

Freek Kapteijn

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7456464/freek-kapteijn-publications-by-year.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

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	Multivariate sodalite zeolitic imidazolate frameworks: a direct solvent-free synthesis.. <i>Chemical Science</i> , 2022 , 13, 842-847	9.4	1
649	High Stability of Methanol to Aromatic Conversion over Bimetallic Ca,Ga-Modified ZSM-5.. <i>ACS Catalysis</i> , 2022 , 12, 3189-3200	13.1	1
648	An integrated approach to the key parameters in methanol-to-olefins reaction catalyzed by MFI/MEL zeolite materials. <i>Chinese Journal of Catalysis</i> , 2022 , 43, 1879-1893	11.3	1
647	Highly Water-Permeable Metal-Organic Framework MOF-303 Membranes for Desalination. <i>Journal of the American Chemical Society</i> , 2021 , 143, 20055-20058	16.4	5
646	High-Silica CHA Zeolite Membrane with Ultra-High Selectivity and Irradiation Stability for Krypton/Xenon Separation. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 9032-9037	16.4	12
645	High-Silica CHA Zeolite Membrane with Ultra-High Selectivity and Irradiation Stability for Krypton/Xenon Separation. <i>Angewandte Chemie</i> , 2021 , 133, 9114-9119	3.6	2
644	Selective CO Sorption Using Compartmentalized Coordination Polymers with Discrete Voids*. <i>Chemistry - A European Journal</i> , 2021 , 27, 4653-4659	4.8	4
643	Surface functionalized N-C-TiO ₂ /C nanocomposites derived from metal-organic framework in water vapour for enhanced photocatalytic H ₂ generation. <i>Journal of Energy Chemistry</i> , 2021 , 57, 485-495	12	19
642	Rapid fabrication of MOF-based mixed matrix membranes through digital light processing. <i>Materials Advances</i> , 2021 , 2, 2739-2749	3.3	4
641	Bimetal-organic framework derived multi-heterostructured TiO ₂ /Cu _x O/C nanocomposites with superior photocatalytic H ₂ generation performance. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 4103-4116	13	13
640	Water and Metal-Organic Frameworks: From Interaction toward Utilization. <i>Chemical Reviews</i> , 2020 , 120, 8303-8377	68.1	114
639	Impact of small promoter amounts on coke structure in dry reforming of methane over Ni/ZrO ₂ . <i>Catalysis Science and Technology</i> , 2020 , 10, 3965-3974	5.5	11
638	Aromatization of Ethylene [Main Intermediate for MDA?]. <i>ChemCatChem</i> , 2020 , 12, 544-549	5.2	18
637	PBI mixed matrix hollow fiber membrane: Influence of ZIF-8 filler over H ₂ /CO ₂ separation performance at high temperature and pressure. <i>Separation and Purification Technology</i> , 2020 , 237, 116347	8.3	35
636	Structured catalysts and reactors [Perspectives for demanding applications. <i>Catalysis Today</i> , 2020 , 383, 5-5	5.3	12
635	Toward Optimal Metal-Organic Frameworks for Adsorption Chillers: Insights from the Scale-Up of MIL-101(Cr) and NH ₂ -MIL-125. <i>Energy Technology</i> , 2020 , 8, 1900617	3.5	9
634	Xenon Recovery by DD3R Zeolite Membranes: Application in Anaesthetics. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 15518-15525	16.4	27

633	Structure-activity relationships in metal organic framework derived mesoporous nitrogen-doped carbon containing atomically dispersed iron sites for CO ₂ electrochemical reduction. <i>Journal of Catalysis</i> , 2019 , 378, 320-330	7.3	20
632	A site-sensitive quasi-in situ strategy to characterize Mo/HZSM-5 during activation. <i>Journal of Catalysis</i> , 2019 , 370, 321-331	7.3	27
631	Quantifying the impact of dispersion, acidity and porosity of Mo/HZSM-5 on the performance in methane dehydroaromatization. <i>Applied Catalysis A: General</i> , 2019 , 574, 144-150	5.1	13
630	Engineering Metal-Organic Frameworks for the Electrochemical Reduction of CO : A Minireview. <i>Chemistry - an Asian Journal</i> , 2019 , 14, 3452-3461	4.5	33
629	Defect-free high-silica CHA zeolite membranes with high selectivity for light gas separation. <i>Journal of Membrane Science</i> , 2019 , 586, 34-43	9.6	27
628	High-Performance Polybenzimidazole Membranes for Helium Extraction from Natural Gas. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 20098-20103	9.5	14
627	Cation influence in adsorptive propane/propylene separation in ZIF-8 (SOD) topology. <i>Chemical Engineering Journal</i> , 2019 , 371, 848-856	14.7	24
626	Novel high performance poly(p-phenylene benzobisimidazole) (PBDI) membranes fabricated by interfacial polymerization for H ₂ separation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8929-8937	13	14
625	Progress in Developing a Structure-Activity Relationship for the Direct Aromatization of Methane. <i>ChemCatChem</i> , 2019 , 11, 39-52	5.2	49
624	Maximizing Ag Utilization in High-Rate CO ₂ Electrochemical Reduction with a Coordination Polymer-Mediated Gas Diffusion Electrode. <i>ACS Energy Letters</i> , 2019 , 4, 2024-2031	20.1	54
623	Porous Metal-Organic Framework CUK-1 for Adsorption Heat Allocation toward Green Applications of Natural Refrigerant Water. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25778-25789	9.5	23
622	Xenon Recovery by DD3R Zeolite Membranes: Application in Anaesthetics. <i>Angewandte Chemie</i> , 2019 , 131, 15664-15671	3.6	8
621	Transport Properties of Mixed-Matrix Membranes: A Kinetic Monte Carlo Study. <i>Physical Review Applied</i> , 2019 , 12,	4.3	7
620	Activity Descriptors Derived from Comparison of Mo and Fe as Active Metal for Methane Conversion to Aromatics. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18814-18824	16.4	32
619	Fabrication of Defect-Free P84 Polyimide Hollow Fiber for Gas Separation: Pathway to Formation of Optimized Structure. <i>Membranes</i> , 2019 , 10,	3.8	4
618	Conceptual design of membrane-based pre-combustion CO ₂ capture process: Role of permeance and selectivity on performance and costs. <i>Journal of Membrane Science</i> , 2019 , 575, 229-241	9.6	18
617	Methane hydrates: Nucleation in microporous materials. <i>Chemical Engineering Journal</i> , 2019 , 360, 569-576	14.7	44
616	ZIF-67 as silver-bullet in adsorptive propane/propylene separation. <i>Chemical Engineering Journal</i> , 2019 , 360, 10-14	14.7	32

615	Photocatalytic properties of TiO ₂ and Fe-doped TiO ₂ prepared by metal organic framework-mediated synthesis. <i>Chemical Engineering Journal</i> , 2019 , 360, 75-88	14.7	65
614	Thin mixed matrix and dual layer membranes containing metal-organic framework nanosheets and Polyactive TM for CO ₂ capture. <i>Journal of Membrane Science</i> , 2019 , 570-571, 226-235	9.6	37
613	Prediction of adsorption isotherms from breakthrough curves. <i>Microporous and Mesoporous Materials</i> , 2019 , 277, 237-244	5.3	19
612	Integrated Vacuum Stripping and Adsorption for the Efficient Recovery of (Biobased) 2-Butanol. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 296-305	3.9	6
611	From amorphous to crystalline: Transformation of silica membranes into silicalite-1 (MFI) zeolite layers. <i>Microporous and Mesoporous Materials</i> , 2019 , 276, 52-61	5.3	3
610	Revealing the Transient Concentration of CO in a Mixed-Matrix Membrane by IR Microimaging and Molecular Modeling. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5156-5160	16.4	29
609	Controlled formation of iron carbides and their performance in Fischer-Tropsch synthesis. <i>Journal of Catalysis</i> , 2018 , 362, 106-117	7.3	78
608	Influence of Filler Pore Structure and Polymer on the Performance of MOF-Based Mixed-Matrix Membranes for CO Capture. <i>Chemistry - A European Journal</i> , 2018 , 24, 7949-7956	4.8	33
607	Einblicke in die Verteilung von CO ₂ -Molekülen und deren zeitliche Entwicklung durch Mikro-Bildgebung mittels IR-Spektroskopie und molekulardynamische Modellierung. <i>Angewandte Chemie</i> , 2018 , 130, 5250-5255	3.6	
606	Effects of Substrate and Polymer Encapsulation on CO Electroreduction by Immobilized Indium(III) Protoporphyrin. <i>ACS Catalysis</i> , 2018 , 8, 4420-4428	13.1	35
605	Metal-Organic-Framework-Mediated Nitrogen-Doped Carbon for CO Electrochemical Reduction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 14751-14758	9.5	79
604	Revealing Lattice Expansion of Small-Pore Zeolite Catalysts during the Methanol-to-Olefins Process Using Combined Operando X-ray Diffraction and UV-vis Spectroscopy. <i>ACS Catalysis</i> , 2018 , 8, 2060-2070	13.1	31
603	NO _x reduction in the Di-Air system over noble metal promoted ceria. <i>Applied Catalysis B: Environmental</i> , 2018 , 231, 200-212	21.8	13
602	Relevance of the Mo-precursor state in H-ZSM-5 for methane dehydroaromatization. <i>Catalysis Science and Technology</i> , 2018 , 8, 916-922	5.5	30
601	Overcoming the Engineering Constraints for Scaling-Up the State-of-the-Art Catalyst for Tail-Gas N ₂ O Decomposition. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 939-945	3.9	6
600	On the dynamic nature of Mo sites for methane dehydroaromatization. <i>Chemical Science</i> , 2018 , 9, 4801-4807	9.7	49
599	In Silico Screening of Metal-Organic Frameworks for Adsorption-Driven Heat Pumps and Chillers. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 27074-27087	9.5	25
598	Benzimidazole linked polymers (BILPs) in mixed-matrix membranes: Influence of filler porosity on the CO ₂ /N ₂ separation performance. <i>Journal of Membrane Science</i> , 2018 , 566, 213-222	9.6	13

597	Molecular-Scale Hybrid Membranes Derived from Metal-Organic Polyhedra for Gas Separation. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21381-21389	9.5	30
596	High performance mixed matrix membranes (MMMs) composed of ZIF-94 filler and 6FDA-DAM polymer. <i>Journal of Membrane Science</i> , 2018 , 550, 198-207	9.6	71
595	Mixed-matrix membranes containing an azine-linked covalent organic framework: Influence of the polymeric matrix on post-combustion CO ₂ -capture. <i>Journal of Membrane Science</i> , 2018 , 549, 377-384	9.6	43
594	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
593	Formulation and catalytic performance of MOF-derived Fe@C/Al composites for high temperature Fischer-Tropsch synthesis. <i>Catalysis Science and Technology</i> , 2018 , 8, 210-220	5.5	23
592	Facile manufacture of porous organic framework membranes for precombustion CO capture. <i>Science Advances</i> , 2018 , 4, eaau1698	14.3	59
591	One-Pot Synthesis of High-Flux b-Oriented MFI Zeolite Membranes for Xe Recovery. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33574-33580	9.5	18
590	Nanosheets of Nonlayered Aluminum Metal-Organic Frameworks through a Surfactant-Assisted Method. <i>Advanced Materials</i> , 2018 , 30, e1707234	24	80
589	Towards High Performance Metal-Organic Framework-Microporous Polymer Mixed Matrix Membranes: Addressing Compatibility and Limiting Aging by Polymer Doping. <i>Chemistry - A European Journal</i> , 2018 , 24, 12796-12800	4.8	15
588	An in situ reactivation study reveals the supreme stability of Alumina for the oxidative dehydrogenation of ethylbenzene to styrene. <i>Catalysis Science and Technology</i> , 2018 , 8, 3733-3736	5.5	7
587	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
586	Understanding metal-organic frameworks for photocatalytic solar fuel production. <i>CrystEngComm</i> , 2017 , 19, 4118-4125	3.3	62
585	High-temperature Fischer-Tropsch synthesis over FeTi mixed oxide model catalysts: Tailoring activity and stability by varying the Ti/Fe ratio. <i>Applied Catalysis A: General</i> , 2017 , 533, 38-48	5.1	14
584	Metal organic frameworks as precursors for the manufacture of advanced catalytic materials. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1709-1745	7.8	174
583	Ruthenium particle size and cesium promotion effects in Fischer-Tropsch synthesis over high-surface-area graphite supported catalysts. <i>Catalysis Science and Technology</i> , 2017 , 7, 1235-1244	5.5	26
582	Synthesis, characterization and performance of bifunctional catalysts for the synthesis of menthol from citronellal. <i>RSC Advances</i> , 2017 , 7, 12041-12053	3.7	11
581	Metal-Organic Framework Mediated Cobalt/Nitrogen-Doped Carbon Hybrids as Efficient and Chemoselective Catalysts for the Hydrogenation of Nitroarenes. <i>ChemCatChem</i> , 2017 , 9, 1854-1862	5.2	63
580	Hydrocarbon conversion in the production of synthetic fuels: general discussion. <i>Faraday Discussions</i> , 2017 , 197, 473-489	3.6	

