

Freek Kapteijn

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650
papers

46,506
citations

103
h-index

189
g-index

700
ext. papers

50,625
ext. citations

7.5
avg, IF

7.67
L-index

#	Paper	IF	Citations
650	Evolution of nitrogen functionalities in carbonaceous materials during pyrolysis. <i>Carbon</i> , 1995 , 33, 1641-1653	16.5	1631
649	Metal-organic framework nanosheets in polymer composite materials for gas separation. <i>Nature Materials</i> , 2015 , 14, 48-55	27	1454
648	Cobalt particle size effects in the Fischer-Tropsch reaction studied with carbon nanofiber supported catalysts. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3956-64	16.4	1178
647	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
646	Metal Organic Framework Catalysis: Quo vadis?. <i>ACS Catalysis</i> , 2014 , 4, 361-378	13.1	756
645	Heterogeneous catalytic decomposition of nitrous oxide. <i>Applied Catalysis B: Environmental</i> , 1996 , 9, 25-64	21.8	742
644	Metal-organic and covalent organic frameworks as single-site catalysts. <i>Chemical Society Reviews</i> , 2017 , 46, 3134-3184	58.5	696
643	Challenges in the Greener Production of Formates/Formic Acid, Methanol, and DME by Heterogeneously Catalyzed CO Hydrogenation Processes. <i>Chemical Reviews</i> , 2017 , 117, 9804-9838	68.1	688
642	Metal-organic framework based mixed matrix membranes: a solution for highly efficient CO ₂ capture?. <i>Chemical Society Reviews</i> , 2015 , 44, 2421-54	58.5	627
641	Catalyst deactivation: is it predictable?. <i>Applied Catalysis A: General</i> , 2001 , 212, 3-16	5.1	586
640	Ethane/ethene separation turned on its head: selective ethane adsorption on the metal-organic framework ZIF-7 through a gate-opening mechanism. <i>Journal of the American Chemical Society</i> , 2010 , 132, 17704-6	16.4	555
639	Activity and selectivity of pure manganese oxides in the selective catalytic reduction of nitric oxide with ammonia. <i>Applied Catalysis B: Environmental</i> , 1994 , 3, 173-189	21.8	548
638	Amino-based metal-organic frameworks as stable, highly active basic catalysts. <i>Journal of Catalysis</i> , 2009 , 261, 75-87	7.3	535
637	Direct demonstration of enhanced diffusion in mesoporous ZSM-5 zeolite obtained via controlled desilication. <i>Journal of the American Chemical Society</i> , 2007 , 129, 355-60	16.4	532
636	Multiphase monolith reactors: Chemical reaction engineering of segmented flow in microchannels. <i>Chemical Engineering Science</i> , 2005 , 60, 5895-5916	4.4	472
635	Preparation of monolithic catalysts. <i>Catalysis Reviews - Science and Engineering</i> , 2001 , 43, 345-380	12.6	425
634	Formation and control of N ₂ O in nitric acid production. <i>Applied Catalysis B: Environmental</i> , 2003 , 44, 117-158	15.8	424

