

Joeri F M Denayer

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

219
papers

10,788
citations

52
h-index

96
g-index

229
ext. papers

11,747
ext. citations

6.5
avg, IF

6.19
L-index

#	Paper	IF	Citations
219	Efficient coproduction of butanol, ethanol, and biohydrogen from municipal solid waste through a cocultivated biorefinery. <i>Energy Conversion and Management</i> , 2022 , 255, 115303	10.6	0
218	Biogas upgrading by adsorption processes: Mathematical modeling, simulation and optimization approach [A review]. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107483	6.8	2
217	Induction heating as an alternative electrified heating method for carbon capture process. <i>Chemical Engineering Journal</i> , 2021 , 431, 133380	14.7	0
216	Multi-component ppm level adsorption of VOCs on the ZIF-8 and UiO-66 MOFs: Breakthrough analysis with selected ion flow tube mass spectrometry. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 106568	6.8	4
215	Apple pomace biorefinery for ethanol, mycoprotein, and value-added biochemicals production by <i>Mucor indicus</i> . <i>Energy</i> , 2021 , 122469	7.9	1
214	CO ₂ Capture on an Adsorbent-Coated Finned Tube Heat Exchanger: Effect of the Adsorbent Thickness. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 4677-4681	3.9	1
213	Capturing renewable isobutanol from model vapor mixtures using an all-silica beta zeolite. <i>Chemical Engineering Journal</i> , 2021 , 412, 128658	14.7	3
212	Kinetic separation of C ₄ olefins using Y-fum-fcu-MOF with ultra-fine-tuned aperture size. <i>Chemical Engineering Journal</i> , 2021 , 413, 127388	14.7	6
211	Hierarchical ZIF-8 composite membranes: Enhancing gas separation performance by exploiting molecular dynamics in hierarchical hybrid materials. <i>Journal of Membrane Science</i> , 2021 , 620, 118943	9.6	4
210	Adsorption Size Effects for Langmuir Systems in Process Simulators: Case Study Comparing Explicit Langmuir-Based Models and FASTIAS. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 12092-12099	3.9	0
209	Effect of Adsorption Duration and Purge Flowrate on Pressure Swing Adsorption Performance. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 13684-13691	3.9	1
208	Techno-economic aspects of different process approaches based on brown macroalgae feedstock: A step toward commercialization of seaweed-based biorefineries. <i>Algal Research</i> , 2021 , 58, 102366	5	8
207	Hydrogen Clathrates: Next Generation Hydrogen Storage Materials. <i>Energy Storage Materials</i> , 2021 , 41, 69-107	19.4	16
206	Hydrothermal pretreatment: An efficient process for improvement of biobutanol, biohydrogen, and biogas production from orange waste via a biorefinery approach. <i>Bioresource Technology</i> , 2021 , 341, 125834	11	3
205	Efficient Downstream Processing of Renewable Alcohols Using Zeolite Adsorbents. <i>Structure and Bonding</i> , 2020 , 85-119	0.9	1
204	Identifying Selective Adsorbents for the Recovery of Renewable Isobutanol. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 9115-9124	8.3	3
203	Hydrogen chloride removal from hydrogen gas by adsorption on hydrated ion-exchanged zeolites. <i>Chemical Engineering Journal</i> , 2020 , 381, 122512	14.7	18