579	Designing new catalysts for synthetic fuels: general discussion. <i>Faraday Discussions</i> , 2017 , 197, 353-388	3.6	6
578	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
577	Gas Phase Sensing of Alcohols by Metal Organic Framework-Polymer Composite Materials. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24926-24935	9.5	39
576	Sensitive and Reversible Detection of Methanol and Water Vapor by In Situ Electrochemically Grown CuBTC MOFs on Interdigitated Electrodes. <i>Small</i> , 2017 , 13, 1604150	11	20
575	Comment on Efficient Conversion of Methane to Aromatics by Coupling Methylation Reaction. <i>ACS Catalysis</i> , 2017 , 7, 4485-4487	13.1	3
574	Base free transfer hydrogenation using a covalent triazine framework based catalyst. <i>CrystEngComm</i> , 2017 , 19, 4166-4170	3.3	12
573	Metal-organic and covalent organic frameworks as single-site catalysts. <i>Chemical Society Reviews</i> , 2017 , 46, 3134-3184	58.5	696
572	Harvesting the photoexcited holes on a photocatalytic proton reduction metal-organic framework. <i>Faraday Discussions</i> , 2017 , 201, 71-86	3.6	10
571	Consequences of secondary zeolite growth on catalytic performance in DMTO studied over DDR and CHA. <i>Catalysis Science and Technology</i> , 2017 , 7, 300-309	5.5	9
570	Chemical Kinetics of Catalyzed Reactions 2017 , 191-220		
569	Catalytic Reaction Engineering 2017 , 221-269		1
568	Understanding the Inhibiting Effect of BTC on CuBTC Growth through Experiment and Modeling. <i>Crystal Growth and Design</i> , 2017 , 17, 5603-5607	3.5	16
567	Revisiting the Incorporation of Ti(IV) in UiO-type Metal-Organic Frameworks: Metal Exchange versus Grafting and Their Implications on Photocatalysis. <i>Chemistry of Materials</i> , 2017 , 29, 8963-8967	9.6	52
566	Facile Method for the Preparation of Covalent Triazine Framework coated Monoliths as Catalyst Support: Applications in C1 Catalysis. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 26060-26065	9.5	31
565	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
564	Revisiting the Aluminum Trimesate-Based MOF (MIL-96): From Structure Determination to the Processing of Mixed Matrix Membranes for CO ₂ Capture. <i>Chemistry of Materials</i> , 2017 , 29, 10326-10338	9.6	53
563	Metal-Organic Framework-Mediated Synthesis in Catalysis 2017 , 225-250		4
562	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

561	Tail gas catalyzed N ₂ O decomposition over Fe-beta zeolite. On the promoting role of framework connected AlO ₆ sites in the vicinity of Fe by controlled dealumination during exchange. <i>Applied Catalysis B: Environmental</i> , 2017 , 203, 218-226	21.8	14
560	Structural and elemental influence from various MOFs on the performance of Fe@C catalysts for Fischer-Tropsch synthesis. <i>Faraday Discussions</i> , 2017 , 197, 225-242	3.6	29
559	Multi-scale crystal engineering of metal organic frameworks. <i>Coordination Chemistry Reviews</i> , 2016 , 307, 147-187	23.2	186
558	Highly dispersed Pt ⁺ on Ti Ce(111)O ₂ as an active phase in preferential oxidation of CO. <i>Applied Catalysis B: Environmental</i> , 2016 , 180, 169-178	21.8	31
557	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
556	Shaping Covalent Triazine Framework for the Hydrogenation of Carbon Dioxide to Formic Acid. <i>ChemCatChem</i> , 2016 , 8, 2173-2173	5.2	1
555	Polymer/Metal Organic Framework Composite Films as Affinity Layer for Capacitive Sensor Devices. <i>ACS Sensors</i> , 2016 , 1, 1188-1192	9.2	34
554	Efficient Electrochemical Production of Syngas from CO ₂ and H ₂ O by using a Nanostructured Ag/g-C ₃ N ₄ Catalyst. <i>ChemElectroChem</i> , 2016 , 3, 1497-1502	4.3	34
553	Assessing the Surface Area of Porous Solids: Limitations, Probe Molecules, and Methods. <i>Langmuir</i> , 2016 , 32, 12664-12675	4	24
552	Electronic origins of photocatalytic activity in d ⁰ metal organic frameworks. <i>Scientific Reports</i> , 2016 , 6, 23676	4.9	154
551	Selective Coke Combustion by Oxygen Pulsing During Mo/ZSM-5-Catalyzed Methane Dehydroaromatization. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 15086-15090	16.4	72
550	Selective Coke Combustion by Oxygen Pulsing During Mo/ZSM-5-Catalyzed Methane Dehydroaromatization. <i>Angewandte Chemie</i> , 2016 , 128, 15310-15314	3.6	13
549	Metal-Organic Framework Capillary Microreactor for Application in Click Chemistry. <i>ChemCatChem</i> , 2016 , 8, 1692-1698	5.2	7
548	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
547	Investigating the Case of Titanium(IV) Carboxyphenolate Photoactive Coordination Polymers. <i>Inorganic Chemistry</i> , 2016 , 55, 7192-9	5.1	56
546	Fundamental Understanding of the Di-Air System: The Role of Ceria in NO _x Abatement. <i>Topics in Catalysis</i> , 2016 , 59, 854-860	2.3	13
545	Organic Linker Defines the Excited-State Decay of Photocatalytic MIL-125(Ti)-Type Materials. <i>ChemSusChem</i> , 2016 , 9, 388-95	8.3	67
544	Methanol-to-olefins process over zeolite catalysts with DDR topology: effect of composition and structural defects on catalytic performance. <i>Catalysis Science and Technology</i> , 2016 , 6, 2663-2678	5.5	43

543	Control of interpenetration of copper-based MOFs on supported surfaces by electrochemical synthesis. <i>CrystEngComm</i> , 2016 , 18, 4018-4022	3.3	18
542	Adsorption of CO ₂ on MIL-53(Al): FTIR evidence of the formation of dimeric CO ₂ species. <i>Chemical Communications</i> , 2016 , 52, 1494-7	5.8	19
541	Photoswitchable metal organic frameworks: turn on the lights and close the windows. <i>CrystEngComm</i> , 2016 , 18, 4006-4012	3.3	92
540	On the thermal stabilization of carbon-supported SiO ₂ catalysts by phosphorus: Evaluation in the oxidative dehydrogenation of ethylbenzene to styrene and a comparison with relevant catalysts. <i>Applied Catalysis A: General</i> , 2016 , 514, 173-181	5.1	6
539	Effect of pretreatment atmosphere on the activity and selectivity of Co/mesoHZSM-5 for Fischer-Tropsch synthesis. <i>New Journal of Chemistry</i> , 2016 , 40, 4167-4177	3.6	31
538	Synthesis and gas adsorption properties of mesoporous silica-NH ₂ -MIL-53(Al) core-shell spheres. <i>Microporous and Mesoporous Materials</i> , 2016 , 225, 116-121	5.3	22
537	Carbon/H-ZSM-5 composites as supports for bi-functional Fischer-Tropsch synthesis catalysts. <i>Catalysis Science and Technology</i> , 2016 , 6, 2633-2646	5.5	30
536	Numerical optimization of a structured tubular reactor for Fischer-Tropsch synthesis. <i>Chemical Engineering Journal</i> , 2016 , 283, 1465-1483	14.7	21
535	Recent developments in zeolite membranes for gas separation. <i>Journal of Membrane Science</i> , 2016 , 499, 65-79	9.6	315
534	Au Capping Agent Removal Using Plasma at Mild Temperature. <i>Catalysts</i> , 2016 , 6, 179	4	4
533	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
532	Shaping Covalent Triazine Frameworks for the Hydrogenation of Carbon Dioxide to Formic Acid. <i>ChemCatChem</i> , 2016 , 8, 2217-2221	5.2	54
531	Establishing hierarchy: the chain of events leading to the formation of silicalite-1 nanosheets. <i>Chemical Science</i> , 2016 , 7, 6506-6513	9.4	15
530	Sulfonated Porous Aromatic Frameworks as Solid Acid Catalysts. <i>ChemCatChem</i> , 2016 , 8, 961-967	5.2	23
529	Evidence for a chemical clock in oscillatory formation of UiO-66. <i>Nature Communications</i> , 2016 , 7, 11832	17.4	24
528	Next Generation Automotive DeNO _x Catalysts: Ceria What Else?. <i>ChemCatChem</i> , 2016 , 8, 102-105	5.2	21
527	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
526	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

525	The importance of heat effects in the methanol to hydrocarbons reaction over ZSM-5: on the role of mesoporosity on catalyst performance. <i>Catalysis Science and Technology</i> , 2016 , 6, 5320-5325	5.5	26
524	Promotion or additive activity? The role of gold on zirconia supported iron oxide in high temperature water-gas shift. <i>Journal of Molecular Catalysis A</i> , 2016 , 420, 115-123		3
523	Adsorption Forms of CO ₂ on MIL-53(Al) and NH ₂ -MIL-53(Al) As Revealed by FTIR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 23584-23595	3.8	31
522	Suppression of the Aromatic Cycle in Methanol-to-Olefins Reaction over ZSM-5 by Post-Synthetic Modification Using Calcium. <i>ChemCatChem</i> , 2016 , 8, 3005-3005	5.2	4
521	Suppression of the Aromatic Cycle in Methanol-to-Olefins Reaction over ZSM-5 by Post-Synthetic Modification Using Calcium. <i>ChemCatChem</i> , 2016 , 8, 3057-3063	5.2	44
520	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
519	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
518	Metal organic framework-mediated synthesis of highly active and stable Fischer-Tropsch catalysts. <i>Nature Communications</i> , 2015 , 6, 6451	17.4	265
517	Enhancing promoting effects in g-C ₃ N ₄ -Mn ⁺ /CeO ₂ -TiO ₂ ternary composites: Photo-handling of charge carriers. <i>Applied Catalysis B: Environmental</i> , 2015 , 176-177, 687-698	21.8	32
516	Adsorption-Driven Heat Pumps: The Potential of Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2015 , 115, 12205-50	68.1	294
515	Metal Organic Framework: Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation (Adv. Mater. 32/2015). <i>Advanced Materials</i> , 2015 , 27, 4803-4803	24	10
514	Six-coordinate Group 13 complexes: the role of d orbitals and electron-rich multi-center bonding. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 12034-8	16.4	10
513	Metal-Organic Frameworks in Adsorption-Driven Heat Pumps: The Potential of Alcohols as Working Fluids. <i>Langmuir</i> , 2015 , 31, 12783-96	4	97
512	Structuring catalyst and reactor – an inviting avenue to process intensification. <i>Catalysis Science and Technology</i> , 2015 , 5, 807-817	5.5	94
511	Crystals for sustainability – structuring Al-based MOFs for the allocation of heat and cold. <i>CrystEngComm</i> , 2015 , 17, 281-285	3.3	30
510	Effect of rhodium on the water-gas shift performance of Fe ₂ O ₃ /ZrO ₂ and CeO ₂ /ZrO ₂ : Influence of rhodium precursor. <i>Catalysis Today</i> , 2015 , 242, 168-177	5.3	11
509	Experimental Evidence of Negative Linear Compressibility in the MIL-53 Metal-Organic Framework Family. <i>CrystEngComm</i> , 2015 , 17, 276-280	3.3	99
508	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