633	Synthesis and Characterization of an Amino Functionalized MIL-101(Al): Separation and Catalytic Properties. <i>Chemistry of Materials</i> , 2011 , 23, 2565-2572	9.6	423
632	Metal organic framework based mixed matrix membranes: An increasingly important field of research with a large application potential. <i>Microporous and Mesoporous Materials</i> , 2013 , 166, 67-78	5.3	399
631	Zeolite based films, membranes and membrane reactors: Progress and prospects. <i>Microporous and Mesoporous Materials</i> , 2006 , 90, 198-220	5.3	381
630	Alumina-Supported Manganese Oxide Catalysts. <i>Journal of Catalysis</i> , 1994 , 150, 94-104	7.3	358
629	Metal-organic frameworks as heterogeneous photocatalysts: advantages and challenges. <i>CrystEngComm</i> , 2014 , 16, 4919-4926	3.3	341
628	The development of nitrogen functionality in model chars during gasification in CO ₂ and O ₂ . <i>Carbon</i> , 1999 , 37, 1143-1150	10.4	323
627	Recent developments in zeolite membranes for gas separation. <i>Journal of Membrane Science</i> , 2016 , 499, 65-79	9.6	315
626	Metal-organic frameworks as scaffolds for the encapsulation of active species: state of the art and future perspectives. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10102		310
625	Electrochemical Synthesis of Some Archetypical Zn ²⁺ , Cu ²⁺ , and Al ³⁺ -Metal Organic Frameworks. <i>Crystal Growth and Design</i> , 2012 , 12, 3489-3498	3.5	309
624	Co@NH ₂ -MIL-125(Ti): cobaloxime-derived metal-organic framework-based composite for light-driven H ₂ production. <i>Energy and Environmental Science</i> , 2015 , 8, 364-375	35.4	304
623	Practical Approach to Zeolitic Membranes and Coatings: State of the Art, Opportunities, Barriers, and Future Perspectives. <i>Chemistry of Materials</i> , 2012 , 24, 2829-2844	9.6	296
622	Functionalized flexible MOFs as fillers in mixed matrix membranes for highly selective separation of CO ₂ from CH ₄ at elevated pressures. <i>Chemical Communications</i> , 2011 , 47, 9522-4	5.8	296
621	Adsorption-Driven Heat Pumps: The Potential of Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2015 , 115, 12205-50	68.1	294
620	Building MOF bottles around phosphotungstic acid ships: One-pot synthesis of bi-functional polyoxometalate-MIL-101 catalysts. <i>Journal of Catalysis</i> , 2010 , 269, 229-241	7.3	290
619	Manufacture of dense coatings of Cu ₃ (BTC) ₂ (HKUST-1) on Alumina. <i>Microporous and Mesoporous Materials</i> , 2008 , 113, 132-138	5.3	271
618	Inertial and interfacial effects on pressure drop of Taylor flow in capillaries. <i>AIChE Journal</i> , 2005 , 51, 2428-2440	3.6	271
617	Electronic metal-support interactions in single-atom catalysts. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 3418-21	16.4	267
616	Metal organic framework-mediated synthesis of highly active and stable Fischer-Tropsch catalysts. <i>Nature Communications</i> , 2015 , 6, 6451	17.4	265

615	Agglomeration in fluidized beds at high temperatures: Mechanisms, detection and prevention. <i>Progress in Energy and Combustion Science</i> , 2008 , 34, 633-666	33.6	262
614	Permeation characteristics of a metal-supported silicalite-1 zeolite membrane. <i>Journal of Membrane Science</i> , 1996 , 117, 57-78	9.6	261
613	Complexity behind CO ₂ capture on NH ₂ -MIL-53(Al). <i>Langmuir</i> , 2011 , 27, 3970-6	4	256
612	Sulfation of metal-organic frameworks: Opportunities for acid catalysis and proton conductivity. <i>Journal of Catalysis</i> , 2011 , 281, 177-187	7.3	249
611	Understanding the anomalous alkane selectivity of ZIF-7 in the separation of light alkane/alkene mixtures. <i>Chemistry - A European Journal</i> , 2011 , 17, 8832-40	4.8	243
610	Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structure-Performance Relationships in CO ₂ /CH ₄ Separation Over NH ₂ -MIL-53(Al)@PI. <i>Advanced Functional Materials</i> , 2014 , 24, 249-256	15.6	236
609	Temperature dependence of one-component permeation through a silicalite-1 membrane. <i>AIChE Journal</i> , 1997 , 43, 2203-2214	3.6	236
608	Metal-organic framework membranes--high potential, bright future?. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1530-2	16.4	221
607	Isorecticular MOFs as efficient photocatalysts with tunable band gap: an operando FTIR study of the photoinduced oxidation of propylene. <i>ChemSusChem</i> , 2008 , 1, 981-3	8.3	216
606	Mass transfer characteristics of three-phase monolith reactors. <i>Chemical Engineering Science</i> , 2001 , 56, 6015-6023	4.4	207
605	Separation and permeation characteristics of a DD3R zeolite membrane. <i>Journal of Membrane Science</i> , 2008 , 316, 35-45	9.6	203
604	Alumina supported manganese oxides for the low-temperature selective catalytic reduction of nitric oxide with ammonia. <i>Applied Catalysis B: Environmental</i> , 1992 , 1, 297-316	21.8	202
603	Enhancing optical absorption of metal-organic frameworks for improved visible light photocatalysis. <i>Chemical Communications</i> , 2013 , 49, 10575-7	5.8	195
602	The generalized Maxwell-Stefan model for diffusion in zeolites: sorbate molecules with different saturation loadings. <i>Chemical Engineering Science</i> , 2000 , 55, 2923-2930	4.4	195
601	Kinetic Analysis of the Decomposition of Nitrous Oxide over ZSM-5 Catalysts. <i>Journal of Catalysis</i> , 1997 , 167, 256-265	7.3	190
600	Towards a unified theory of reactions of carbon with oxygen-containing molecules. <i>Carbon</i> , 1995 , 33, 1155-1165	10.4	187
599	Multi-scale crystal engineering of metal organic frameworks. <i>Coordination Chemistry Reviews</i> , 2016 , 307, 147-187	23.2	186
598	Metal Organic Framework Crystals in Mixed-Matrix Membranes: Impact of the Filler Morphology on the Gas Separation Performance. <i>Advanced Functional Materials</i> , 2016 , 26, 3154-3163	15.6	185

