Freek Kapteijn

List of Publications by Year
in descending order

645 papers	55,611 citations	1099 112 h-index	1934 207 g-index
700 all docs	700 docs citations	700 times ranked	35004 citing authors

#	Article	IF	Citations
1	Evolution of nitrogen functionalities in carbonaceous materials during pyrolysis. Carbon, 1995, 33, 1641-1653.	10.3	1,815
2	Metalâ€“organic framework nanosheets in polymer composite materials for gas separation. Nature Materials, 2015, 14, 48-55.	27.5	1,780
3	Cobalt Particle Size Effects in the Fischerâ^'Tropsch Reaction Studied with Carbon Nanofiber Supported Catalysts. Journal of the American Chemical Society, 2006, 128, 3956-3964.	13.7	1,318
4	Challenges in the Greener Production of Formates/Formic Acid, Methanol, and DME by Heterogeneously Catalyzed CO₂Hydrogenation Processes. Chemical Reviews, 2017, 117, 9804-9838.	47.7	1,058
5	An Amine-Functionalized MIL-53 Metalâ^'Organic Framework with Large Separation Power for CO₂ and CH₄. Journal of the American Chemical Society, 2009, 131, 6326-6327.	13.7	926
6	Metalâ€“organic and covalent organic frameworks as single-site catalysts. Chemical Society Reviews, 2017, 46, 3134-3184.	38.1	861
7	Metal Organic Framework Catalysis: <i>Quo vadis</i>?. ACS Catalysis, 2014, 4, 361-378.	11.2	859
8	Heterogeneous catalytic decomposition of nitrous oxide. Applied Catalysis B: Environmental, 1996, 9, 25-64.	20.2	834
9	Metalâ€“organic framework based mixed matrix membranes: a solution for highly efficient CO₂ capture?. Chemical Society Reviews, 2015, 44, 2421-2454.	38.1	732
10	Catalyst deactivation: is it predictable?. Applied Catalysis A: General, 2001, 212, 3-16.	4.3	668
11	Activity and selectivity of pure manganese oxides in the selective catalytic reduction of nitric oxide with ammonia. Applied Catalysis B: Environmental, 1994, 3, 173-189.	20.2	662
12	Ethane/Ethene Separation Turned on Its Head: Selective Ethane Adsorption on the Metalâ^'Organic Framework ZIF-7 through a Gate-Opening Mechanism. Journal of the American Chemical Society, 2010, 132, 17704-17706.	13.7	650
13	Direct Demonstration of Enhanced Diffusion in Mesoporous ZSM-5 Zeolite Obtained via Controlled Desilication. Journal of the American Chemical Society, 2007, 129, 355-360.	13.7	616
14	Amino-based metal-organic frameworks as stable, highly active basic catalysts. Journal of Catalysis, 2009, 261, 75-87.	6.2	600
15	Multiphase monolith reactors: Chemical reaction engineering of segmented flow in microchannels. Chemical Engineering Science, 2005, 60, 5895-5916.	3.8	540
16	Formation and control of N2O in nitric acid production. Applied Catalysis B: Environmental, 2003, 44, 117-151.	20.2	509
17	Synthesis and Characterization of an Amino Functionalized MIL-101(Al): Separation and Catalytic Properties. Chemistry of Materials, 2011, 23, 2565-2572.	6.7	479
18	Preparation of monolithic catalysts. Catalysis Reviews - Science and Engineering, 2001, 43, 345-380.	12.9	474

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19	Recent developments in zeolite membranes for gas separation. Journal of Membrane Science, 2016, 499, 65-79.	8.2	435
20	Metal organic framework based mixed matrix membranes: An increasingly important field of research with a large application potential. Microporous and Mesoporous Materials, 2013, 166, 67-78.	4.4	434
21	Metalâ€“organic frameworks as heterogeneous photocatalysts: advantages and challenges. CrystEngComm, 2014, 16, 4919-4926.	2.6	413
22	Zeolite based films, membranes and membrane reactors: Progress and prospects. Microporous and Mesoporous Materials, 2006, 90, 198-220.	4.4	410
23	Adsorption-Driven Heat Pumps: The Potential of Metalâ€“Organic Frameworks. Chemical Reviews, 2015, 115, 12205-12250.	47.7	410