507	Kinetics of the high temperature water-gas shift over Fe ₂ O ₃ /ZrO ₂ , Rh/ZrO ₂ and Rh/Fe ₂ O ₃ /ZrO ₂ . <i>Chemical Engineering Journal</i> , 2015 , 263, 427-434	14.7	14
506	Metal-organic framework nanosheets in polymer composite materials for gas separation. <i>Nature Materials</i> , 2015 , 14, 48-55	27	1454
505	Separation of CO ₂ /CH ₄ mixtures over NH ₂ -MIL-53A: An experimental and modelling study. <i>Chemical Engineering Science</i> , 2015 , 124, 96-108	4.4	24
504	Design of hydrophilic metal organic framework water adsorbents for heat reallocation. <i>Advanced Materials</i> , 2015 , 27, 4775-80	24	168
503	Dynamic Release/Immobilization of a Homogeneous Rhodium Hydroformylation Catalyst by a Polyoxometalate Metal-Organic Framework Composite. <i>ChemCatChem</i> , 2015 , 7, 3243-3247	5.2	18
502	Preliminary Design of a Vacuum Pressure Swing Adsorption Process for Natural Gas Upgrading Based on Amino-Functionalized MIL-53. <i>Chemical Engineering and Technology</i> , 2015 , 38, 1183-1194	2	11
501	Anchoring of Diphenylphosphinyl Groups to NH ₂ -MIL-53 by Post-Synthetic Modification. <i>European Journal of Inorganic Chemistry</i> , 2015 , 2015, 4648-4652	2.3	12
500	Manufacture of dense CAU-10-H coatings for application in adsorption driven heat pumps: optimization and characterization. <i>CrystEngComm</i> , 2015 , 17, 5911-5920	3.3	32
499	Revisiting the synthesis of Au/TiO ₂ P25 catalyst and application in the low temperature water-gas shift under realistic conditions. <i>Catalysis Today</i> , 2015 , 244, 19-28	5.3	7
498	Metal organic framework synthesis in the presence of surfactants: towards hierarchical MOFs?. <i>CrystEngComm</i> , 2015 , 17, 1693-1700	3.3	59
497	Application of staged O ₂ feeding in the oxidative dehydrogenation of ethylbenzene to styrene over Al ₂ O ₃ and P ₂ O ₅ /SiO ₂ catalysts. <i>Applied Catalysis A: General</i> , 2014 , 476, 204-214	5.1	14
496	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
495	The role of rhodium in the mechanism of the water-gas shift over zirconia supported iron oxide. <i>Journal of Catalysis</i> , 2014 , 313, 34-45	7.3	28
494	Molecular promoting of aluminum metal-organic framework topology MIL-101 by N,N-dimethylformamide. <i>Inorganic Chemistry</i> , 2014 , 53, 882-7	5.1	41
493	Electronic metal-support interactions in single-atom catalysts. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 3418-21	16.4	267
492	Metal-Organic Frameworks: 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 (Adv. Funct. Mater. 2/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 268-268	15.6	4
491	Metal Organic Framework Catalysis: Quo vadis?. <i>ACS Catalysis</i> , 2014 , 4, 361-378	13.1	756
490	Stabilized gold on cerium-modified cryptomelane: Highly active in low-temperature CO oxidation. <i>Journal of Catalysis</i> , 2014 , 309, 58-65	7.3	71

489	Numerical Validation of a Simplified Engineering Approach for Heat Transfer in a Closed-Cross-Flow Structured Tubular Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 16579-16585	3.9	5
488	Interplay of Linker Functionalization and Hydrogen Adsorption in the Metal-Organic Framework MIL-101. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19572-19579	3.8	20
487	Sulfur as a Selectivity Modifier in a Highly Active Rh/Fe ₂ O ₃ /ZrO ₂ Catalyst for Water-Gas Shift. <i>ChemCatChem</i> , 2014 , 6, 2240-2243	5.2	1
486	Coke formation in the oxidative dehydrogenation of ethylbenzene to styrene by TEOM. <i>Catalysis Science and Technology</i> , 2014 , 4, 3879-3890	5.5	7
485	Induced Chirality in a Metal-Organic Framework by Postsynthetic Modification for Highly Selective Asymmetric Aldol Reactions. <i>ChemCatChem</i> , 2014 , 6, 2211-2214	5.2	22
484	Influence of support morphology on the detemplation and permeation of ZSM-5 and SSZ-13 zeolite membranes. <i>Microporous and Mesoporous Materials</i> , 2014 , 197, 268-277	5.3	39
483	Molecular simulation of gas adsorption and diffusion in a breathing MOF using a rigid force field. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 16060-6	3.6	28
482	Metal-Organic frameworks as heterogeneous photocatalysts: advantages and challenges. <i>CrystEngComm</i> , 2014 , 16, 4919-4926	3.3	34 ¹
481	Making coke a more efficient catalyst in the oxidative dehydrogenation of ethylbenzene using wide-pore transitional aluminas. <i>Journal of Molecular Catalysis A</i> , 2014 , 381, 179-187		23
480	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
479	Insights into the Catalytic Performance of Mesoporous H-ZSM-5-Supported Cobalt in Fischer-Tropsch Synthesis. <i>ChemCatChem</i> , 2014 , 6, 142-151	5.2	49
478	On the stability of conventional and nano-structured carbon-based catalysts in the oxidative dehydrogenation of ethylbenzene under industrially relevant conditions. <i>Carbon</i> , 2014 , 77, 329-340	10.4	18
477	Innenteilbild: Electronic Metal-Support Interactions in Single-Atom Catalysts (Angew. Chem. 13/2014). <i>Angewandte Chemie</i> , 2014 , 126, 3350-3350	3.6	3
476	High flux high-silica SSZ-13 membrane for CO ₂ separation. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 13083-13092	5.3	10 ²
475	Unveiling the mechanism of selective gate-driven diffusion of CO ₂ over N ₂ in MFU-4 metal-organic framework. <i>Dalton Transactions</i> , 2014 , 43, 9612-9	4.3	19
474	Adsorptive characterization of porous solids: Error analysis guides the way. <i>Microporous and Mesoporous Materials</i> , 2014 , 200, 199-215	5.3	109
473	Electronic Metal-Support Interactions in Single-Atom Catalysts. <i>Angewandte Chemie</i> , 2014 , 126, 3486-3489	3.6	51
472	Inhibition of a Gold-Based Catalyst in Benzyl Alcohol Oxidation: Understanding and Remediation. <i>Catalysts</i> , 2014 , 4, 89-115	4	32

471	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
470	4th International conference on structured catalysts and reactors, ICOSCAR-4, Beijing, China, September 25-27, 2013. <i>Catalysis Today</i> , 2013 , 216, 1	5.3	1
469	Monolithic reactors in catalysis: excellent control. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 346-354	5.3	25
468	Adsorption of hexane isomers on MFI type zeolites at ambient temperature: Understanding the aluminium content effect. <i>Microporous and Mesoporous Materials</i> , 2013 , 170, 26-35	5.3	24
467	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
466	A diffusion study of small hydrocarbons in DDR zeolites by micro-imaging. <i>Microporous and Mesoporous Materials</i> , 2013 , 180, 219-228	5.3	21
465	Process intensification of tubular reactors: Considerations on catalyst hold-up of structured packings. <i>Catalysis Today</i> , 2013 , 216, 111-116	5.3	25
464	Dynamic desorption of CO ₂ and CH ₄ from amino-MIL-53(Al) adsorbent. <i>Adsorption</i> , 2013 , 19, 1235-1244	2.6	24
463	Fascinating chemistry or frustrating unpredictability: observations in crystal engineering of metal-organic frameworks. <i>CrystEngComm</i> , 2013 , 15, 9249	3.3	95
462	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
461	MOF@MOF core-shell vs. Janus particles and the effect of strain: potential for guest sorption, separation and sequestration. <i>CrystEngComm</i> , 2013 , 15, 6003	3.3	36
460	Enhancing optical absorption of metal-organic frameworks for improved visible light photocatalysis. <i>Chemical Communications</i> , 2013 , 49, 10575-7	5.8	195
459	Synthesis, characterisation and catalytic performance of a mesoporous tungsten silicate: W-TUD-1. <i>Applied Catalysis A: General</i> , 2013 , 468, 150-159	5.1	20
458	Oxidative dehydrogenation of ethylbenzene to styrene over alumina: effect of calcination. <i>Catalysis Science and Technology</i> , 2013 , 3, 519-526	5.5	24
457	Selectivity of the Fischer-Tropsch process: deviations from single alpha product distribution explained by gradients in process conditions. <i>Catalysis Science and Technology</i> , 2013 , 3, 2210	5.5	27
456	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
455	Toward a Transferable Set of Charges to Model Zeolitic Imidazolate Frameworks: Combined Experimental/Theoretical Research. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 466-471	3.8	20
454	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

453	Kinetics of propane dehydrogenation over PtSn/Al ₂ O ₃ . <i>Catalysis Science and Technology</i> , 2013 , 3, 962-975	15	31
452	A "smart" hollandite DeNO _x Catalyst: Self-Protection against Alkali Poisoning. <i>Angewandte Chemie</i> , 2013 , 125, 688-692	3.6	10
451	A "smart" hollandite DeNO(x) catalyst: self-protection against alkali poisoning. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 660-4	16.4	71
450	Small-angle X-ray scattering documents the growth of metal-organic frameworks. <i>Catalysis Today</i> , 2013 , 205, 120-127	5.3	45
449	A convection-based single-parameter model for heat transport in multiphase tubular reactors packed with closed cross flow structures. <i>Chemical Engineering Journal</i> , 2013 , 233, 265-273	14.7	7
448	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
447	Understanding Adsorption of Highly Polar Vapors on Mesoporous MIL-100(Cr) and MIL-101(Cr): Experiments and Molecular Simulations. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 7613-7622	3.8	60
446	The molecular pathway to ZIF-7 microrods revealed by in situ time-resolved small- and wide-angle X-ray scattering, quick-scanning extended X-ray absorption spectroscopy, and DFT calculations. <i>Chemistry - A European Journal</i> , 2013 , 19, 7809-16	4.8	44
445	Towards liquid fuels from biosyngas: effect of zeolite structure in hierarchical-zeolite-supported cobalt catalysts. <i>ChemSusChem</i> , 2013 , 6, 1646-50	8.3	61
444	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
443	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
442	Towards acid MOFs: catalytic performance of sulfonic acid functionalized architectures. <i>Catalysis Science and Technology</i> , 2013 , 3, 2311	5.5	129
441	Metal-doped carbon xerogels for the electro-catalytic conversion of CO ₂ to hydrocarbons. <i>Carbon</i> , 2013 , 56, 324-331	10.4	46
440	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
439	Pt/Al ₂ O ₃ Catalyzed 1,3-Propanediol Formation from Glycerol using Tungsten Additives. <i>ChemCatChem</i> , 2013 , 5, 497-505	5.2	69
438	Six-flow operations for catalyst development in Fischer-Tropsch synthesis: bridging the gap between high-throughput experimentation and extensive product evaluation. <i>Review of Scientific Instruments</i> , 2013 , 84, 124101	1.7	11
437	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
436	Influence of force field parameters on computed diffusion coefficients of CO ₂ in LTA-type zeolite. <i>Microporous and Mesoporous Materials</i> , 2012 , 158, 64-76	5.3	11

435	The Impact of MOF Flexibility Using an Amino Functionalized MOF in Mixed Matrix Membranes for CO ₂ Separation. <i>Procedia Engineering</i> , 2012 , 44, 2121-2123		4
434	High compressibility of a flexible metal-organic framework. <i>RSC Advances</i> , 2012 , 2, 5051	3.7	55
433	Chloromethylation as a functionalisation pathway for metal-organic frameworks. <i>CrystEngComm</i> , 2012 , 14, 4109	3.3	40
432	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
431	Towards efficient polyoxometalate encapsulation in MIL-100(Cr): influence of synthesis conditions. <i>New Journal of Chemistry</i> , 2012 , 36, 977	3.6	55
430	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
429	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
428	Highly selective chemical sensing in a luminescent nanoporous magnet. <i>Advanced Materials</i> , 2012 , 24, 5625-9	24	121
427	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
426	Intensifying the Fischer-Tropsch Synthesis by reactor structuring: A model study. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 865-870	14.7	24
425	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
424	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
423	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
422	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
421	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
420	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
419	Transport Limitations during Phase Transfer Catalyzed Ethyl-Benzene Oxidation: Facts and Fictions of Halide Catalysis. <i>ACS Catalysis</i> , 2012 , 2, 1421-1424	13.1	8
418	Heat transport in structured packings with two-phase co-current downflow. <i>Chemical Engineering Journal</i> , 2012 , 185-186, 250-266	14.7	25