597	In situ investigation of the thermal decomposition of CoAl hydrotalcite in different atmospheres. <i>Journal of Materials Chemistry</i> , 2001 , 11, 821-830		181
596	Mechanism of formation of polychlorinated dibenzo-p-dioxins and dibenzofurans in the catalyzed combustion of carbon. <i>Environmental Science & Technology</i> , 1994 , 28, 312-21	10.3	176
595	Metal organic frameworks as precursors for the manufacture of advanced catalytic materials. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1709-1745	7.8	174
594	Modeling permeation of binary mixtures through zeolite membranes. <i>AIChE Journal</i> , 1999 , 45, 497-511	3.6	172
593	Design of hydrophilic metal organic framework water adsorbents for heat reallocation. <i>Advanced Materials</i> , 2015 , 27, 4775-80	24	168
592	Kinetic control of metal-organic framework crystallization investigated by time-resolved in situ X-ray scattering. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9624-8	16.4	159
591	The six-flow reactor technology A review on fast catalyst screening and kinetic studies. <i>Catalysis Today</i> , 2000 , 60, 93-109	5.3	159
590	Single cobalt sites in mesoporous N-doped carbon matrix for selective catalytic hydrogenation of nitroarenes. <i>Journal of Catalysis</i> , 2018 , 357, 20-28	7.3	156
589	Hierarchical H-ZSM-5-supported cobalt for the direct synthesis of gasoline-range hydrocarbons from syngas: Advantages, limitations, and mechanistic insight. <i>Journal of Catalysis</i> , 2013 , 305, 179-190	7.3	155
588	Electronic origins of photocatalytic activity in d0 metal organic frameworks. <i>Scientific Reports</i> , 2016 , 6, 23676	4.9	154
587	Synergy of FeCe _{1-x} O ₂ mixed oxides for N ₂ O decomposition. <i>Journal of Catalysis</i> , 2006 , 239, 340-346	7.3	153
586	Tuning the catalytic performance of metal-organic frameworks in fine chemistry by active site engineering. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10313		151
585	Physicochemical Characterization of Isomorphously Substituted FeZSM-5 during Activation. <i>Journal of Catalysis</i> , 2002 , 207, 113-126	7.3	148
584	New non-traditional multiphase catalytic reactors based on monolithic structures. <i>Catalysis Today</i> , 2001 , 66, 133-144	5.3	147
583	TEOM: A Unique Technique for Measuring Adsorption Properties. Light Alkanes in Silicalite-1. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 1934-1942	3.9	146
582	Structured Packings for Multiphase Catalytic Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 3720-3751	3.9	145
581	Adsorption of Linear and Branched Alkanes in the Zeolite Silicalite-1. <i>Journal of the American Chemical Society</i> , 1998 , 120, 5599-5600	16.4	145
580	Structure-performance descriptors and the role of Lewis acidity in the methanol-to-propylene process. <i>Nature Chemistry</i> , 2018 , 10, 804-812	17.6	145