24	Electrochemical Synthesis of Some Archetypical Zn²⁺, Cu²⁺, and Al³⁺ Metal Organic Frameworks. Crystal Growth and Design, 2012, 12, 3489-3498.	3.0	406
25	Alumina-Supported Manganese Oxide Catalysts. Journal of Catalysis, 1994, 150, 94-104.	6.2	403
26	Inertial and interfacial effects on pressure drop of Taylor flow in capillaries. AICHE Journal, 2005, 51, 2428-2440.	3.6	365
27	Co@NH₂-MIL-125(Ti): cobaloxime-derived metalâ€“organic framework-based composite for light-driven H₂ production. Energy and Environmental Science, 2015, 8, 364-375.	30.8	362
28	The development of nitrogen functionality in model chars during gasification in CO2 and O2. Carbon, 1999, 37, 1143-1150.	10.3	352
29	Metalâ€“organic frameworks as scaffolds for the encapsulation of active species: state of the art and future perspectives. Journal of Materials Chemistry, 2012, 22, 10102.	6.7	352
30	Electronic Metalâ€“Support Interactions in Singleâ€Atom Catalysts. Angewandte Chemie - International Edition, 2014, 53, 3418-3421.	13.8	347
31	Functionalized flexible MOFs as fillers in mixed matrix membranes for highly selective separation of CO2 from CH4 at elevated pressures. Chemical Communications, 2011, 47, 9522.	4.1	340
32	Practical Approach to Zeolitic Membranes and Coatings: State of the Art, Opportunities, Barriers, and Future Perspectives. Chemistry of Materials, 2012, 24, 2829-2844.	6.7	332
33	Metal organic framework-mediated synthesis of highly active and stable Fischer-Tropsch catalysts. Nature Communications, 2015, 6, 6451.	12.8	325
34	Agglomeration in fluidized beds at high temperatures: Mechanisms, detection and prevention. Progress in Energy and Combustion Science, 2008, 34, 633-666.	31.2	314
35	Building MOF bottles around phosphotungstic acid ships: One-pot synthesis of bi-functional polyoxometalate-MIL-101 catalysts. Journal of Catalysis, 2010, 269, 229-241.	6.2	311
36	Water and Metalâ€“Organic Frameworks: From Interaction toward Utilization. Chemical Reviews, 2020, 120, 8303-8377.	47.7	303

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37	Permeation characteristics of a metal-supported silicalite-1 zeolite membrane. Journal of Membrane Science, 1996, 117, 57-78.	8.2	299
38	Manufacture of dense coatings of Cu3(BTC)2 (HKUST-1) on Î±-alumina. Microporous and Mesoporous Materials, 2008, 113, 132-138.	4.4	298
39	Complexity behind CO₂ Capture on NH₂-MIL-53(Al). Langmuir, 2011, 27, 3970-3976.	3.5	274
40	Understanding the Anomalous Alkane Selectivity of ZIFâ€7 in the Separation of Light Alkane/Alkene Mixtures. Chemistry - A European Journal, 2011, 17, 8832-8840.	3.3	274
41	Sulfation of metalâ€“organic frameworks: Opportunities for acid catalysis and proton conductivity. Journal of Catalysis, 2011, 281, 177-187.	6.2	269
42	Temperature dependence of one-component permeation through a silicalite-1 membrane. AICHE Journal, 1997, 43, 2203-2214.	3.6	267
43	Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structureâ€Performance Relationships in CO₂/CH₄ Separation Over NH₂â€MILâ€53(Al)@PI. Advanced Functional Materials, 2014, 24, 249-256.	14.9	262
44	Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation. Advanced Materials, 2015, 27, 4775-4780.	21.0	253
45	Metalâ€Organic Framework Membranesâ€"High Potential, Bright Future?. Angewandte Chemie - International Edition, 2010, 49, 1530-1532.	13.8	252
46	Metal organic frameworks as precursors for the manufacture of advanced catalytic materials. Materials Chemistry Frontiers, 2017, 1, 1709-1745.	5.9	252
47	Isoreticular MOFs as Efficient Photocatalysts with Tunable Band Gap: An Operando FTIR Study of the Photoinduced Oxidation of Propylene. ChemSusChem, 2008, 1, 981-983.	6.8	246
48	Separation and permeation characteristics of a DD3R zeolite membrane. Journal of Membrane Science, 2008, 316, 35-45.	8.2	244