4 ¹⁷	Catalysed ethylbenzene dehydrogenation in CO ₂ or N ₂ Carbon deposits as the active phase. <i>Applied Catalysis A: General</i> , 2012 , 417-418, 163-173	5.1	31
4 ¹⁶	The role of RWGS in the dehydrogenation of ethylbenzene to styrene in CO ₂ . <i>Applied Catalysis A: General</i> , 2012 , 423-424, 59-68	5.1	19
4 ¹⁵	Micro-imaging of transient guest profiles in nanoporous host systems of cylindrical symmetry. <i>Journal of Chemical Physics</i> , 2012 , 137, 164704	3.9	12
4 ¹⁴	Monolithic Catalysts and Reactors. <i>Advances in Catalysis</i> , 2011 , 54, 249-327	2.4	30
4 ¹³	Live encapsulation of a Keggin polyanion in NH ₂ -MIL-101(Al) observed by in situ time resolved X-ray scattering. <i>Chemical Communications</i> , 2011 , 47, 8578-80	5.8	60
4 ¹²	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
4 ¹¹	Complexity behind CO ₂ capture on NH ₂ -MIL-53(Al). <i>Langmuir</i> , 2011 , 27, 3970-6	4	256
4 ¹⁰	Tuning selectivity of Pt/CaCO ₃ in glycerol hydrogenolysis via Design of Experiments approach. <i>Catalysis Communications</i> , 2011 , 13, 1-5	3.2	55
4 ⁰⁹	Simple modification of macroporous alumina supports for the fabrication of dense NaA zeolite coatings: Interplay of electrostatic and chemical interactions. <i>Microporous and Mesoporous Materials</i> , 2011 , 146, 69-75	5.3	17
4 ⁰⁸	Sulfation of metal-organic frameworks: Opportunities for acid catalysis and proton conductivity. <i>Journal of Catalysis</i> , 2011 , 281, 177-187	7.3	249
4 ⁰⁷	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
4 ⁰⁶	Heterogeneously Catalyzed Continuous-Flow Hydrogenation Using Segmented Flow in Capillary Columns. <i>ChemCatChem</i> , 2011 , 3, 1155-1157	5.2	43
4 ⁰⁵	Facile synthesis of the DD3R zeolite: performance in the adsorptive separation of buta-1,3-diene and but-2-ene isomers. <i>Journal of Materials Chemistry</i> , 2011 , 21, 18386		50
4 ⁰⁴	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
4 ⁰³	Isobutane dehydrogenation in a DD3R zeolite membrane reactor. <i>Chemical Engineering Journal</i> , 2011 , 166, 368-377	14.7	38
4 ⁰²	Kinetic Control of Metal-Organic Framework Crystallization Investigated by Time-Resolved In Situ X-Ray Scattering. <i>Angewandte Chemie</i> , 2011 , 123, 9798-9802	3.6	34
4 ⁰¹	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
4 ⁰⁰	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

399	MOFs meet monoliths: Hierarchical structuring metal organic framework catalysts. <i>Applied Catalysis A: General</i> , 2011 , 391, 261-267	5.1	115
398	Shape selective methanol to olefins over highly thermostable DDR catalysts. <i>Applied Catalysis A: General</i> , 2011 , 391, 234-243	5.1	50
397	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
396	Diffusion in Zeolites Impact on Catalysis 2010 , 361-387		24
395	Zeolite Membranes in Catalysis: What Is New and How Bright Is the Future? 2010 , 211-237		2
394	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
393	Modeling Permeation of CO ₂ /CH ₄ , N ₂ /CH ₄ , and CO ₂ /Air Mixtures across a DD3R Zeolite Membrane. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 9379-9389	3.8	31
392	Synthesis of Anisotropic Gold Nanoparticles by Electro spraying into a Reductive-Surfactant Solution. <i>Chemistry of Materials</i> , 2010 , 22, 1656-1663	9.6	18
391	Self-Diffusion Studies in CuBTC by PFG NMR and MD Simulations. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10527-10534	3.8	73
390	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
389	Minimization of Chemicals Use during Adsorptive Recovery of Succinic Acid. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 3794-3801	3.9	5
388	Reconciling the Relevant Site Model and dynamically corrected Transition State Theory. <i>Chemical Physics Letters</i> , 2010 , 495, 77-79	2.5	4
387	Detection of agglomeration and gradual particle size changes in circulating fluidized beds. <i>Powder Technology</i> , 2010 , 202, 24-38	5.2	25
386	Diffusion in zeolites: Extension of the relevant site model to light gases and mixtures thereof in zeolites DDR, CHA, MFI and FAU. <i>Separation and Purification Technology</i> , 2010 , 73, 151-163	8.3	10
385	Production of ultra pure water by desalination of seawater using a hydroxy sodalite membrane. <i>Journal of Membrane Science</i> , 2010 , 356, 52-57	9.6	57
384	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
383	Thermostability of hydroxy sodalite in view of membrane applications. <i>Microporous and Mesoporous Materials</i> , 2010 , 132, 510-517	5.3	44
382	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

381	Shape-selective diisopropylation of naphthalene in H-Mordenite: Myth or reality?. <i>Journal of Catalysis</i> , 2010 , 270, 60-66	7.3	15
380	Weakly bound capping agents on gold nanoparticles in catalysis: Surface poison?. <i>Journal of Catalysis</i> , 2010 , 271, 104-114	7.3	103
379	Catalyst performance changes induced by palladium phase transformation in the hydrogenation of benzonitrile. <i>Journal of Catalysis</i> , 2010 , 274, 176-191	7.3	45
378	Metall-organische Membranen: hohes Potenzial, große Zukunft?. <i>Angewandte Chemie</i> , 2010 , 122, 1572-1574	7.4	33
377	Metal-organic framework membranes--high potential, bright future?. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1530-2	16.4	221
376	Performance of hydroxy sodalite membranes as absolute water selective materials under acidic and basic conditions. <i>Journal of Membrane Science</i> , 2010 , 356, 1-6	9.6	20
375	Case studies for selective agglomeration detection in fluidized beds: Application of a new screening methodology. <i>Powder Technology</i> , 2010 , 203, 148-166	5.2	20
374	Zeolite Beta membranes for the separation of hexane isomers. <i>Microporous and Mesoporous Materials</i> , 2010 , 128, 194-202	5.3	17
373	Application of a sodalite membrane reactor in esterification. Coupling reaction and separation. <i>Catalysis Today</i> , 2010 , 156, 132-139	5.3	67
372	Propane/propylene separation with Li-exchanged zeolite 13X. <i>Chemical Engineering Journal</i> , 2010 , 160, 207-214	14.7	75
371	Heat transport in structured packings with co-current downflow of gas and liquid. <i>Chemical Engineering Science</i> , 2010 , 65, 420-426	4.4	25
370	Hysteresis during CO-oxidation activity measurements on carbon-supported copper/chromium catalysts. <i>Recueil Des Travaux Chimiques Des Pays-Bas</i> , 2010 , 109, 112-116		8
369	Modeling the Loading Dependency of Diffusion in Zeolites: the Relevant Site Model Extended to Mixtures in DDR-Type Zeolite. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 21856-21865	3.8	25
368	Amino-based metal-organic frameworks as stable, highly active basic catalysts. <i>Journal of Catalysis</i> , 2009 , 261, 75-87	7.3	535
367	Benefit of Microscopic Diffusion Measurement for the Characterization of Nanoporous Materials. <i>Chemical Engineering and Technology</i> , 2009 , 32, 1494-1511	2	26
366	A non-equilibrium thermodynamics approach to model mass and heat transport for water pervaporation through a zeolite membrane. <i>Journal of Membrane Science</i> , 2009 , 330, 388-398	9.6	34
365	b-Oriented MFI membranes prepared from porous silica coatings. <i>Microporous and Mesoporous Materials</i> , 2009 , 120, 165-169	5.3	20
364	Application of hydroxy sodalite films as novel water selective membranes. <i>Journal of Membrane Science</i> , 2009 , 326, 153-160	9.6	63

363	Performance and stability of multi-channel MFI zeolite membranes detemplated by calcination and ozonation in ethanol/water pervaporation. <i>Journal of Membrane Science</i> , 2009 , 339, 261-274	9.6	44
362	Detemplation of [B]MFI zeolite crystals by ozonation. <i>Microporous and Mesoporous Materials</i> , 2009 , 120, 35-38	5.3	21
361	Continuous synthesis of NaA zeolite membranes. <i>Microporous and Mesoporous Materials</i> , 2009 , 120, 170-176	4.7	41
360	Detemplation of DDR type zeolites by ozonation. <i>Microporous and Mesoporous Materials</i> , 2009 , 120, 12-18	5.3	35
359	Tuning the framework polarity in MFI membranes by deboronation: Effect on mass transport. <i>Microporous and Mesoporous Materials</i> , 2009 , 125, 39-45	5.3	5
358	Intensification of co-current gas-liquid reactors using structured catalytic packings: A multiscale approach. <i>Catalysis Today</i> , 2009 , 147, S138-S143	5.3	23
357	Experimental and numerical comparison of structured packings with a randomly packed bed reactor for Fischer-Tropsch synthesis. <i>Catalysis Today</i> , 2009 , 147, S2-S9	5.3	48
356	Palladium and platinum catalysts supported on carbon nanofiber coated monoliths for low-temperature combustion of BTX. <i>Applied Catalysis B: Environmental</i> , 2009 , 89, 411-419	21.8	59
355	Zeolite BEA catalysed esterification of hexanoic acid with 1-octanol: Kinetics, side reactions and the role of water. <i>Applied Catalysis A: General</i> , 2009 , 358, 141-145	5.1	20
354	Modeling the Loading Dependency of Diffusion in Zeolites: The Relevant Site Model. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 17840-17850	3.8	34
353	Detecting and Counteracting Agglomeration in Fluidized Bed Biomass Combustion. <i>Energy & Fuels</i> , 2009 , 23, 157-169	4.1	27
352	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
351	Identification of adsorption sites in Cu-BTC by experimentation and molecular simulation. <i>Langmuir</i> , 2009 , 25, 1725-31	4	92
350	Adsorption and Diffusion of Water, Methanol, and Ethanol in All-Silica DD3R: Experiments and Simulation. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14290-14301	3.8	61
349	Methodology for the Screening of Signal Analysis Methods for Selective Detection of Hydrodynamic Changes in Fluidized Bed Systems. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 3158-3166	3.9	13
348	Selective sensor utilizing a thin monolayer of b-oriented silicalite-1 crystals-magneto-elastic ribbon assembly. <i>Analyst, The</i> , 2009 , 134, 2118-22	5	27
347	Metal-TUD-1 Catalyzed Aerobic Oxidation of Cyclohexane: A Comparative Study. <i>Australian Journal of Chemistry</i> , 2009 , 62, 360	1.2	12
346	Tuning the support adsorption properties of Pd/SiO ₂ by silylation to improve the selective hydrogenation of aromatic ketones. <i>Journal of Catalysis</i> , 2008 , 257, 55-63	7.3	24

345	Enhancing the catalytic performance of Pt/ZnO in the selective hydrogenation of cinnamaldehyde by Cr addition to the support. <i>Journal of Catalysis</i> , 2008 , 258, 52-60	7.3	59
344	Polyethyleneimine (PEI) functionalized ceramic monoliths as enzyme carriers: Preparation and performance. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2008 , 50, 20-27		42
343	Carbon Monoliths in Catalysis 2008 , 401-427		
342	Structured Packings for Multiphase Catalytic Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 3720-3751	3.9	145
341	Laboratory Catalytic Reactors: Aspects of Catalyst Testing 1 A list of symbols used in the text is provided at the end of the chapter. 2008 , 2019		4
340	Deactivation and Regeneration 2008 , 1829		2
339	Rate Procurement and Kinetic Modelling 1 A list of symbols used in the text is provided at the end of the chapter. 2008 , 1693		1
338	Hydrogel coated monoliths for enzymatic hydrolysis of penicillin G. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2008 , 35, 815-24	4.2	9
337	Propylene/propane mixture adsorption on faujasite sorbents. <i>Adsorption</i> , 2008 , 14, 309-321	2.6	51
336	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
335	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
334	Separation and permeation characteristics of a DD3R zeolite membrane. <i>Journal of Membrane Science</i> , 2008 , 316, 35-45	9.6	203
333	Dynamic methods for catalytic kinetics. <i>Applied Catalysis A: General</i> , 2008 , 342, 3-28	5.1	86
332	Carbon-based monolithic supports for palladium catalysts: The role of the porosity in the gas-phase total combustion of m-xylene. <i>Applied Catalysis B: Environmental</i> , 2008 , 77, 272-277	21.8	31
331	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
330	Dehydration performance of a hydrophobic DD3R zeolite membrane. <i>Journal of Membrane Science</i> , 2008 , 321, 344-349	9.6	61
329	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
328	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