579	Zeolitic coatings and their potential use in catalysis. <i>Microporous and Mesoporous Materials</i> , 1998 , 21, 213-226	5.3	141
578	Steam-activated FeMFI zeolites. Evolution of iron species and activity in direct N ₂ O decomposition. <i>Journal of Catalysis</i> , 2003 , 214, 33-45	7.3	140
577	Three-phase hydrogenation of D-glucose over a carbon supported ruthenium catalyst: mass transfer and kinetics. <i>Applied Catalysis A: General</i> , 2003 , 251, 1-17	5.1	136
576	Highly dispersed platinum in metal organic framework NH ₂ -MIL-101(Al) containing phosphotungstic acid: Characterization and catalytic performance. <i>Journal of Catalysis</i> , 2012 , 289, 42-52	7.3	133
575	Effect of Operating Conditions and Membrane Quality on the Separation Performance of Composite Silicalite-1 Membranes. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 4071-4083	3.9	132
574	Monolithic catalysts as efficient three-phase reactors. <i>Chemical Engineering Science</i> , 2001 , 56, 823-829	4.4	130
573	Structural and chemical disorder of cryptomelane promoted by alkali doping: Influence on catalytic properties. <i>Journal of Catalysis</i> , 2012 , 293, 165-174	7.3	129
572	Towards acid MOFs: Catalytic performance of sulfonic acid functionalized architectures. <i>Catalysis Science and Technology</i> , 2013 , 3, 2311	5.5	129
571	Elucidating the Nature of Fe Species during Pyrolysis of the Fe-BTC MOF into Highly Active and Stable Fischer-Tropsch Catalysts. <i>ACS Catalysis</i> , 2016 , 6, 3236-3247	13.1	129
570	Alumina-Supported Manganese Oxide Catalysts. <i>Journal of Catalysis</i> , 1994 , 150, 105-116	7.3	128
569	Azine-Linked Covalent Organic Framework (COF)-Based Mixed-Matrix Membranes for CO ₂ /CH ₄ Separation. <i>Chemistry - A European Journal</i> , 2016 , 22, 14467-70	4.8	126
568	Catalysis engineering of bifunctional solids for the one-step synthesis of liquid fuels from syngas: a review. <i>Catalysis Science and Technology</i> , 2014 , 4, 893-907	5.5	125
567	A new surface oxygen complex on carbon: toward a unified mechanism for carbon gasification reactions. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 2835-2840	3.9	124
566	Highly selective chemical sensing in a luminescent nanoporous magnet. <i>Advanced Materials</i> , 2012 , 24, 5625-9	24	121
565	NH ₂ -MIL-53(Al): a high-contrast reversible solid-state nonlinear optical switch. <i>Journal of the American Chemical Society</i> , 2012 , 134, 8314-7	16.4	121
564	NO-Assisted N ₂ O Decomposition over Fe-Based Catalysts: Effects of Gas-Phase Composition and Catalyst Constitution. <i>Journal of Catalysis</i> , 2002 , 208, 211-223	7.3	121
563	Water vapour separation from permanent gases by a zeolite-4A membrane. <i>Journal of Membrane Science</i> , 2005 , 253, 57-66	9.6	119
562	Soot oxidation catalyzed by a Cu/K/Mo/Cl catalyst: evaluation of the chemistry and performance of the catalyst. <i>Applied Catalysis B: Environmental</i> , 1995 , 6, 339-352	21.8	117