202	A 3D-Printed Zeolitic Imidazolate Framework-8 Monolith For Flue- and Biogas Separations by Adsorption: Influence of Flow Distribution and Process Parameters. <i>Frontiers in Chemical Engineering</i> , 2020 , 2,	1	2
201	A reference high-pressure CH ₄ adsorption isotherm for zeolite Y: results of an interlaboratory study. <i>Adsorption</i> , 2020 , 26, 1253-1266	2.6	11
200	Selection of binder recipes for the formulation of MOFs into resistant pellets for molecular separations by fixed-bed adsorption. <i>Microporous and Mesoporous Materials</i> , 2020 , 304, 109322	5.3	13
199	A new honeycomb carbon monolith for CO ₂ capture by rapid temperature swing adsorption using steam regeneration. <i>Chemical Engineering Journal</i> , 2020 , 383, 123075	14.7	18
198	3D-Printed ZIF-8 Monoliths for Biobutanol Recovery. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 8813-8824	3.9	18
197	Effect of core-shell structuring of chabazite zeolite with a siliceous zeolite thin layer on the separation of acetone-butanol-ethanol vapor in humid vapor conditions. <i>Chemical Engineering Journal</i> , 2019 , 363, 292-299	14.7	16
196	3D-Printed Zeolitic Imidazolate Framework Structures for Adsorptive Separations. <i>ACS Applied Nano Materials</i> , 2019 , 2, 4991-4999	5.6	25
195	Nanoporous ZSM-5 Crystals Coated with Silicalite-1 for Enhanced p-Xylene Separation. <i>ACS Applied Nano Materials</i> , 2019 , 2, 2642-2650	5.6	10
194	Highly Robust MOF Polymeric Beads with a Controllable Size for Molecular Separations. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 13694-13703	9.5	26
193	Macroscopic and Microscopic View of Competitive and Cooperative Adsorption of Alcohol Mixtures on ZIF-8. <i>Langmuir</i> , 2019 , 35, 3887-3896	4	9
192	Concentration and temperature profiles in a fixed bed column based on an analytical solution of the axial dispersion model for binary and multicomponent non-isothermal adsorption processes. <i>Computers and Chemical Engineering</i> , 2019 , 123, 78-86	4	
191	Equilibrium Theory-Based Assessment of Dual-Reflux Pressure Swing Adsorption Cycles That Utilize Light Gas for Pressure Swing. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 350-365	3.9	9
190	Unravelling the influence of carbon dioxide on the adsorptive recovery of butanol from fermentation broth using ITQ-29 and ZIF-8. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 9957-9964	3.6	10
189	Improving the selectivity to 4-tert-butylresorcinol by adjusting the surface chemistry of heteropolyacid-based alkylation catalysts. <i>Journal of Catalysis</i> , 2018 , 359, 198-211	7.3	22
188	Nonideality in the Adsorption of Ethanol/Ethyl Acetate/Water Mixtures On ZIF-8 Metal Organic Framework. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 7040-7047	3.9	8
187	3D-printed SAPO-34 monoliths for gas separation. <i>Microporous and Mesoporous Materials</i> , 2018 , 255, 185-191	5.3	74
186	An explicit multicomponent adsorption isotherm model: accounting for the size-effect for components with Langmuir adsorption behavior. <i>Adsorption</i> , 2018 , 24, 517-530	2.6	14
185	Hierarchical Pore Development of ZIF-8 MOF by Simple Salt-Assisted Mechanosynthesis. <i>Crystal Growth and Design</i> , 2018 , 18, 274-279	3.5	46