327	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
326	Separation of CO ₂ and CH ₄ by a DDR membrane. <i>Research on Chemical Intermediates</i> , 2008 , 34, 467-474	2.8	44
325	Experimental and Theoretical Study of Reactive Stripping in Monolith Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 4149-4157	3.9	10
324	Coated-Wall Reactor Modeling Criteria for Neglecting Radial Concentration Gradients. 2. Reactor Tubes Filled with Inert Particles. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 3871-3876	3.9	8
323	Coated-Wall Reactor Modeling Criteria for Neglecting Radial Concentration Gradients. 1. Empty Reactor Tubes. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 3863-3870	3.9	20
322	Enhancement of Catalyst Performance Using Pressure Pulses on Macroporous Structured Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 8574-8583	3.9	13
321	Synthesis and Permeation Properties of Silicalite-1/Carbon Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 3997-4006	3.9	7
320	On the Driving Force of Methanol Pervaporation through a Microporous Methylated Silica Membrane. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 4091-4099	3.9	22
319	Tuning the morphology of monolith coatings. <i>Applied Catalysis A: General</i> , 2007 , 319, 267-271	5.1	23
318	Selective hydrogenation of fatty acid methyl esters over palladium on carbon-based monoliths. <i>Catalysis Today</i> , 2007 , 128, 13-17	5.3	45
317	Modelling kinetics and deactivation for the selective hydrogenation of an aromatic ketone over Pd/SiO ₂ . <i>Chemical Engineering Science</i> , 2007 , 62, 5322-5329	4.4	19
316	Carbon/ceramic composites for enzyme immobilization. <i>Microporous and Mesoporous Materials</i> , 2007 , 99, 216-223	5.3	16
315	Asymmetric effects in catalytic membranes. <i>Kinetics and Catalysis</i> , 2007 , 48, 132-135	1.5	17
314	Deuteration study to elucidate hydrogenolysis of benzylic alcohols over supported palladium catalysts. <i>Journal of Catalysis</i> , 2007 , 246, 344-350	7.3	23
313	Evaluation of deactivation mechanisms of Pd-catalyzed hydrogenation of 4-isobutylacetophenone. <i>Journal of Catalysis</i> , 2007 , 248, 249-257	7.3	13
312	Synthesis of thin defect-free hydroxy sodalite membranes: New candidate for activated water permeation. <i>Journal of Membrane Science</i> , 2007 , 299, 63-72	9.6	67
311	Preparation and performance of H-SOD membranes: a new synthesis procedure and absolute water separation. <i>Studies in Surface Science and Catalysis</i> , 2007 , 170, 1028-1035	1.8	5
310	Investigating mass transport in zeolite pores by tuning the framework polarity. <i>Studies in Surface Science and Catalysis</i> , 2007 , 942-948	1.8	5

309	Natural gas purification with a DDR zeolite membrane; permeation modelling with maxwell-stefan equations. <i>Studies in Surface Science and Catalysis</i> , 2007 , 170, 1021-1027	1.8	37
308	Fenton detemplation of ordered (meso)porous materials. <i>Studies in Surface Science and Catalysis</i> , 2007 , 170, 648-654	1.8	5
307	Kinetics of the Wet Oxidation of Phenol over an Fe/Activated Carbon Catalyst. <i>International Journal of Chemical Reactor Engineering</i> , 2007 , 5,	1.2	2
306	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
305	Kureha activated carbon characterized by the adsorption of light hydrocarbons. <i>Studies in Surface Science and Catalysis</i> , 2007 , 287-294	1.8	4
304	Asymmetry effects in membrane catalysis. <i>Catalysis Today</i> , 2006 , 118, 7-11	5.3	18
303	Utilizing full-exchange capacity of zeolites by alkaline leaching: Preparation of Fe-ZSM5 and application in N2O decomposition. <i>Journal of Catalysis</i> , 2006 , 238, 250-259	7.3	97
302	Synergy of Fe _x Ce _{1-x} O ₂ mixed oxides for N2O decomposition. <i>Journal of Catalysis</i> , 2006 , 239, 340-346	7.3	153
301	Potential application of monolith packed columns as bioreactors, control of biofilm formation. <i>Biotechnology and Bioengineering</i> , 2006 , 93, 238-45	4.9	25
300	Analysis of gas adsorption in Kureha active carbon based on the slitpore model and Monte-Carlo simulations. <i>Molecular Simulation</i> , 2006 , 32, 513-522	2	8
299	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
298	Alkaline leaching for synthesis of improved Fe-ZSM5 catalysts. <i>Catalysis Communications</i> , 2006 , 7, 100-103	3.2	18
297	Gas-Liquid Mass Transfer in Benchscale Stirred Tanks Fluid Properties and Critical Impeller Speed for Gas Induction. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 4574-4581	3.9	27
296	Tooling up Heterogeneous Catalysis through Fenton Chemistry. Detemplation and functionalization of micro- And mesoporous materials.. <i>Studies in Surface Science and Catalysis</i> , 2006 , 162, 37-46	1.8	1
295	Ceramic membranes modified with catalytic oxide films as ensembles of catalytic nanoreactors. <i>Kinetics and Catalysis</i> , 2006 , 47, 25-34	1.5	26
294	Intensification of gas phase catalytic processes in nano-channels of ceramic catalytic membranes. <i>Desalination</i> , 2006 , 199, 161-163	10.3	3
293	Selective hydrogenation of fatty acid methyl esters on palladium catalysts supported on carbon-coated monoliths. <i>Carbon</i> , 2006 , 44, 173-176	10.4	24
292	Pd and Pt catalysts supported on carbon-coated monoliths for low-temperature combustion of xylenes. <i>Carbon</i> , 2006 , 44, 2463-2468	10.4	41

291	Carbon coated monoliths as support material for a lactase from <i>Aspergillus oryzae</i> : Characterization and design of the carbon carriers. <i>Carbon</i> , 2006 , 44, 3053-3063	10.4	16
290	Shouldn't catalysts shape up?. <i>Catalysis Today</i> , 2006 , 111, 111-118	5.3	89
289	Micropore accessibility of large mordenite crystals. <i>Microporous and Mesoporous Materials</i> , 2006 , 92, 145-153	5.3	11
288	Zeolite based films, membranes and membrane reactors: Progress and prospects. <i>Microporous and Mesoporous Materials</i> , 2006 , 90, 198-220	5.3	381
287	Structured Reactors for Enzyme Immobilization. <i>Chemical Engineering Research and Design</i> , 2006 , 84, 390-398	5.5	26
286	Adsorptive Separation of Light Olefin/Paraffin Mixtures. <i>Chemical Engineering Research and Design</i> , 2006 , 84, 350-354	5.5	100
285	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
284	Ion exchanged Fe-FER through H ₂ O ₂ -assisted decomplexation of organic salts. <i>Chemical Communications</i> , 2005 , 1525-7	5.8	11
283	Room temperature detemplation of zeolites through H ₂ O ₂ -mediated oxidation. <i>Chemical Communications</i> , 2005 , 2744-6	5.8	12
282	One-pot catalyst preparation: combined detemplating and Fe ion-exchange of BEA through Fenton's chemistry. <i>Chemical Communications</i> , 2005 , 2178-80	5.8	27
281	Combined Hydrogenation and Isomerization Combined Hydrogenation and Isomerization under Diffusion Limiting Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 9668-9675	3.9	7
280	Scaling-up Multiphase Monolith Reactors: Linking Residence Time Distribution and Feed Maldistribution. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 4898-4913	3.9	65
279	Axial Mixing in Monolith Reactors: Effect of Channel Size. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 2046-2057	3.9	17
278	Monoliths as Biocatalytic Reactors: Smart Gas-Liquid Contacting for Process Intensification. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 9646-9652	3.9	25
277	Stacking of Film-Flow Monoliths for Improved Performance in Reactive Stripping. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 9556-9560	3.9	10
276	Highly active and stable ion-exchanged Fe-ferrierite catalyst for N ₂ O decomposition under nitric acid tail gas conditions. <i>Catalysis Communications</i> , 2005 , 6, 301-305	3.2	46
275	Reactive Stripping in Structured Catalytic Reactors: Hydrodynamics and Reaction Performance 2005 , 233-264		3
274	Two-Phase Segmented Flow in Capillaries and Monolith Reactors. <i>Chemical Industries</i> , 2005 , 393-434		

273	Modeling and Design of Monolith Reactors for Three-Phase Processes. <i>Chemical Industries</i> , 2005 , 435-478		
272	Water vapour separation from permanent gases by a zeolite-4A membrane. <i>Journal of Membrane Science</i> , 2005 , 253, 57-66	9.6	119
271	Silicalite-1 coating on Pt/TiO ₂ particles by a two-step hydrothermal synthesis. <i>Microporous and Mesoporous Materials</i> , 2005 , 83, 244-250	5.3	20
270	Comparison of adsorption behaviour of light alkanes and alkenes on Kureha activated carbon. <i>Carbon</i> , 2005 , 43, 1416-1423	10.4	41
269	Adsorption properties of carbon molecular sieves prepared from an activated carbon by pitch pyrolysis. <i>Carbon</i> , 2005 , 43, 1643-1651	10.4	42
268	High performance monolithic catalysts for hydrogenation reactions. <i>Catalysis Today</i> , 2005 , 105, 623-628	5.3	54
267	Fast gas-liquid-solid reactions in monoliths: A case study of nitro-aromatic hydrogenation. <i>Catalysis Today</i> , 2005 , 105, 421-428	5.3	26
266	Biofilm growth pattern in honeycomb monolith packings: Effect of shear rate and substrate transport limitations. <i>Catalysis Today</i> , 2005 , 105, 448-454	5.3	30
265	Modelling of reactive stripping in monolith reactors. <i>Catalysis Today</i> , 2005 , 105, 414-420	5.3	12
264	A novel structured bioreactor: Development of a monolithic stirrer reactor with immobilized lipase. <i>Catalysis Today</i> , 2005 , 105, 443-447	5.3	50
263	Fischer-Tropsch synthesis using monolithic catalysts. <i>Catalysis Today</i> , 2005 , 105, 350-356	5.3	95
262	Reactive stripping in pilot scale monolith reactors—application to esterification. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005 , 44, 695-699	3.7	20
261	Multiphase monolith reactors: Chemical reaction engineering of segmented flow in microchannels. <i>Chemical Engineering Science</i> , 2005 , 60, 5895-5916	4.4	472
260	Liquid residence time distribution in the film flow monolith reactor. <i>AIChE Journal</i> , 2005 , 51, 122-133	3.6	22
259	Inertial and interfacial effects on pressure drop of Taylor flow in capillaries. <i>AIChE Journal</i> , 2005 , 51, 2428-2440	3.6	271
258	The pressure drop experiment to determine slug lengths in multiphase monoliths. <i>Catalysis Today</i> , 2005 , 105, 667-672	5.3	30
257	Hydrodynamic properties of a novel open wall monolith reactor. <i>Catalysis Today</i> , 2005 , 105, 385-390	5.3	10
256	Innovations in the synthesis of Fe-(exchanged)-zeolites. <i>Catalysis Today</i> , 2005 , 110, 255-263	5.3	25