49	Multi-scale crystal engineering of metal organic frameworks. Coordination Chemistry Reviews, 2016, 307, 147-187.	18.8	239
50	Kinetic Analysis of the Decomposition of Nitrous Oxide over ZSM-5 Catalysts. Journal of Catalysis, 1997, 167, 256-265.	6.2	237
51	Mass transfer characteristics of three-phase monolith reactors. Chemical Engineering Science, 2001, 56, 6015-6023.	3.8	237
52	Enhancing optical absorption of metalâ€“organic frameworks for improved visible light photocatalysis. Chemical Communications, 2013, 49, 10575-10577.	4.1	237
53	Metal Organic Framework Crystals in Mixedâ€Matrix Membranes: Impact of the Filler Morphology on the Gas Separation Performance. Advanced Functional Materials, 2016, 26, 3154-3163.	14.9	225
54	Structureâ€“performance descriptors and the role of Lewis acidity in the methanol-to-propylene process. Nature Chemistry, 2018, 10, 804-812.	13.6	221

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55	Alumina supported manganese oxides for the low-temperature selective catalytic reduction of nitric oxide with ammonia. Applied Catalysis B: Environmental, 1992, 1, 297-316.	20.2	218
56	InÂsitu investigation of the thermal decomposition of Coâ€"Al hydrotalcite in different atmospheres. Journal of Materials Chemistry, 2001, 11, 821-830.	6.7	218
57	Towards a unified theory of reactions of carbon with oxygen-containing molecules. Carbon, 1995, 33, 1155-1165.	10.3	216
58	The generalized Maxwellâ€"Stefan model for diffusion in zeolites:. Chemical Engineering Science, 2000, 55, 2923-2930.	3.8	216
59	Single cobalt sites in mesoporous N-doped carbon matrix for selective catalytic hydrogenation of nitroarenes. Journal of Catalysis, 2018, 357, 20-28.	6.2	208
60	Physicochemical Characterization of Isomorphously Substituted FeZSM-5 during Activation. Journal of Catalysis, 2002, 207, 113-126.	6.2	197
61	Electronic origins of photocatalytic activity in d0 metal organic frameworks. Scientific Reports, 2016, 6, 23676.	3.3	196
62	Mechanism of formation of polychlorinated dibenzo-p-dioxins and dibenzofurans in the catalyzed combustion of carbon. Environmental Science & Technology, 1994, 28, 312-321.	10.0	194
63	The six-flow reactor technology A review on fast catalyst screening and kinetic studies. Catalysis Today, 2000, 60, 93-109.	4.4	194
64	Hierarchical H-ZSM-5-supported cobalt for the direct synthesis of gasoline-range hydrocarbons from syngas: Advantages, limitations, and mechanistic insight. Journal of Catalysis, 2013, 305, 179-190.	6.2	192
65	Modeling permeation of binary mixtures through zeolite membranes. AICHE Journal, 1999, 45, 497-511.	3.6	188
66	Kinetic Control of Metalâ€"Organic Framework Crystallization Investigated by Timeâ€Resolved Inâ€…Situ Xâ€Ray Scattering. Angewandte Chemie - International Edition, 2011, 50, 9624-9628.	13.8	182
67	Synergy of FexCe1âˆ'xO2 mixed oxides for N2O decomposition. Journal of Catalysis, 2006, 239, 340-346.	6.2	177
68	Tuning the catalytic performance of metalâ€"organic frameworks in fine chemistry by active site engineering. Journal of Materials Chemistry, 2012, 22, 10313.	6.7	176
69	Elucidating the Nature of Fe Species during Pyrolysis of the Fe-BTC MOF into Highly Active and Stable Fischerâ€"Tropsch Catalysts. ACS Catalysis, 2016, 6, 3236-3247.	11.2	176
70	Steam-activated FeMFI zeolites. Evolution of iron species and activity in direct N2O decomposition. Journal of Catalysis, 2003, 214, 33-45.	6.2	167
71	New non-traditional multiphase catalytic reactors based on monolithic structures. Catalysis Today, 2001, 66, 133-144.	4.4	166
72	Structural and chemical disorder of cryptomelane promoted by alkali doping: Influence on catalytic properties. Journal of Catalysis, 2012, 293, 165-174.	6.2	165