184	Applying the wave theory to fixed-bed dynamics of Metal-Organic Frameworks exhibiting stepped adsorption isotherms: Water/ethanol separation on ZIF-8. <i>Chemical Engineering Journal</i> , 2017 , 324, 313-323	14.7	19
183	Intensified Biobutanol Recovery by using Zeolites with Complementary Selectivity. <i>ChemSusChem</i> , 2017 , 10, 2968-2977	8.3	23
182	Gel-based morphological design of zirconium metal-organic frameworks. <i>Chemical Science</i> , 2017 , 8, 3939-3948	12.3	
181	Stepped water isotherm and breakthrough curves on aluminium fumarate metal-organic framework: experimental and modelling study. <i>Adsorption</i> , 2017 , 23, 185-192	2.6	10
180	Optimal design of dual-reflux pressure swing adsorption units via equilibrium theory: Process configurations employing heavy gas for pressure swing. <i>Chemical Engineering Journal</i> , 2017 , 311, 385-406	14.7	14
179	CO ₂ , CH ₄ and N ₂ separation with a 3DFD-printed ZSM-5 monolith. <i>Chemical Engineering Journal</i> , 2017 , 308, 719-726	14.7	105
178	Modeling of Adsorption Thermodynamics of Linear and Branched Alkanes in the Aluminum Fumarate Metal Organic Framework. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 20287-20295	3.8	1
177	Shape selective properties of the Al-fumarate metal-organic framework in the adsorption and separation of n-alkanes, iso-alkanes, cyclo-alkanes and aromatic hydrocarbons. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 3294-301	3.6	29
176	Synthesis, characterization and sorption properties of functionalized Cr-MIL-101-X (X=H, Cl, Br, CH ₃ , C ₆ H ₄ , B ₂ , (CH ₃) ₂) materials. <i>Journal of Solid State Chemistry</i> , 2016 , 238, 195-202	3.3	24
175	Molecular separations with breathing metal-organic frameworks: modelling packed bed adsorbers. <i>Dalton Transactions</i> , 2016 , 45, 4416-30	4.3	18
174	An aliphatic copper metal-organic framework as versatile shape selective adsorbent in liquid phase separations. <i>Microporous and Mesoporous Materials</i> , 2016 , 226, 292-298	5.3	30
173	On the electrochemical deposition of metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 3914-3925	13	88
172	A continuous flow reactor setup as a tool for rapid synthesis of micron sized NaA zeolite. <i>Microporous and Mesoporous Materials</i> , 2016 , 226, 133-139	5.3	9
171	On controlling the anodic electrochemical film deposition of HKUST-1 metal-organic frameworks. <i>Microporous and Mesoporous Materials</i> , 2016 , 224, 302-310	5.3	41
170	The role of crystal diversity in understanding mass transfer in nanoporous materials. <i>Nature Materials</i> , 2016 , 15, 401-6	27	111
169	Cathode flow field design for nitric oxide/hydrogen fuel cell in cogeneration of hydroxylamine and electricity. <i>International Journal of Energy Research</i> , 2016 , 40, 1355-1366	4.5	5
168	Theoretical study of the effect of trickle phase conditions on competitive adsorption in packed bed adsorption columns. <i>Chemical Engineering Journal</i> , 2016 , 297, 35-44	14.7	
167	Enhanced gas sorption and breathing properties of the new sulfone functionalized COMOC-2 metal organic framework. <i>Dalton Transactions</i> , 2016 , 45, 9485-91	4.3	20