255	Intrinsic channel maldistribution in monolithic catalyst support structures. <i>Chemical Engineering Journal</i> , 2005 , 109, 89-96	14.7	12
254	Adsorption on Kureha Activated Carbon: Isotherms and Kinetics. <i>Adsorption</i> , 2005 , 11, 637-641	2.6	5
253	Zeolite based separation of light olefin and paraffin mixtures. <i>Studies in Surface Science and Catalysis</i> , 2005 , 158, 979-986	1.8	5
252	Modelling of n-hexane and 3-methylpentane permeation through a silicalite-1 membrane. <i>Studies in Surface Science and Catalysis</i> , 2004 , 154, 1935-1943	1.8	3
251	Quality enhancement of NaA zeolite membranes. <i>Studies in Surface Science and Catalysis</i> , 2004 , 612-619	1.8	1
250	Effect of NO on the SCR of N ₂ O with propane over Fe-zeolites. <i>Applied Catalysis B: Environmental</i> , 2004 , 47, 177-187	21.8	35
249	SBA-15 based catalysts in catalytic N ₂ O decomposition in a model tail-gas from nitric acid plants. <i>Applied Catalysis B: Environmental</i> , 2004 , 53, 265-274	21.8	60
248	N ₂ O Decomposition over Liquid Ion-Exchanged Fe-BEA Catalysts: Correlation Between Activity and the IR Intensity of Adsorbed NO at 1874 cm ⁻¹ . <i>Catalysis Letters</i> , 2004 , 93, 113-120	2.8	27
247	Determination of adsorption and diffusion parameters in zeolites through a structured approach. <i>Chemical Engineering Science</i> , 2004 , 59, 2477-2487	4.4	15
246	Structured reactors for enzyme immobilization: advantages of tuning the wall morphology. <i>Chemical Engineering Science</i> , 2004 , 59, 5027-5033	4.4	41
245	Application of Structured Packings and Monoliths for Reactive Stripping. <i>Chemie-Ingenieur-Technik</i> , 2004 , 76, 1275-1276	0.8	
244	Adsorption and breakthrough performance of carbon-coated ceramic monoliths at low concentration of n-butane. <i>Chemical Engineering Science</i> , 2004 , 59, 2791-2800	4.4	47
243	Concentration-dependent diffusion of isobutane in silicalite-1 studied with the ZLC technique. <i>Chemical Engineering Science</i> , 2004 , 59, 3827-3835	4.4	23
242	Adsorption of butane isomers and SF ₆ on Kureha activated carbon: 1. Equilibrium. <i>Langmuir</i> , 2004 , 20, 5277-84	4	14
241	Improving Flooding Performance for Countercurrent Monolith Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 4848-4855	3.9	7
240	Adsorption of Butane Isomers and SF ₆ on Kureha Activated Carbon: 2. Kinetics. <i>Langmuir</i> , 2004 , 20, 1704-1710	13	
239	Monolithic Catalysts as an Alternative to Slurry Systems: Hydrogenation of Edible Oil. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 2337-2344	3.9	52
238	Reactant-Selective Hydrogenation over Composite Silicalite-1-Coated Pt/TiO ₂ Particles. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 1211-1215	3.9	64

237	Breakthrough of shallow activated carbon beds under constant and pulsating flow. <i>AIHA Journal: A Journal for the Science of Occupational and Environmental Health and Safety</i> , 2003 , 64, 173-80		22
236	Pressure Drop of Taylor Flow in Capillaries: Impact of Slug Length 2003 , 519		4
235	Trends in Fischer-Tropsch Reactor Technology Opportunities for Structured Reactors. <i>Topics in Catalysis</i> , 2003 , 26, 29-39	2.3	60
234	Elucidation of the Surprising Role of NO in N ₂ O Decomposition over FeZSM-5. <i>Kinetics and Catalysis</i> , 2003 , 44, 639-647	1.5	14
233	Dispersion and Distribution of Ruthenium on Carbon-Coated Ceramic Monolithic Catalysts Prepared by Impregnation. <i>Catalysis Letters</i> , 2003 , 90, 181-186	2.8	11
232	Formation and control of N ₂ O in nitric acid production. <i>Applied Catalysis B: Environmental</i> , 2003 , 44, 117-158	2.5	424
231	Separation modeling of linear and branched C ₆ alkane permeation through silicalite-1 membranes. <i>Separation and Purification Technology</i> , 2003 , 32, 223-230	8.3	14
230	Preparation of thin porous titania films on stainless steel substrates for heat exchange (HEX) reactors. <i>Separation and Purification Technology</i> , 2003 , 32, 387-395	8.3	14
229	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
228	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
227	Active site structure sensitivity in N ₂ O conversion over FeMFI zeolites. <i>Journal of Catalysis</i> , 2003 , 218, 234-238	7.3	99
226	Gas and liquid distribution in the monolith film flow reactor. <i>AIChE Journal</i> , 2003 , 49, 3007-3017	3.6	49
225	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
224	Is a monolithic loop reactor a viable option for Fischer-Tropsch synthesis?. <i>Chemical Engineering Science</i> , 2003 , 58, 583-591	4.4	58
223	Influence of the support layer on the flux limitation in pervaporation. <i>Journal of Membrane Science</i> , 2003 , 223, 141-156	9.6	73
222	Separation of kinetics and mass-transport effects for a fast reaction: the selective hydrogenation of functionalized alkynes. <i>Catalysis Today</i> , 2003 , 79-80, 315-321	5.3	39
221	Using monolithic catalysts for highly selective Fischer-Tropsch synthesis. <i>Catalysis Today</i> , 2003 , 79-80, 495-501	5.3	51
220	BEA coating of structured supports performance in acylation. <i>Applied Catalysis A: General</i> , 2003 , 243, 237-250	5.1	67

219	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
218	Three-phase hydrogenation of β -glucose over a carbon supported ruthenium catalyst: mass transfer and kinetics. <i>Applied Catalysis A: General</i> , 2003 , 251, 1-17	5.1	136
217	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
216	High-throughput experimentation in catalyst testing and in kinetic studies for heterogeneous catalysis. <i>Catalysis Today</i> , 2003 , 81, 457-471	5.3	33
215	Improvement of Thermal Stability of Porous Titania Films Prepared by Electrostatic Sol-Spray Deposition (ESSD). <i>Chemistry of Materials</i> , 2003 , 15, 1283-1288	9.6	22
214	Effect of NO on the catalytic removal of N ₂ O over FeZSM-5. Friend or foe. <i>Catalysis Communications</i> , 2003 , 4, 333-338	3.2	13
213	Catalysis Engineering on Three Levels. <i>International Journal of Chemical Reactor Engineering</i> , 2003 , 1,	1.2	1
212	Thermal decomposition of layered Co-Al hydrotalcite An in situ study 2003 , 631-638		
211	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
210	Ex-framework FeZSM-5 for control of N ₂ O in tail-gases. <i>Catalysis Today</i> , 2002 , 76, 55-74	5.3	83
209	A TEOM-MS study on the interaction of N ₂ O with a hydrotalcite-derived multimetallic mixed oxide catalyst. <i>Applied Catalysis A: General</i> , 2002 , 225, 87-100	5.1	14
208	Catalyst performance testing. <i>Applied Catalysis A: General</i> , 2002 , 227, 321-333	5.1	43
207	Water removal by reactive stripping for a solid-acid catalyzed esterification in a monolithic reactor. <i>Chemical Engineering Science</i> , 2002 , 57, 1627-1632	4.4	44
206	Modeling of fast pulse responses in the Multitrack: an advanced TAP reactor. <i>Chemical Engineering Science</i> , 2002 , 57, 1835-1847	4.4	19
205	Catalyst performance testing: the influence of catalyst bed dilution on the conversion observed. <i>Chemical Engineering Journal</i> , 2002 , 90, 173-183	14.7	38
204	Electrochemical characterization of iron sites in ex-framework FeZSM-5. <i>Journal of Electroanalytical Chemistry</i> , 2002 , 519, 72-84	4.1	22
203	Preparation and characterisation of carbon-coated monoliths for catalyst supports. <i>Carbon</i> , 2002 , 40, 1079-1088	10.4	37
202	Effect of oxygen functional groups on synthetic carbons on liquid phase oxidation of cyclohexanone. <i>Carbon</i> , 2002 , 40, 1267-1278	10.4	54

201	Preparation of carbon-coated monolithic supports. <i>Carbon</i> , 2002 , 40, 1891-1902	10.4	52
200	Catalyst performance testing: bed dilution revisited. <i>Chemical Engineering Science</i> , 2002 , 57, 4921-4932	4.4	55
199	Physicochemical Characterization of Isomorphously Substituted FeZSM-5 during Activation. <i>Journal of Catalysis</i> , 2002 , 207, 113-126	7.3	148
198	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
197	Characterization of Iron Species in Ex-Framework FeZSM-5 by Electrochemical Methods. <i>Catalysis Letters</i> , 2002 , 78, 303-312	2.8	10
196	NO Adsorption on Ex-Framework [Fe,X]MFI Catalysts: Novel IR Bands and Evaluation of Assignments. <i>Catalysis Letters</i> , 2002 , 80, 129-138	2.8	73
195	Flooding Performance of Square Channel Monolith Structures. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 6759-6771	3.9	8
194	Magnetic properties of Co γ -Al, Ni γ -Al, and Mg γ -Al hydrotalcites and the oxides formed upon their thermal decomposition. <i>Journal of Materials Chemistry</i> , 2002 , 12, 2370-2375		23
193	Direct N ₂ O decomposition over ex-framework FeMFI catalysts. Role of extra-framework species. <i>Catalysis Communications</i> , 2002 , 3, 19-23	3.2	27
192	Dual-Bed Catalytic System for Removal of NO _x -N ₂ O in Lean-Burn Engine Exhausts 2002 , 229-243		
191	30-O-02-Characterization and performance of ex-framework FeZSM-5 in catalytic N ₂ O decomposition. <i>Studies in Surface Science and Catalysis</i> , 2001 , 172	1.8	3
190	Increasing the selectivity of the Fischer Tropsch process by periodic operation. <i>Computer Aided Chemical Engineering</i> , 2001 , 699-704	0.6	3
189	New non-traditional multiphase catalytic reactors based on monolithic structures. <i>Catalysis Today</i> , 2001 , 66, 133-144	5.3	147
188	Monolithic catalysts as more efficient three-phase reactors. <i>Catalysis Today</i> , 2001 , 66, 157-165	5.3	58
187	Kinetics of cinnamaldehyde hydrogenation—concentration dependent selectivity. <i>Catalysis Today</i> , 2001 , 66, 381-387	5.3	35
186	Esterification in a structured catalytic reactor with counter-current water removal. <i>Catalysis Today</i> , 2001 , 66, 175-181	5.3	33
185	Gas-liquid mass transfer of aqueous Taylor flow in monoliths. <i>Catalysis Today</i> , 2001 , 69, 51-55	5.3	84
184	Influence of channel geometry on hydrodynamics and mass transfer in the monolith film flow reactor. <i>Catalysis Today</i> , 2001 , 69, 153-163	5.3	34

183	Preparation and characterisation aspects of carbon-coated monoliths. <i>Catalysis Today</i> , 2001 , 69, 357-363	5.3	17
182	Carbon coated monolithic catalysts in the selective oxidation of cyclohexanone. <i>Catalysis Today</i> , 2001 , 69, 283-290	5.3	21
181	Zeolite coated structures for the acylation of aromatics. <i>Microporous and Mesoporous Materials</i> , 2001 , 48, 279-284	5.3	52
180	Diffusion of linear and branched C6 alkanes in silicalite-1 studied by the tapered element oscillating microbalance. <i>Microporous and Mesoporous Materials</i> , 2001 , 47, 157-171	5.3	55
179	Catalyst deactivation: is it predictable?. <i>Applied Catalysis A: General</i> , 2001 , 212, 3-16	5.1	586
178	Monolithic catalysts with non-uniform active phase distribution by impregnation. <i>Applied Catalysis A: General</i> , 2001 , 213, 179-187	5.1	82
177	Binary adsorption equilibrium of organics and water on activated carbon. <i>AIChE Journal</i> , 2001 , 47, 1885-1892	3.2	32
176	Modelling sorption and diffusion in activated carbon: a novel low pressure pulse-response technique. <i>Carbon</i> , 2001 , 39, 2113-2130	10.4	12
175	Hydrodynamic aspects of the monolith loop reactor. <i>Chemical Engineering Science</i> , 2001 , 56, 805-812	4.4	74
174	Formal reply to letter to the editor Comments on the modeling of a fore void volume in a TAP reactor. <i>Chemical Engineering Science</i> , 2001 , 56, 3927	4.4	
173	Gas and liquid phase distribution and their effect on reactor performance in the monolith film flow reactor. <i>Chemical Engineering Science</i> , 2001 , 56, 5935-5944	4.4	50
172	Eurokin. Chemical Reaction Kinetics in Practice. <i>Cattech</i> , 2001 , 5, 36-60		103
171	NO-Assisted N ₂ O Decomposition over ex-Framework FeZSM-5: Mechanistic Aspects. <i>Catalysis Letters</i> , 2001 , 77, 7-13	2.8	56
170	Monolithic catalysts as efficient three-phase reactors. <i>Chemical Engineering Science</i> , 2001 , 56, 823-829	4.4	130
169	Mass transfer characteristics of three-phase monolith reactors. <i>Chemical Engineering Science</i> , 2001 , 56, 6015-6023	4.4	207
168	On the stability of the thermally decomposed Co-Al hydrotalcite against retrotopotactic transformation. <i>Materials Research Bulletin</i> , 2001 , 36, 1767-1775	5.1	50
167	Characterization and performance of Pt-USY in the SCR of NO _x with hydrocarbons under lean-burn conditions. <i>Applied Catalysis B: Environmental</i> , 2001 , 29, 285-298	21.8	41
166	Comparative study of Pt-based catalysts on different supports in the low-temperature de-NO _x -SCR with propene. <i>Applied Catalysis B: Environmental</i> , 2001 , 30, 399-408	21.8	64