561	MOFs meet monoliths: Hierarchical structuring metal organic framework catalysts. <i>Applied Catalysis A: General</i> , 2011 , 391, 261-267	5.1	115
560	Water and Metal-Organic Frameworks: From Interaction toward Utilization. <i>Chemical Reviews</i> , 2020 , 120, 8303-8377	68.1	114
559	Fischer-Tropsch synthesis with in situ H ₂ O removal: Directions of membrane development. <i>Microporous and Mesoporous Materials</i> , 2008 , 115, 123-136	5.3	114
558	High flux high-silica SSZ-13 membrane for CO ₂ separation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 13083-13092	5.3	114
557	Mixed matrix membranes based on NH ₂ -functionalized MIL-type MOFs: Influence of structural and operational parameters on the CO ₂ /CH ₄ separation performance. <i>Microporous and Mesoporous Materials</i> , 2014 , 192, 35-42	5.3	110
556	Methodological and operational aspects of permeation measurements on silicalite-1 membranes. <i>Journal of Membrane Science</i> , 1998 , 144, 87-104	9.6	110
555	Visualizing the crystal structure and locating the catalytic activity of micro- and mesoporous ZSM-5 zeolite crystals by using in situ optical and fluorescence microscopy. <i>Chemistry - A European Journal</i> , 2008 , 14, 1718-25	4.8	110
554	Adsorptive characterization of porous solids: Error analysis guides the way. <i>Microporous and Mesoporous Materials</i> , 2014 , 200, 199-215	5.3	109
553	Mechanism of the potassium catalysed gasification of carbon in CO ₂ . <i>Fuel</i> , 1984 , 63, 1043-1047	7.1	108
552	Role of Adsorption in the Permeation of CH ₄ and CO ₂ through a Silicalite-1 Membrane. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 767-776	3.9	107
551	Shape Selectivity in Adsorption on the All-Silica DD3R. <i>Langmuir</i> , 2000 , 16, 3322-3329	4	107
550	Breaking the Fischer-Tropsch synthesis selectivity: direct conversion of syngas to gasoline over hierarchical Co/H-ZSM-5 catalysts. <i>Catalysis Science and Technology</i> , 2013 , 3, 572-575	5.5	105
549	Influence of ZIF-8 particle size in the performance of polybenzimidazole mixed matrix membranes for pre-combustion CO ₂ capture and its validation through interlaboratory test. <i>Journal of Membrane Science</i> , 2016 , 515, 45-53	9.6	105
548	The role of the active phase of Raney-type Ni catalysts in the selective hydrogenation of d-glucose to d-sorbitol. <i>Applied Catalysis A: General</i> , 2003 , 253, 437-452	5.1	104
547	Weakly bound capping agents on gold nanoparticles in catalysis: Surface poison?. <i>Journal of Catalysis</i> , 2010 , 271, 104-114	7.3	103
546	Eurokin. Chemical Reaction Kinetics in Practice. <i>Cattech</i> , 2001 , 5, 36-60		103
545	Selective gas and vapor sorption and magnetic sensing by an isorecticular mixed-metal-organic framework. <i>Journal of the American Chemical Society</i> , 2012 , 134, 15301-4	16.4	102
544	Carbon supported Ru catalysts as promising alternative for Raney-type Ni in the selective hydrogenation of d-glucose. <i>Catalysis Today</i> , 2003 , 79-80, 35-41	5.3	102