166	Separation properties of the MIL-125(Ti) Metal-Organic Framework in high-performance liquid chromatography revealing cis/trans selectivity. <i>Journal of Chromatography A</i> , 2016 , 1469, 68-76	4.5	19
165	Tracking the liquid-liquid extraction performance in mesoflow reactors. <i>Chemical Engineering Journal</i> , 2015 , 279, 9-17	14.7	10
164	Adsorption and Separation of Small Hydrocarbons on the Flexible, Vanadium-Containing MOF, COMOC-2. <i>Langmuir</i> , 2015 , 31, 5063-70	4	25
163	Surface modification of soft-templated ordered mesoporous carbon for electrochemical supercapacitors. <i>Microporous and Mesoporous Materials</i> , 2015 , 217, 141-149	5.3	43
162	A TSR model for direct propane fuel cell with equilibrium adsorption and desorption processes. <i>Renewable Energy</i> , 2015 , 83, 1084-1096	8.1	4
161	Multistage counter-current solvent extraction in a flat membrane microcontactor. <i>Chemical Engineering Journal</i> , 2015 , 273, 138-146	14.7	26
160	New DeTar catalytic filter with integrated catalytic ceramic foam: Catalytic activity under model and real bio syngas conditions. <i>Fuel Processing Technology</i> , 2015 , 134, 98-106	7.2	15
159	Polyimide mixed matrix membranes for CO ₂ separations using carbon-silica nanocomposite fillers. <i>Journal of Membrane Science</i> , 2015 , 495, 121-129	9.6	45
158	Breakthrough Model for Adsorption of Paraffinic Mixtures in Mixed Phase Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 8754-8761	3.9	2
157	Metal-organic frameworks as stationary phases for chiral chromatographic and membrane separations. <i>Chemical Engineering Science</i> , 2015 , 124, 179-187	4.4	54
156	Catalyst Design by NH ₄ OH Treatment of USY Zeolite. <i>Advanced Functional Materials</i> , 2015 , 25, 7130-7144	15.6	60
155	A micromixer with consistent mixing performance for a wide range of flow rates. <i>Electrophoresis</i> , 2015 , 36, 405-12	3.6	4
154	Isolation of Renewable Phenolics by Adsorption on Ultrastable Hydrophobic MIL-140 Metal-Organic Frameworks. <i>ChemSusChem</i> , 2015 , 8, 3159-66	8.3	33
153	Hierarchical Zeolite: Catalyst Design by NH ₄ OH Treatment of USY Zeolite (Adv. Funct. Mater. 46/2015). <i>Advanced Functional Materials</i> , 2015 , 25, 7244-7244	15.6	1
152	Adsorption and Diffusion Phenomena in Crystal Size Engineered ZIF-8 MOF. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 28430-28439	3.8	149
151	Gas phase adsorption of alkanes, alkenes and aromatics on the sulfone-DUT-5 Metal Organic Framework. <i>Microporous and Mesoporous Materials</i> , 2015 , 206, 217-225	5.3	26
150	Electrochemical Film Deposition of the Zirconium Metal-Organic Framework UiO-66 and Application in a Miniaturized Sorbent Trap. <i>Chemistry of Materials</i> , 2015 , 27, 1801-1807	9.6	128
149	Experimental Study of Adsorptive Interactions of Polar and Nonpolar Adsorbates in the Zeolitic Imidazolate Framework ZIF-68 via Pulse Gas Chromatography. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 1832-1839	3.8	7

148	Unusual chain length dependent adsorption of linear and branched alkanes on UiO-66. <i>Adsorption</i> , 2014 , 20, 251-259	2.6	11
147	Adsorption and separation of n-hexane and cyclohexane on the UiO-66 metal-organic framework. <i>Microporous and Mesoporous Materials</i> , 2014 , 183, 143-149	5.3	42
146	A New Concept for High-Performance Fuel Cell Design with Controlled Component Mixing using Jet Flow. <i>Energy Technology</i> , 2014 , 2, 928-933	3.5	1
145	Correction to Adsorption and Separation of CO ₂ on KFI Zeolites: Effect of Cation Type and Si/Al Ratio on Equilibrium and Kinetic Properties. <i>Langmuir</i> , 2014 , 30, 2968-2968	4	4
144	Prediction of molecular separation of polar-apolar mixtures on heterogeneous metal-organic frameworks: HKUST-1. <i>Langmuir</i> , 2014 , 30, 7878-83	4	25
143	Adsorptive separation on metal-organic frameworks in the liquid phase. <i>Chemical Society Reviews</i> , 2014 , 43, 5766-88	58.5	685
142	Seeding-free aqueous synthesis of zeolitic imidazolate framework-8 membranes: How to trigger preferential heterogeneous nucleation and membrane growth in aqueous rapid reaction solution. <i>Journal of Membrane Science</i> , 2014 , 472, 29-38	9.6	16
141	Adsorptive characterization of the ZIF-68 metal-organic framework: a complex structure with amphiphilic properties. <i>Langmuir</i> , 2014 , 30, 8416-24	4	52
140	Chromatographic separation through confinement in nanocages. <i>Microporous and Mesoporous Materials</i> , 2014 , 189, 216-221	5.3	12
139	Biogas upgrading through kinetic separation of carbon dioxide and methane over Rb- and Cs-ZK-5 zeolites. <i>RSC Advances</i> , 2014 , 4, 62511-62524	3.7	24
138	Adsorption of CO ₂ and N ₂ in Na ⁺ SM-5: effects of Na ⁺ and Al content studied by Grand Canonical Monte Carlo simulations and experiments. <i>Adsorption</i> , 2014 , 20, 157-171	2.6	18
137	High Adsorption Capacities and Two-Step Adsorption of Polar Adsorbates on Copper-Benzene-1,3,5-tricarboxylate Metal-Organic Framework. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 18100-18111	3.8	59
136	Adsorption and separation of CO ₂ on KFI zeolites: effect of cation type and Si/Al ratio on equilibrium and kinetic properties. <i>Langmuir</i> , 2013 , 29, 4998-5012	4	47
135	New Functionalized Metal-Organic Frameworks MIL-47-X (X = Cl, Br, NH ₃ , F ₃ , OH, CH ₃): Synthesis, Characterization, and CO ₂ Adsorption Properties. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 22784-22796	3.8	72
134	Dynamic desorption of CO ₂ and CH ₄ from amino-MIL-53(Al) adsorbent. <i>Adsorption</i> , 2013 , 19, 1235-1244	2.6	24
133	Sorption and breathing properties of difluorinated MIL-47 and Al-MIL-53 frameworks. <i>Microporous and Mesoporous Materials</i> , 2013 , 181, 175-181	5.3	28
132	Partially fluorinated MIL-47 and Al-MIL-53 frameworks: influence of functionalization on sorption and breathing properties. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 3552-61	3.6	56
131	New V(IV)-based metal-organic framework having framework flexibility and high CO ₂ adsorption capacity. <i>Inorganic Chemistry</i> , 2013 , 52, 113-20	5.1	63