165	Highly reproducible high-flux silicalite-1 membranes: optimization of silicalite-1 membrane preparation. <i>Separation and Purification Technology</i> , 2001 , 22-23, 223-229	8.3	23
164	Evaluation of reproducible high flux silicalite-1 membranes: gas permeation and separation characterization. <i>Separation and Purification Technology</i> , 2001 , 22-23, 295-307	8.3	30
163	Adsorption of 1,2-Dichloropropane on Activated Carbon. <i>Journal of Chemical & Engineering Data</i> , 2001 , 46, 662-664	2.8	7
162	In situ investigation of the thermal decomposition of CoAl hydrotalcite in different atmospheres. <i>Journal of Materials Chemistry</i> , 2001 , 11, 821-830		181
161	Equilibrium adsorption of linear and branched C6 alkanes on silicalite-1 studied by the tapered element oscillating microbalance. <i>Physical Chemistry Chemical Physics</i> , 2001 , 3, 1755-1761	3.6	67
160	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
159	Preparation of monolithic catalysts. <i>Catalysis Reviews - Science and Engineering</i> , 2001 , 43, 345-380	12.6	425
158	CARBON-BASED MONOLITHIC STRUCTURES. <i>Catalysis Reviews - Science and Engineering</i> , 2001 , 43, 291-314	16	65
157	Optimization of Geometric Properties of a Monolithic Catalyst for the Selective Hydrogenation of Phenylacetylene. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 2801-2809	3.9	46
156	A spectroscopic study of the effect of the trivalent cation on the thermal decomposition behaviour of Co-based hydrotalcites. <i>Journal of Materials Chemistry</i> , 2001 , 11, 2529-2536		30
155	Design of an Industrial Adsorption Process with Activated Carbon for the Removal of Hexafluoropropylene from Wet Air. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 3171-3180	9	7
154	Hydrodechlorination of 1,2-dichloropropane over Pt-Cu/C catalysts: Coke formation determined by a novel technique-TEOM. <i>Studies in Surface Science and Catalysis</i> , 2001 , 139, 21-28	1.8	6
153	Dual-bed Catalytic System for the Selective Reduction of NO _x with Propene. <i>Chemical Engineering and Technology</i> , 2000 , 23, 721-725	2	4
152	One-component permeation maximum: Diagnostic tool for silicalite-1 membranes?. <i>AIChE Journal</i> , 2000 , 46, 1096-1100	3.6	36
151	Diffusivities of light alkanes in a silicalite-1 membrane layer. <i>Microporous and Mesoporous Materials</i> , 2000 , 35-36, 267-281	5.3	36
150	Comments on Infrared emission spectroscopic studies of the thermal transformation of Mg-, Ni- and Co-hydrotalcite catalysts [Appl. Catal. A: Gen. 184 (1999) 617-621]. <i>Applied Catalysis A: General</i> , 2000 , 204, 265-267	5.1	9
149	In-target production of high specific radioactivity [¹⁵ O]nitrous oxide by deuteron irradiation of nitrogen gas. <i>Applied Radiation and Isotopes</i> , 2000 , 52, 77-85	1.7	6
148	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

147	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
146	Dual-bed catalytic system for NO _x /N ₂ O removal: a practical application for lean-burn deNO _x HC-SCR. <i>Applied Catalysis B: Environmental</i> , 2000 , 25, 191-203	21.8	39
145	Reduction of NO by Propene Over Pt, Pd and Rh-Based ZSM-5 Under Lean-Burn Conditions. <i>Reaction Kinetics and Catalysis Letters</i> , 2000 , 69, 385-392		3
144	Equilibrium Adsorption of Light Alkanes in Silicalite-1 by the Inertial Microbalance Technique. <i>Adsorption</i> , 2000 , 6, 159-167	2.6	36
143	Structured catalysts for the acylation of aromatics. <i>Topics in Catalysis</i> , 2000 , 13, 275-280	2.3	14
142	Effect of the Support in de-NO _x HC-SCR Over Transition Metal Catalysts. <i>Reaction Kinetics and Catalysis Letters</i> , 2000 , 70, 199-206		6
141	Highly Active and Stable Pt-USY in the Low-Temperature de-NO _x HC-SCR. <i>Reaction Kinetics and Catalysis Letters</i> , 2000 , 71, 33-40		
140	Co-based ex-HTlc for the decomposition of N ₂ O: Tailoring catalysts for active and stable operation. <i>Studies in Surface Science and Catalysis</i> , 2000 , 1445-1450	1.8	5
139	Adsorption of light alkanes on silicalite-1: Reconciliation of experimental data and molecular simulations. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 1989-1995	3.6	60
138	Selective adsorption of unsaturated linear C ₄ molecules on the all-silica DD3R. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 1773-1779	3.6	48
137	Shape Selectivity in Adsorption on the All-Silica DD3R. <i>Langmuir</i> , 2000 , 16, 3322-3329	4	107
136	Preparation of mesoporous highly dispersed Pd-Pt catalysts for deep hydrodesulfurization. <i>Studies in Surface Science and Catalysis</i> , 2000 , 1019-1026	1.8	4
135	Catalytic Reactor Engineering [Novel Concepts in Production and in Catalyst Testing 2000 , 283-300		
134	CONTRIBUTION OF CATALYSIS TOWARDS THE REDUCTION OF ATMOSPHERIC AIR POLLUTION: CO ₂ , CFCs, N ₂ O, OZONE. <i>Catalytic Science Series</i> , 1999 , 219-256	0.4	
133	Application of a silicalite-1 membrane reactor in metathesis reactions. <i>Applied Catalysis A: General</i> , 1999 , 178, 225-241	5.1	46
132	Modeling of the transient sorption and diffusion processes in microporous materials at low pressure. <i>Catalysis Today</i> , 1999 , 53, 189-205	5.3	33
131	Transport and separation properties of a silicalite-1 membrane[. Variable separation factor. <i>Chemical Engineering Science</i> , 1999 , 54, 259-269	4.4	58
130	Permeation of weakly adsorbing components through a silicalite-1 membrane. <i>Chemical Engineering Science</i> , 1999 , 54, 1081-1092	4.4	70

129	Hydrodynamics and mass transfer issues in a countercurrent gas-liquid internally finned monolith reactor. <i>Chemical Engineering Science</i> , 1999 , 54, 2381-2389	4.4	27
128	Application of a zeolite membrane reactor in the metathesis of propene. <i>Chemical Engineering Science</i> , 1999 , 54, 1441-1445	4.4	44
127	Potentials of internally finned monoliths as a packing for multifunctional reactors. <i>Chemical Engineering Science</i> , 1999 , 54, 1359-1365	4.4	23
126	A DRIFTS study of the interaction of alkali metal oxides with carbonaceous surfaces. <i>Carbon</i> , 1999 , 37, 401-410	10.4	22
125	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
124	Transport and separation properties of a silicalite-1 membrane□ Operating conditions. <i>Chemical Engineering Science</i> , 1999 , 54, 245-258	4.4	67
123	Measurement and modeling of the transient adsorption, desorption and diffusion processes in microporous materials. <i>Chemical Engineering Science</i> , 1999 , 54, 4423-4436	4.4	57
122	A numerical comparison of alternative three-phase reactors with a conventional trickle-bed reactor. The advantages of countercurrent flow for hydrodesulfurization. <i>Chemical Engineering Science</i> , 1999 , 54, 4791-4799	4.4	48
121	Gas□liquid mass transfer in an internally finned monolith operated countercurrently in the film flow regime. <i>Chemical Engineering Science</i> , 1999 , 54, 5119-5125	4.4	13
120	High activity and stability of the Rh-free Co-based ex-hydrotalcite containing Pd in the catalytic decomposition of N ₂ O. <i>Catalysis Letters</i> , 1999 , 60, 133-138	2.8	55
119	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
118	Modeling permeation of binary mixtures through zeolite membranes. <i>AIChE Journal</i> , 1999 , 45, 497-511	3.6	172
117	Binary permeation through a silicalite-1 membrane. <i>AIChE Journal</i> , 1999 , 45, 976-985	3.6	76
116	Shape selectivity in the adsorption of propane/propene on the all-silica DD3R. <i>Chemical Communications</i> , 1999 , 2453-2454	5.8	66
115	N ₂ O decomposition on hydrotalcite based catalysts. A mechanistic approach 1999 , 343-348		1
114	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
113	Transition Metal Oxide Catalyzed Carbon Black Oxidation: A Study with 18O ₂ . <i>Journal of Catalysis</i> , 1998 , 179, 258-266	7.3	83
112	The effect of NO _x and CO on the rate of transition metal oxide catalyzed carbon black oxidation: An exploratory study. <i>Applied Catalysis B: Environmental</i> , 1998 , 17, 205-220	21.8	42

111	The Delft silicalite-1 membrane: peculiar permeation and counter-intuitive separation phenomena. <i>Journal of Molecular Catalysis A</i> , 1998 , 134, 201-208		11
110	Zeolitic coatings and their potential use in catalysis. <i>Microporous and Mesoporous Materials</i> , 1998 , 21, 213-226	5.3	141
109	Methodological and operational aspects of permeation measurements on silicalite-1 membranes. <i>Journal of Membrane Science</i> , 1998 , 144, 87-104	9.6	110
108	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
107	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
106	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
105	Catalytic oxidation of model soot by chlorine based catalysts. <i>Studies in Surface Science and Catalysis</i> , 1998 , 116, 645-654	1.8	7
104	Potential of Monolithic Reactors in Catalysis; Multiphase Applications. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 549, 3		1
103	Carbon coating of ceramic monolithic substrates. <i>Studies in Surface Science and Catalysis</i> , 1998 , 118, 175-183		23
102	Performance of Manganese-based Sorbents in High-Temperature Coal Gas Desulfurization 1998 , 243-267		4
101	Catalytic oxidation of model soot by metal chlorides. <i>Applied Catalysis B: Environmental</i> , 1997 , 12, 33-47	21.8	89
100	Kinetic Analysis of the Decomposition of Nitrous Oxide over ZSM-5 Catalysts. <i>Journal of Catalysis</i> , 1997 , 167, 256-265	7.3	190
99	Kinetics of the Hydrodenitrogenation of ortho-Propylaniline over NiMo(P)/Al ₂ O ₃ Catalysts. <i>Journal of Catalysis</i> , 1997 , 168, 491-500	7.3	46
98	Mathematical treatment of transient kinetic data: Combination of parameter estimation with solving the related partial differential equations. <i>Applied Catalysis A: General</i> , 1997 , 151, 27-57	5.1	56
97	Carbon monoxide oxidation over platinum powder: A comparison of TAP and step-response experiments. <i>Applied Catalysis A: General</i> , 1997 , 151, 247-266	5.1	17
96	A radiotracer method for measuring the rate of metal volatilisation losses from catalysts. <i>Applied Radiation and Isotopes</i> , 1997 , 48, 1521-1524	1.7	2
95	Stability of Oriented Silicalite-1 Films in View of Zeolite Membrane Preparation. <i>Zeolites</i> , 1997 , 19, 13-20		100
94	Temperature dependence of one-component permeation through a silicalite-1 membrane. <i>AIChE Journal</i> , 1997 , 43, 2203-2214	3.6	236