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73	TEOM:Â A Unique Technique for Measuring Adsorption Properties. Light Alkanes in Silicalite-1. Industrial & Engineering Chemistry Research, 1998, 37, 1934-1942.	3.7	164
74	Adsorption of Linear and Branched Alkanes in the Zeolite Silicalite-1. Journal of the American Chemical Society, 1998, 120, 5599-5600.	13.7	163
75	Zeolitic coatings and their potential use in catalysis. Microporous and Mesoporous Materials, 1998, 21, 213-226.	4.4	162
76	Azineâ€Linked Covalent Organic Framework (COF)â€Based Mixedâ€Matrix Membranes for CO₂/CH₄ Separation. Chemistry - A European Journal, 2016, 22, 14467-14470.	3.3	161
77	Three-phase hydrogenation of ?-glucose over a carbon supported ruthenium catalystâ€"mass transfer and kinetics. Applied Catalysis A: General, 2003, 251, 1-17.	4.3	160
78	Structured Packings for Multiphase Catalytic Reactors. Industrial & Engineering Chemistry Research, 2008, 47, 3720-3751.	3.7	160
79	NO-Assisted N2O Decomposition over Fe-Based Catalysts: Effects of Gas-Phase Composition and Catalyst Constitution. Journal of Catalysis, 2002, 208, 211-223.	6.2	156
80	Monolithic catalysts as efficient three-phase reactors. Chemical Engineering Science, 2001, 56, 823-829.	3.8	155
81	Effect of Operating Conditions and Membrane Quality on the Separation Performance of Composite Silicalite-1 Membranes. Industrial & Engineering Chemistry Research, 1998, 37, 4071-4083.	3.7	152
82	Catalysis engineering of bifunctional solids for the one-step synthesis of liquid fuels from syngas: a review. Catalysis Science and Technology, 2014, 4, 893-907.	4.1	148
83	Highly dispersed platinum in metal organic framework NH2-MIL-101(Al) containing phosphotungstic acid â€" Characterization and catalytic performance. Journal of Catalysis, 2012, 289, 42-52.	6.2	147
84	Influence of ZIF-8 particle size in the performance of polybenzimidazole mixed matrix membranes for pre-combustion CO2 capture and its validation through interlaboratory test. Journal of Membrane Science, 2016, 515, 45-53.	8.2	145
85	NH₂-MIL-53(Al): A High-Contrast Reversible Solid-State Nonlinear Optical Switch. Journal of the American Chemical Society, 2012, 134, 8314-8317.	13.7	144
86	Alumina-Supported Manganese Oxide Catalysts. Journal of Catalysis, 1994, 150, 105-116.	6.2	143
87	High flux high-silica SSZ-13 membrane for CO₂separation. Journal of Materials Chemistry A, 2014, 2, 13083-13092.	10.3	142
88	Towards acid MOFs â€" catalytic performance of sulfonic acid functionalized architectures. Catalysis Science and Technology, 2013, 3, 2311.	4.1	141
89	A new surface oxygen complex on carbon: toward a unified mechanism for carbon gasification reactions. Industrial & Engineering Chemistry Research, 1993, 32, 2835-2840.	3.7	137
90	Adsorptive characterization of porous solids: Error analysis guides the way. Microporous and Mesoporous Materials, 2014, 200, 199-215.	4.4	134

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91	Fischerâ€"Tropsch synthesis with in situ H2O removal â€" Directions of membrane development. Microporous and Mesoporous Materials, 2008, 115, 123-136.	4.4	133
92	Soot oxidation catalyzed by a Cu/K/Mo/Cl catalyst: evaluation of the chemistry and performance of the catalyst. Applied Catalysis B: Environmental, 1995, 6, 339-352.	20.2	131
93	Active site structure sensitivity in N2O conversion over FeMFI zeolites. Journal of Catalysis, 2003, 218, 234-238.	6.2	131
94	Highly Selective Chemical Sensing in a Luminescent Nanoporous Magnet. Advanced Materials, 2012, 24, 5625-5629.	21.0	131
95	Water vapour separation from permanent gases by a zeolite-4A membrane. Journal of Membrane Science, 2005, 253, 57-66.	8.2	130
96	Manufacture of highly loaded silica-supported cobalt Fischerâ€"Tropsch catalysts from a metal organic framework. Nature Communications, 2017, 8, 1680.	12.8	128