130	Nonuniform Chain-Length-Dependent Diffusion of Short 1-Alcohols in SAPO-34 in Liquid Phase. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 9758-9765	3.8	17
129	CO ₂ reverse selective mixed matrix membranes for H ₂ purification by incorporation of carbon-silica fillers. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 945-953	13	28
128	Selective Dynamic CO ₂ Separations on Mg-MOF-74 at Low Pressures: A Detailed Comparison with 13X. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 9301-9310	3.8	64
127	Fabrication and separation performance evaluation of a metal-organic framework based microseparator device. <i>Chemical Engineering Science</i> , 2013 , 95, 65-72	4.4	20
126	High pressure, high temperature electrochemical synthesis of metal-organic frameworks: films of MIL-100 (Fe) and HKUST-1 in different morphologies. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 5827	13	121
125	Understanding Hydrocarbon Adsorption in the UiO-66 Metal-Organic Framework: Separation of (Un)saturated Linear, Branched, Cyclic Adsorbates, Including Stereoisomers. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 12567-12578	3.8	56
124	A modified tank in series model for cogeneration of hydroxylamine and electricity in the nitric oxide/hydrogen fuel cell. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 9863-9872	6.7	2
123	Pt/H-ZSM-22 hydroisomerization catalysts optimization guided by Single-Event MicroKinetic modeling. <i>Journal of Catalysis</i> , 2012 , 290, 165-176	7.3	43
122	Electrochemical synthesis of thin HKUST-1 layers on copper mesh. <i>Microporous and Mesoporous Materials</i> , 2012 , 158, 209-213	5.3	89
121	Synthesis, characterization and sorption properties of NH ₂ -MIL-47. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 15562-70	3.6	25
120	Combined improved mixing and reduced energy dissipation by combining convective effects and lamination. <i>Chemical Engineering Journal</i> , 2012 , 211-212, 260-269	14.7	8
119	Pulse gas chromatographic study of adsorption of substituted aromatics and heterocyclic molecules on MIL-47 at zero coverage. <i>Langmuir</i> , 2012 , 28, 13883-91	4	27
118	Unusual pressure-temperature dependency in the capillary liquid chromatographic separation of C ₈ alkylaromatics on the MIL-53(Al) metal-organic framework. <i>Microporous and Mesoporous Materials</i> , 2012 , 162, 1-5	5.3	24
117	Vapor-Phase Adsorption and Separation of Ethylbenzene and Styrene on the Metal-Organic Frameworks MIL-47 and MIL-53(Al). <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 14824-14833	3.9	38
116	Adsorptive separations for the recovery and purification of biobutanol. <i>Adsorption</i> , 2012 , 18, 367-373	2.6	59
115	A tank in series model for alkaline fuel cell in cogeneration of hydrogen peroxide and electricity. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 17258-17267	6.7	10
114	Vanadium Analogues of Nonfunctionalized and Amino-Functionalized MOFs with MIL-101 Topology: Synthesis, Characterization, and Gas Sorption Properties. <i>European Journal of Inorganic Chemistry</i> , 2012 , 2012, 2481-2486	2.3	41
113	Fast and selective sugar conversion to alkyl lactate and lactic acid with bifunctional carbon-silica catalysts. <i>Journal of the American Chemical Society</i> , 2012 , 134, 10089-101	16.4	292