543	Superior performance of ex-framework FeZSM-5 in direct N ₂ O decomposition in tail-gases from nitric acid plants. <i>Chemical Communications</i> , 2001 , 693-694	5.8	102
542	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
541	Stability of Oriented Silicalite-1 Films in View of Zeolite Membrane Preparation. <i>Zeolites</i> , 1997 , 19, 13-20		100
540	Adsorptive Separation of Light Olefin/Paraffin Mixtures. <i>Chemical Engineering Research and Design</i> , 2006 , 84, 350-354	5.5	100
539	Experimental Evidence of Negative Linear Compressibility in the MIL-53 Metal-Organic Framework Family. <i>CrystEngComm</i> , 2015 , 17, 276-280	3.3	99
538	Active site structure sensitivity in N ₂ O conversion over FeMFI zeolites. <i>Journal of Catalysis</i> , 2003 , 218, 234-238	7.3	99
537	Metal-Organic Frameworks in Adsorption-Driven Heat Pumps: The Potential of Alcohols as Working Fluids. <i>Langmuir</i> , 2015 , 31, 12783-96	4	97
536	Utilizing full-exchange capacity of zeolites by alkaline leaching: Preparation of Fe-ZSM5 and application in N ₂ O decomposition. <i>Journal of Catalysis</i> , 2006 , 238, 250-259	7.3	97
535	Fascinating chemistry or frustrating unpredictability: observations in crystal engineering of metal-organic frameworks. <i>CrystEngComm</i> , 2013 , 15, 9249	3.3	95
534	A high capacity manganese-based sorbent for regenerative high temperature desulfurization with direct sulfur production: Conceptual process application to coal gas cleaning. <i>Chemical Engineering Journal</i> , 2003 , 96, 223-235	14.7	95
533	Fischer-Tropsch synthesis using monolithic catalysts. <i>Catalysis Today</i> , 2005 , 105, 350-356	5.3	95
532	Structuring catalyst and reactor – an inviting avenue to process intensification. <i>Catalysis Science and Technology</i> , 2015 , 5, 807-817	5.5	94
531	Heterogeneous metathesis of unsaturated fatty acid esters. <i>Journal of the Chemical Society Chemical Communications</i> , 1977 , 198		94
530	Photoswitchable metal organic frameworks: turn on the lights and close the windows. <i>CrystEngComm</i> , 2016 , 18, 4006-4012	3.3	92
529	Mechanistic Insight into the Synthesis of Higher Alcohols from Syngas: The Role of K Promotion on MoS ₂ Catalysts. <i>ACS Catalysis</i> , 2013 , 3, 1634-1637	13.1	92
528	Identification of adsorption sites in Cu-BTC by experimentation and molecular simulation. <i>Langmuir</i> , 2009 , 25, 1725-31	4	92
527	The formation of carbon surface oxygen complexes by oxygen and ozone. The effect of transition metal oxides. <i>Carbon</i> , 1998 , 36, 1269-1276	10.4	92
526	Unraveling the Optoelectronic and Photochemical Behavior of Zn ₄ O-Based Metal Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 12487-12493	3.8	91

