability of the value function. Chemical Engineering Science, 2015, 126, 604-607.	3.8	3
155	Macroscopic Measurement of Adsorption and Diffusion in Zeolites. , 2010, , 195-212.		3
156	Equation of State Mixing Rules That Incorporate Only the Residual Part of the UNIQUAC Model. Industrial & Engineering Chemistry Research, 1998, 37, 2929-2935.	3.7	2
157	The flow pattern and residence time distribution for an endless belt solidâ€“liquid contactor. Chemical Engineering Science, 1999, 54, 417-432.	3.8	2
158	Extension of generalised mixing rules to cubic equations of state. Journal of Chemical Thermodynamics, 2004, 36, 949-956.	2.0	2
159	On the properties of equations of state at infinite pressure. AICHE Journal, 2007, 53, 986-988.	3.6	2
160	Multicriteria Design framework for CO2 capture by multi-step PSA cycles. Computer Aided Chemical Engineering, 2009, 26, 603-608.	0.5	2
161	Adsorption celebrates 25Âyears. Adsorption, 2020, 26, 3-3.	3.0	2
162	Novel Strategy to Produce Ultrapure Hydrogen from Coal with Pre-combustion Carbon Capture. Energy Procedia, 2014, 63, 2023-2030.	1.8	1

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163	Determining the Properties of Novel Nanoporous Materials for the Evaluation of Process Performance in Carbon Capture Applications. Advanced Science Letters, 2017, 23, 6012-6014.	0.2	1
164	Extruded monoliths for gas separation processes: Height equivalent to a theoretical plate and pressure drop correlations. AICHE Journal, 0, , .	3.6	1
165	Measurement of Diffusion in Small Pore Zeolites to Improve Selectivity in Separation Processes. Structure and Bonding, 2020, , 121-144.	1.0	0
166	Exact equivalence at cyclic steady state between isothermal diffusion and linear driving force models for linear adsorption systems. Adsorption, 2021, 27, 171-180.	3.0	0
167	Martin BÃ¼low: response. Adsorption, 2021, 27, 993-993.	3.0	0
168	Response to the letter to the editor by Silva and Rodrigues. Adsorption, 2022, 28, 101-103.	3.0	0
169	Analysis of CO2 kinetics in Na,Cs-Rho crystals using the zero length column: a case study for slow systems. Brazilian Journal of Chemical Engineering, 0, , 1.	1.3	0
170	THE ZLC METHOD FOR DIFFUSION MEASUREMENTS. , 2007, , .		0