112	Adsorption and separation of light gases on an amino-functionalized metal-organic framework: an adsorption and in situ XRD study. <i>ChemSusChem</i> , 2012 , 5, 740-50	8.3	100
111	Experimental and statistical modeling study of low coverage gas adsorption of light alkanes on meso-microporous silica. <i>Chemical Engineering Journal</i> , 2012 , 179, 52-62	14.7	9
110	Separation of Xylene Isomers 2011 , 171-190		6
109	Modeling the effect of structural changes during dynamic separation processes on MOFs. <i>Langmuir</i> , 2011 , 27, 13064-71	4	52
108	Complexity behind CO ₂ capture on NH ₂ -MIL-53(Al). <i>Langmuir</i> , 2011 , 27, 3970-6	4	256
107	Adsorption and Separation of C ₁₀ Alcohols on SAPO-34. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 8117-8125	3.8	53
106	Modeling of Toluene Acetylation with Acetic Anhydride on H-USY Zeolite. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 11822-11832	3.9	6
105	An Improved Tank in Series Model for the Direct Methanol Fuel Cell. <i>International Journal of Electrochemistry</i> , 2011 , 2011, 1-9	2.4	6
104	Adsorptive separation of liquid water/acetonitrile mixtures. <i>Separation and Purification Technology</i> , 2011 , 82, 76-86	8.3	9
103	An improved tank in series model for PEMFC. <i>International Journal of Hydrogen Energy</i> , 2011 , 36, 14552-14561	6.7	8
102	High performance liquid chromatography column packings with deliberately broadened particle size distribution: relation between column performance and packing structure. <i>Journal of Chromatography A</i> , 2011 , 1218, 6654-62	4.5	15
101	Extending the Total Pore Blocking method to normal phase high performance liquid chromatography. <i>Journal of Chromatography A</i> , 2011 , 1218, 7781-7	4.5	2
100	A high-throughput methodology for liquid phase adsorption experimentation. <i>Adsorption</i> , 2011 , 17, 347-359	26.9	6
99	Use of pressure drop profiles to assess the accuracy of Total Pore Blocking measurements of the external porosity of chromatographic columns. <i>Journal of Chromatography A</i> , 2011 , 1218, 3940-3	4.5	4
98	Hydrocracking of Fischer-Tropsch waxes: Kinetic modeling via LHHW approach. <i>AIChE Journal</i> , 2011 , 57, 711-723	3.6	14
97	Biobutanol separation with the metal-organic framework ZIF-8. <i>ChemSusChem</i> , 2011 , 4, 1074-7	8.3	168
96	Novel graph machine based QSAR approach for the prediction of the adsorption enthalpies of alkanes on zeolites. <i>Catalysis Today</i> , 2011 , 159, 74-83	5.3	7
95	Catalytic and molecular separation properties of Zeogrids and Zeotiles. <i>Catalysis Today</i> , 2011 , 168, 17-27	5.3	13