97	Hydrodynamic aspects of the monolith loop reactor. Chemical Engineering Science, 2001, 56, 805-812.	3.8	127
98	Eurokin. Chemical Reaction Kinetics in Practice. Cattech, 2001, 5, 36-60.	2.2	127
99	The role of the active phase of Raney-type Ni catalysts in the selective hydrogenation of ?-glucose to ?-sorbitol. Applied Catalysis A: General, 2003, 253, 437-452.	4.3	126
100	MOFs meet monoliths: Hierarchical structuring metal organic framework catalysts. Applied Catalysis A: General, 2011, 391, 261-267.	4.3	126
101	Mechanism of the potassium catalysed gasification of carbon in CO2. Fuel, 1984, 63, 1043-1047.	6.4	125
102	Carbon supported Ru catalysts as promising alternative for Raney-type Ni in the selective hydrogenation of d-glucose. Catalysis Today, 2003, 79-80, 35-41.	4.4	125
103	Mixed matrix membranes based on NH2-functionalized MIL-type MOFs: Influence of structural and operational parameters on the CO2/CH4 separation performance. Microporous and Mesoporous Materials, 2014, 192, 35-42.	4.4	123
104	Metalâ€"Organic Frameworks in Adsorption-Driven Heat Pumps: The Potential of Alcohols as Working Fluids. Langmuir, 2015, 31, 12783-12796.	3.5	123
105	Insights into the Activity and Deactivation of the Methanol-to-Olefins Process over Different Small-Pore Zeolites As Studied with Operando UVâ€"vis Spectroscopy. ACS Catalysis, 2017, 7, 4033-4046.	11.2	122
106	Methodological and operational aspects of permeation measurements on silicalite-1 membranes. Journal of Membrane Science, 1998, 144, 87-104.	8.2	121
107	Photocatalytic properties of TiO2 and Fe-doped TiO2 prepared by metal organic framework-mediated synthesis. Chemical Engineering Journal, 2019, 360, 75-88.	12.7	121
108	Experimental evidence of negative linear compressibility in the MIL-53 metalâ€"organic framework family. CrystEngComm, 2015, 17, 276-280.	2.6	119

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109	Photoswitchable metal organic frameworks: turn on the lights and close the windows. CrystEngComm, 2016, 18, 4006-4012.	2.6	118
110	Role of Adsorption in the Permeation of CH4and CO2through a Silicalite-1 Membrane. Industrial & Engineering Chemistry Research, 2006, 45, 767-776.	3.7	117
111	Structuring catalyst and reactor â€" an inviting avenue to process intensification. Catalysis Science and Technology, 2015, 5, 807-817.	4.1	117
112	Nanosheets of Nonlayered Aluminum Metalâ€"Organic Frameworks through a Surfactantâ€Assisted Method. Advanced Materials, 2018, 30, e1707234.	21.0	117
113	Shape Selectivity in Adsorption on the All-Silica DD3R. Langmuir, 2000, 16, 3322-3329.	3.5	116
114	Visualizing the Crystal Structure and Locating the Catalytic Activity of Microâ€•and Mesoporous ZSMâ€5 Zeolite Crystals by Using In Situ Optical and Fluorescence Microscopy. Chemistry - A European Journal, 2008, 14, 1718-1725.	3.3	116
115	Adsorption and Separation of Light Gases on an Aminoâ€Functionalized Metalâ€"Organic Framework: An Adsorption and Inâ€…Situ XRD Study. ChemSusChem, 2012, 5, 740-750.	6.8	115
116	Breaking the Fischerâ€"Tropsch synthesis selectivity: direct conversion of syngas to gasoline over hierarchical Co/H-ZSM-5 catalysts. Catalysis Science and Technology, 2013, 3, 572-575.	4.1	114
117	Adsorptive Separation of Light Olefin/Paraffin Mixtures. Chemical Engineering Research and Design, 2006, 84, 350-354.	5.6	113
118	Mechanistic Insight into the Synthesis of Higher Alcohols from Syngas: The Role of K Promotion on MoS₂ Catalysts. ACS Catalysis, 2013, 3, 1634-1637.	11.2	113
119	Stability of Oriented Silicalite-1 Films in View of Zeolite Membrane Preparation. Zeolites, 1997, 19, 13-20.	0.5	112
120	Weakly bound capping agents on gold nanoparticles in catalysis: Surface poison?. Journal of Catalysis, 2010, 271, 104-114.	6.2	111