525	Permeation and separation behaviour of a silicalite-1 membrane. <i>Catalysis Today</i> , 1995 , 25, 213-218	5.3	91
524	Interplay of metal node and amine functionality in NH ₂ -MIL-53: modulating breathing behavior through intra-framework interactions. <i>Langmuir</i> , 2012 , 28, 12916-22	4	89
523	Catalytic oxidation of model soot by metal chlorides. <i>Applied Catalysis B: Environmental</i> , 1997 , 12, 33-47	21.8	89
522	Shouldn't catalysts shape up?. <i>Catalysis Today</i> , 2006 , 111, 111-118	5.3	89
521	Fischer-Tropsch reaction-diffusion in a cobalt catalyst particle: aspects of activity and selectivity for a variable chain growth probability. <i>Catalysis Science and Technology</i> , 2012 , 2, 1221	5.5	88
520	Insights into the Activity and Deactivation of the Methanol-to-Olefins Process over Different Small-Pore Zeolites As Studied with Operando UV-vis Spectroscopy. <i>ACS Catalysis</i> , 2017 , 7, 4033-4046	13.1	87
519	Manufacture of highly loaded silica-supported cobalt Fischer-Tropsch catalysts from a metal organic framework. <i>Nature Communications</i> , 2017 , 8, 1680	17.4	87
518	High temperature permeation and separation characteristics of an all-silica DDR zeolite membrane. <i>Microporous and Mesoporous Materials</i> , 2010 , 132, 137-147	5.3	87
517	Dynamic methods for catalytic kinetics. <i>Applied Catalysis A: General</i> , 2008 , 342, 3-28	5.1	86
516	CO ₂ gasification of carbon catalysed by alkali metals. <i>Fuel</i> , 1984 , 63, 1036-1042	7.1	86
515	Optimization of zeolite Beta by steaming and acid leaching for the acylation of anisole with octanoic acid: a structure-activity relation. <i>Journal of Catalysis</i> , 2003 , 218, 239-248	7.3	84
514	Gas-liquid mass transfer of aqueous Taylor flow in monoliths. <i>Catalysis Today</i> , 2001 , 69, 51-55	5.3	84
513	The oxamate route, a versatile post-functionalization for metal incorporation in MIL-101(Cr): Catalytic applications of Cu, Pd, and Au. <i>Journal of Catalysis</i> , 2013 , 307, 295-304	7.3	83
512	Transition Metal Oxide Catalyzed Carbon Black Oxidation: A Study with 18O ₂ . <i>Journal of Catalysis</i> , 1998 , 179, 258-266	7.3	83
511	Ex-framework FeZSM-5 for control of N ₂ O in tail-gases. <i>Catalysis Today</i> , 2002 , 76, 55-74	5.3	83
510	Monolithic catalysts I-non-uniform active phase distribution by impregnation. <i>Applied Catalysis A: General</i> , 2001 , 213, 179-187	5.1	82
509	NO and N ₂ O decomposition over coal char at fluidized-bed combustion conditions. <i>Combustion and Flame</i> , 1994 , 99, 499-507	5.3	82
508	Accelerated synthesis of all-silica DD3R and its performance in the separation of propylene/propane mixtures. <i>Microporous and Mesoporous Materials</i> , 2008 , 115, 585-593	5.3	81

507	Highly active SO ₂ -resistant ex-framework FeMFI catalysts for direct N ₂ O decomposition. <i>Applied Catalysis B: Environmental</i> , 2002 , 35, 227-234	21.8	81
506	Modified activated carbons for the selective catalytic reduction of NO with NH ₃ . <i>Carbon</i> , 1993 , 31, 213-224	22.4	81
505	Nanosheets of Nonlayered Aluminum Metal-Organic Frameworks through a Surfactant-Assisted Method. <i>Advanced Materials</i> , 2018 , 30, e1707234	24	80
504	Metal-Organic-Framework-Mediated Nitrogen-Doped Carbon for CO Electrochemical Reduction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 14751-14758	9.5	79
503	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2018 , 362, 106-117	7.3	78
502	Toward bifunctional catalysts for the direct conversion of syngas to gasoline range hydrocarbons: H-ZSM-5 coated Co versus H-ZSM-5 supported Co. <i>Applied Catalysis A: General</i> , 2013 , 456, 11-22	5.1	78
501	Structural promotion and stabilizing effect of Mg in the catalytic decomposition of nitrous oxide over calcined hydrotalcite-like compounds. <i>Applied Catalysis B: Environmental</i> , 1999 , 23, 59-72	21.8	77
500	Efficient production of hydrogen from formic acid using a covalent triazine framework supported molecular catalyst. <i>ChemSusChem</i> , 2015 , 8, 809-12	8.3	76
499	Structural Effects in Visible-Light-Responsive Metal-Organic Frameworks Incorporating ortho-Fluoroazobenzenes. <i>Chemistry - A European Journal</i> , 2016 , 22, 746-52	4.8	76
498	Binary permeation through a silicalite-1 membrane. <i>AIChE Journal</i> , 1999 , 45, 976-985	3.6	76
497	Shape and Transition State Selective Hydrogenations Using Egg-Shell Pt-MIL-101(Cr) Catalyst. <i>ACS Catalysis</i> , 2013 , 3, 2617-2626	13.1	75
496	Propane/propylene separation with Li-exchanged zeolite 13X. <i>Chemical Engineering Journal</i> , 2010 , 160, 207-214	14.7	75
495	Hydrodynamic aspects of the monolith loop reactor. <i>Chemical Engineering Science</i> , 2001 , 56, 805-812	4.4	74
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