94	Experimental investigation of the difference in B-term dominated band broadening between fully porous and porous-shell particles for liquid chromatography using the Effective Medium Theory. <i>Journal of Chromatography A</i> , 2011 , 1218, 4406-16	4.5	52
93	Parallel Tempering Simulations of Liquid-Phase Adsorption of n-Alkane Mixtures in Zeolite LTA-5A. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 762-769	3.8	17
92	Separating Saturated Alkylaromatics from Their Unsaturated Analogues Using Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 1051-1055	3.8	35
91	Thermodynamic analysis of the breathing of amino-functionalized MIL-53(Al) upon CO ₂ adsorption. <i>Microporous and Mesoporous Materials</i> , 2011 , 140, 108-113	5.3	72
90	Graphitic nanocrystals inside the pores of mesoporous silica: Synthesis, characterization and an adsorption study. <i>Microporous and Mesoporous Materials</i> , 2011 , 144, 120-133	5.3	18
89	A pulse chromatographic study of the adsorption properties of the amino-MIL-53 (Al) metal-organic framework. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 9413-8	3.6	68
88	Competitive Adsorption of C ₂₀ -C ₃₆ Linear Paraffins on the Amorphous Microporous Silica-Alumina ERS-8 in Vapor Phase and Liquid Phase. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 7541-7549	3.9	11
87	Separation of C(5)-hydrocarbons on microporous materials: complementary performance of MOFs and zeolites. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2284-92	16.4	158
86	Molecular sieve properties of mesoporous silica with intraporous nanocarbon. <i>Chemical Communications</i> , 2010 , 46, 928-30	5.8	27
85	Separation of styrene and ethylbenzene on metal-organic frameworks: analogous structures with different adsorption mechanisms. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15277-85	16.4	181
84	Synergy between shape selective and non-shape selective bifunctional zeolites modelled via the Single-Event MicroKinetic (SEMK) methodology. <i>Chemical Engineering Science</i> , 2010 , 65, 174-178	4.4	18
83	Silica-MOF Composites as a Stationary Phase in Liquid Chromatography. <i>European Journal of Inorganic Chemistry</i> , 2010 , 2010, 3735-3738	2.3	109
82	Statistical analysis and Partial Least Square regression as new tools for modelling and understanding the adsorption properties of zeolites. <i>Microporous and Mesoporous Materials</i> , 2010 , 132, 246-257	5.3	11
81	A study of the parameters affecting the accuracy of the total pore blocking method. <i>Journal of Chromatography A</i> , 2010 , 1217, 6754-61	4.5	16
80	Molecular Packing-Induced Selectivity Effects in Liquid Adsorption in Zeolites 2010 , 171-193		3
79	Framework breathing in the vapour-phase adsorption and separation of xylene isomers with the metal-organic framework MIL-53. <i>Chemistry - A European Journal</i> , 2009 , 15, 7724-31	4.8	146
78	Design of Optimum Zeolite Pore System for Central Hydrocracking of Long-Chain n-Alkanes based on a Single-Event Microkinetic Model. <i>Topics in Catalysis</i> , 2009 , 52, 1251-1260	2.3	29
77	Separation of CO ₂ /CH ₄ mixtures with the MIL-53(Al) metal-organic framework. <i>Microporous and Mesoporous Materials</i> , 2009 , 120, 221-227	5.3	287

76	Rotation dynamics of 2-methyl butane and n-pentane in MCM-22 zeolite: a molecular dynamics simulation study. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 2869-75	3.6	8
75	An amine-functionalized MIL-53 metal-organic framework with large separation power for CO ₂ and CH ₄ . <i>Journal of the American Chemical Society</i> , 2009 , 131, 6326-7	16.4	863
74	Low-coverage adsorption properties of the metal-organic framework MIL-47 studied by pulse chromatography and Monte Carlo simulations. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 3515-21	3.6	69
73	Pore-filling-dependent selectivity effects in the vapor-phase separation of xylene isomers on the metal-organic framework MIL-47. <i>Journal of the American Chemical Society</i> , 2008 , 130, 7110-8	16.4	258
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