121	A high capacity manganese-based sorbent for regenerative high temperature desulfurization with direct sulfur production. Chemical Engineering Journal, 2003, 96, 223-235.	12.7	110
122	Selective Gas and Vapor Sorption and Magnetic Sensing by an Isoreticular Mixed-Metalâ€"Organic Framework. Journal of the American Chemical Society, 2012, 134, 15301-15304.	13.7	109
123	Utilizing full-exchange capacity of zeolites by alkaline leaching: Preparation of Fe-ZSM5 and application in N2O decomposition. Journal of Catalysis, 2006, 238, 250-259.	6.2	108
124	Fischerâ€"Tropsch reactionâ€"diffusion in a cobalt catalyst particle: aspects of activity and selectivity for a variable chain growth probability. Catalysis Science and Technology, 2012, 2, 1221.	4.1	108
125	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. Journal of Catalysis, 2018, 362, 106-117.	6.2	108
126	Superior performance of ex-framework FeZSM-5 in direct N2O decomposition in tail-gases from nitric acid plants. Chemical Communications, 2001, , 693-694.	4.1	107

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127	Fascinating chemistry or frustrating unpredictability: observations in crystal engineering of metalâ€“organic frameworks. CrystEngComm, 2013, 15, 9249.	2.6	105
128	Metal-Organic-Framework-Mediated Nitrogen-Doped Carbon for CO₂ Electrochemical Reduction. ACS Applied Materials & Interfaces, 2018, 10, 14751-14758.	8.0	105
129	Ex-framework FeZSM-5 for control of N2O in tail-gases. Catalysis Today, 2002, 76, 55-74.	4.4	104
130	Heterogeneous metathesis of unsaturated fatty acid esters. Journal of the Chemical Society Chemical Communications, 1977, , 198.	2.0	102
131	Permeation and separation behaviour of a silicalite-1 membrane. Catalysis Today, 1995, 25, 213-218.	4.4	102
132	High temperature permeation and separation characteristics of an all-silica DDR zeolite membrane. Microporous and Mesoporous Materials, 2010, 132, 137-147.	4.4	102
133	Optimization of zeolite Beta by steaming and acid leaching for the acylation of anisole with octanoic acid: a structureâ€“activity relation. Journal of Catalysis, 2003, 218, 239-248.	6.2	101
134	Fischerâ€“Tropsch synthesis using monolithic catalysts. Catalysis Today, 2005, 105, 350-356.	4.4	100
135	Dynamic methods for catalytic kinetics. Applied Catalysis A: General, 2008, 342, 3-28.	4.3	99
136	CO2 gasification of carbon catalysed by alkali metals. Fuel, 1984, 63, 1036-1042.	6.4	98
137	Catalytic oxidation of model soot by metal chlorides. Applied Catalysis B: Environmental, 1997, 12, 33-47.	20.2	98
138	The formation of carbon surface oxygen complexes by oxygen and ozone. The effect of transition metal oxides. Carbon, 1998, 36, 1269-1276.	10.3	98
139	Identification of Adsorption Sites in Cu-BTC by Experimentation and Molecular Simulation. Langmuir, 2009, 25, 1725-1731.	3.5	98
140	Unraveling the Optoelectronic and Photochemical Behavior of Zn₄O-Based Metal Organic Frameworks. Journal of Physical Chemistry C, 2011, 115, 12487-12493.	3.1	98
141	Interplay of Metal Node and Amine Functionality in NH₂-MIL-53: Modulating Breathing Behavior through Intra-framework Interactions. Langmuir, 2012, 28, 12916-12922.	3.5	98
142	Facile manufacture of porous organic framework membranes for precombustion CO ₂ capture. Science Advances, 2018, 4, eaau1698.	10.3	98
143	NO Adsorption on Ex-Framework [Fe,X]MFI Catalysts: Novel IR Bands and Evaluation of Assignments. Catalysis Letters, 2002, 80, 129-138.	2.6	97
144	Shouldnâ€™t catalysts shape up?. Catalysis Today, 2006, 111, 111-118.	4.4	97

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145	Efficient production of hydrogen from formic acid using a Covalent Triazine Framework supported molecular catalyst. ChemSusChem, 2015, 8, 809-812.	6.8	97
146	Highly active SO2-resistant ex-framework FeMFI catalysts for direct N2O decomposition. Applied Catalysis B: Environmental, 2002, 35, 227-234.	20.2	96
147	Transition Metal Oxide Catalyzed Carbon Black Oxidation: A Study with18O2. Journal of Catalysis, 1998, 179, 258-266.	6.2	95
148	High performance mixed matrix membranes (MMMs) composed of ZIF-94 filler and 6FDA-DAM polymer. Journal of Membrane Science, 2018, 550, 198-207.	8.2	95
149	Monolithic catalysts â€" non-uniform active phase distribution by impregnation. Applied Catalysis A: General, 2001, 213, 179-187.	4.3	94
150	Selective Coke Combustion by Oxygen Pulsing During Mo/ZSMâ€5â€Catalyzed Methane Dehydroaromatization. Angewandte Chemie - International Edition, 2016, 55, 15086-15090.	13.8	94
151	Accelerated synthesis of all-silica DD3R and its performance in the separation of propylene/propane mixtures. Microporous and Mesoporous Materials, 2008, 115, 585-593.	4.4	93
152	Toward bifunctional catalysts for the direct conversion of syngas to gasoline range hydrocarbons: H-ZSM-5 coated Co versus H-ZSM-5 supported Co. Applied Catalysis A: General, 2013, 456, 11-22.	4.3	93
153	NO and N2O decomposition over coal char at fluidized-bed combustion conditions. Combustion and Flame, 1994, 99, 499-507.	5.2	91
154	Modified activated carbons for the selective catalytic reduction of NO with NH3. Carbon, 1993, 31, 213-222.	10.3	90
155	Structural Effects in Visibleâ€Lightâ€Responsive Metalâ€"Organic Frameworks Incorporating <i>ortho</i>â€Fluoroazobenzenes. Chemistry - A European Journal, 2016, 22, 746-752.	3.3	90
156	Gasâ€"liquid mass transfer of aqueous Taylor flow in monoliths. Catalysis Today, 2001, 69, 51-55.	4.4	89
157	Shape and Transition State Selective Hydrogenations Using Egg-Shell Pt-MIL-101(Cr) Catalyst. ACS Catalysis, 2013, 3, 2617-2626.	11.2	89
158	Structural promotion and stabilizing effect of Mg in the catalytic decomposition of nitrous oxide over calcined hydrotalcite-like compounds. Applied Catalysis B: Environmental, 1999, 23, 59-72.	20.2	88
159	The oxamate route, a versatile post-functionalization for metal incorporation in MIL-101(Cr): Catalytic applications of Cu, Pd, and Au. Journal of Catalysis, 2013, 307, 295-304.	6.2	86
160	A â€œSmartâ€•Hollandite DeNO_{<i>x</i>} Catalyst: Selfâ€Protection against Alkali Poisoning. Angewandte Chemie - International Edition, 2013, 52, 660-664.	13.8	85
161	Maximizing Ag Utilization in High-Rate CO₂ Electrochemical Reduction with a Coordination Polymer-Mediated Gas Diffusion Electrode. ACS Energy Letters, 2019, 4, 2024-2031.	17.4	85
162	Synthesis of thin defect-free hydroxy sodalite membranes: New candidate for activated water permeation. Journal of Membrane Science, 2007, 299, 63-72.	8.2	84

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163	Organic Linker Defines the Excitedâ€State Decay of Photocatalytic MILâ€125(Ti)â€Type Materials. ChemSusChem, 2016, 9, 388-395.	6.8	84
164	Propane/propylene separation with Li-exchanged zeolite 13X. Chemical Engineering Journal, 2010, 160, 207-214.	12.7	83
165	Stabilized gold on cerium-modified cryptomelane: Highly active in low-temperature CO oxidation. Journal of Catalysis, 2014, 309, 58-65.	6.2	83
166	Metalâ€“Organic Framework Mediated Cobalt/Nitrogenâ€Doped Carbon Hybrids as Efficient and Chemoselective Catalysts for the Hydrogenation of Nitroarenes. ChemCatChem, 2017, 9, 1854-1862.	3.7	83
167	Self-Diffusion Studies in CuBTC by PFG NMR and MD Simulations. Journal of Physical Chemistry C, 2010, 114, 10527-10534.	3.1	82
168	Binary permeation through a silicalite-1 membrane. AIChE Journal, 1999, 45, 976-985.	3.6	81
169	Influence of the support layer on the flux limitation in pervaporation. Journal of Membrane Science, 2003, 223, 141-156.	8.2	81
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