93	NO Reduction over Alumina-Supported Cu and CuCr Studied with the Step Response Method. <i>Journal of Catalysis</i> , 1997 , 170, 168-180	7.3	9
92	Effect of the adsorption isotherm on one- and two-component diffusion in activated carbon. <i>Carbon</i> , 1997 , 35, 1415-1425	10.4	12
91	Bridging the gap between macroscopic and NMR diffusivities. <i>Chemical Engineering Science</i> , 1997 , 52, 3401-3404	4.4	49
90	Hydrodynamics of gas-liquid countercurrent flow in internally finned monolithic structures. <i>Chemical Engineering Science</i> , 1997 , 52, 3893-3899	4.4	17
89	Zeolite-based membranes preparation, performance and prospects. <i>Studies in Surface Science and Catalysis</i> , 1996 , 413-454	1.8	30
88	Decomposition of nitrous oxide over ZSM-5 catalysts. <i>Studies in Surface Science and Catalysis</i> , 1996 , 641-650	3.0	30
87	Sorbent development for continuous regenerative H ₂ S removal in a rotating monolith reactor. <i>Canadian Journal of Chemical Engineering</i> , 1996 , 74, 713-718	2.3	12
86	Heterogeneous catalytic decomposition of nitrous oxide. <i>Applied Catalysis B: Environmental</i> , 1996 , 9, 25-64	21.8	742
85	Fuel gas injection to reduce N ₂ O emissions from the combustion of coal in a fluidized bed. <i>Combustion and Flame</i> , 1996 , 107, 103-113	5.3	6
84	Permeation characteristics of a metal-supported silicalite-1 zeolite membrane. <i>Journal of Membrane Science</i> , 1996 , 117, 57-78	9.6	261
83	Permeation and separation of light hydrocarbons through a silicalite-1 membrane. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , 1995 , 57, 145-153		17
82	Synthesis of mechanically strong and thermally stable spherical alumina catalyst supports for the process of methane dimerization in a fluidized bed. <i>Catalysis Today</i> , 1995 , 24, 269-271	5.3	10
81	Permeation and separation behaviour of a silicalite-1 membrane. <i>Catalysis Today</i> , 1995 , 25, 213-218	5.3	91
80	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
79	Permeation and separation behaviour of a silicalite (MFI) membrane. <i>Studies in Surface Science and Catalysis</i> , 1995 , 98, 215-216	1.8	2
78	Trade-Off Between NO _x and N ₂ O in Fluidized-Bed Combustion of Coals. <i>Energy & Fuels</i> , 1995 , 9, 743-752	4.1	28
77	Thermostability of copper-chromium oxide catalysts on alumina support promoted by lanthanum and cerium. <i>Studies in Surface Science and Catalysis</i> , 1995 , 1145-1152	1.8	1
76	Gas injection as a measure to reduce N ₂ O emissions from fluidized bed combustion of coal. <i>Coal Science and Technology</i> , 1995 , 24, 1915-1918		1

75	Isotopic steady-state and step-response study on carbon gasification catalyzed by calcium. <i>Carbon</i> , 1995 , 33, 1147-1154	10.4	10
74	Towards a unified theory of reactions of carbon with oxygen-containing molecules. <i>Carbon</i> , 1995 , 33, 1155-1165	10.4	187
73	Analysis of mass and heat transfer in transient experiments over heterogeneous catalysts. <i>Chemical Engineering Science</i> , 1995 , 50, 3573-3580	4.4	63
72	Evolution of nitrogen functionalities in carbonaceous materials during pyrolysis. <i>Carbon</i> , 1995 , 33, 1641-1653	10.3	1631
71	Selective catalytic reduction of NO with NH ₃ over activated carbons. I: Effect of origin and activation procedure on activity. <i>Carbon</i> , 1994 , 32, 897-904	10.4	17
70	On why do different carbons show different gasification rates: A transient isotopic CO ₂ gasification study. <i>Carbon</i> , 1994 , 32, 1223-1231	10.4	28
69	Assessment of the CO ₂ -carbon gasification catalyzed by calcium. A transient isotopic study. <i>Carbon</i> , 1994 , 32, 423-430	10.4	16
68	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
67	Kinetics of the alkali-carbonate catalysed gasification of carbon: 3. H ₂ O gasification. <i>Fuel</i> , 1994 , 73, 723-730	7.3	40
66	A transient kinetic study of carbon monoxide oxidation over copper-based catalysts for automotive pollution control. <i>Catalysis Today</i> , 1994 , 20, 409-422	5.3	22
65	Temperature- and occupancy-dependent diffusion of n-butane through a silicalite-1 membrane. <i>Microporous Materials</i> , 1994 , 3, 227-234		68
64	Alumina-Supported Manganese Oxide Catalysts. <i>Journal of Catalysis</i> , 1994 , 150, 94-104	7.3	358
63	Alumina-Supported Manganese Oxide Catalysts. <i>Journal of Catalysis</i> , 1994 , 150, 105-116	7.3	128
62	Modelling the transient kinetics of heterogeneous catalysts. CO-oxidation over supported Cr and Cu. <i>Chemical Engineering Science</i> , 1994 , 49, 4375-4390	4.4	14
61	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
60	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
59	Nitric oxide reduction and carbon monoxide oxidation over carbon-supported copper-chromium catalysts. <i>Applied Catalysis B: Environmental</i> , 1993 , 2, 257-275	21.8	58
58	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

57	Kinetics of the selective catalytic reduction of nitrogen oxide (NO) with ammonia over manganese oxide (Mn ₂ O ₃)-tungsten oxide (WO ₃)/gamma-alumina. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 445-452	3.9	62
56	Alumina Supported Manganese Catalysts for Low Temperature Selective Catalytic Reduction of NO with NH ₃ . <i>Studies in Surface Science and Catalysis</i> , 1993 , 2705-2708	1.8	2
55	Correlation of Bulk and Surface Thermodynamics of Some Transition Metal Oxides; Application to Exhaust Gas Catalysts. <i>Studies in Surface Science and Catalysis</i> , 1993 , 2693-2696	1.8	
54	Modified activated carbons for the selective catalytic reduction of NO with NH ₃ . <i>Carbon</i> , 1993 , 31, 213-224	2.4	81
53	The formation of PCDDs and PCDFs in the catalysed combustion of carbon: implications for coal combustion. <i>Fuel</i> , 1993 , 72, 343-347	7.1	13
52	Steam gasification kinetics and burn-off behaviour for a bituminous coal derived char in the presence of H ₂ . <i>Fuel Processing Technology</i> , 1993 , 36, 235-242	7.2	20
51	Anomalous carbon dioxide gasification behaviour of high temperature coal chars. <i>Fuel Processing Technology</i> , 1993 , 36, 243-250	7.2	7
50	High vacuum cell for high temperature in-situ infrared studies of heterogeneous catalysts. <i>Vibrational Spectroscopy</i> , 1993 , 4, 245-250	2.1	6
49	Alternatives to Noble Metal Catalysts for Automotive Exhaust Purification. <i>Catalysis Today</i> , 1993 , 16, 273-287	5.3	63
48	Single and Multi-Component Transport through Metal-Supported MFI Zeolite Membranes 1993 , 425-436		21
47	A Transient Kinetic Study of the Co-Oxidation Over a Cu-Cr-Catalyst 1993 , 473-482		1
46	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
45	Transient kinetic techniques for detailed insight in gas-solid reactions. <i>Energy & Fuels</i> , 1992 , 6, 494-497	4.7	27
44	In situ FTIR study of copper-chromium oxide catalysts in CO oxidation. <i>Journal of Molecular Catalysis</i> , 1992 , 74, 193-205		25
43	Methane formation in H ₂ ,CO mixtures over carbon-supported potassium carbonate. <i>Journal of Catalysis</i> , 1992 , 134, 525-535	7.3	5
42	Stability of carbon-supported catalysts in an oxidizing environment. <i>Carbon</i> , 1992 , 30, 577-585	10.4	17
41	Kinetics of the CO oxidation by O ₂ and N ₂ O over Cu-Cr/Al ₂ O ₃ . <i>AIChE Journal</i> , 1992 , 38, 385-396	3.6	27
40	Determination of Coal Behavior for Practical Coal Conversion Processes 1992 , 75-84		

39	General aspects of catalyst testing. <i>Catalysis Today</i> , 1991 , 11, 1-12	5.3	53
38	Catalyst loss and retention during alkali-catalysed carbon gasification in CO ₂ . <i>Carbon</i> , 1991 , 29, 929-941	10.4	40
37	The interaction of H ₂ O, CO ₂ , H ₂ and CO with the alkali-carbonate/carbon system: a thermogravimetric study. <i>Fuel</i> , 1991 , 70, 205-214	7.1	24
36	Burn-off behaviour in alkali-catalysed CO ₂ gasification of bituminous coal char: A comparison of TGA and fixed-bed reactor. <i>Fuel Processing Technology</i> , 1991 , 28, 5-17	7.2	9
35	Catalytic Automotive Pollution Control Without Noble Metals. <i>Studies in Surface Science and Catalysis</i> , 1991 , 71, 353-369	1.8	6
34	Kinetics of the alkali-metal-carbonate-catalyzed gasification of carbon. 2. The water-gas-shift reaction. <i>Industrial & Engineering Chemistry Research</i> , 1991 , 30, 1760-1770	3.9	7
33	KINETICS AND MECHANISM OF THE ALKALI CATALYSED GASIFICATION OF CARBON 1991 , 295-298		
32	The characterization of fly-chars from coal combustion; the effect of temperature and rank on reactivity, texture and composition. <i>Fuel Processing Technology</i> , 1990 , 24, 391-398	7.2	
31	Raman spectra of chromium oxide species in CrO ₃ /Al ₂ O ₃ catalysts. <i>Journal of Molecular Catalysis</i> , 1990 , 60, 83-98		62
30	Selective catalytic reduction of NO with NH ₃ over carbon supported copper catalysts.. <i>Catalysis Today</i> , 1990 , 7, 157-165	5.3	69
29	Characterization of coal pyrolysis by means of differential scanning calorimetry. 2. Quantitative heat effects in a H ₂ and in a CO ₂ atmosphere. <i>Fuel Processing Technology</i> , 1989 , 23, 63-74	7.2	13
28	Characterization of alkali carbonate catalysts for carbon gasification with ¹⁸ O labeled CO ₂ . <i>Carbon</i> , 1988 , 26, 41-48	10.4	14
27	Measurement of C,H,N-release from coals during pyrolysis: Implications for combustion. <i>Fuel</i> , 1988 , 67, 1190-1196	7.1	7
26	Characterization of coal pyrolysis by means of differential scanning calorimetry. 1. Quantitative heat effects in an inert atmosphere. <i>Fuel Processing Technology</i> , 1987 , 15, 45-57	7.2	16
25	Alkali-catalyzed carbon gasification in CO/CO ₂ mixtures: An extended model for the oxygen exchange and gasification reaction. <i>Journal of Catalysis</i> , 1987 , 107, 173-180	7.3	35
24	Kinetics of the alkali carbonate catalysed gasification of carbon. <i>Fuel</i> , 1986 , 65, 1371-1376	7.1	47
23	CO ₂ gasification of activated carbon catalyzed by earth alkaline elements. <i>AIChE Journal</i> , 1986 , 32, 691-695	9.5	64
22	Kinetics of Catalysed and Uncatalysed Coal Gasification 1986 , 291-360		9

21	Catalytic Gasification 1986 , 181-195		11
20	Mechanism of the potassium catalysed gasification of carbon in CO ₂ . <i>Fuel</i> , 1984 , 63, 1043-1047	7.1	108
19	Characterization of CuO?ZnO?Al ₂ O ₃ methanol synthesis catalysts using temperature programmed reduction and thermal stability. <i>Thermochimica Acta</i> , 1984 , 72, 111-116	2.9	21
18	CO ₂ gasification of carbon catalysed by alkali metals. <i>Fuel</i> , 1984 , 63, 1036-1042	7.1	86
17	Methanation of CO over alkali metal-carbon catalysts. <i>Journal of the Chemical Society Chemical Communications</i> , 1984 , 278-279		14
16	Reduction of NO _x over alkali metal-carbon systems. <i>Journal of the Chemical Society Chemical Communications</i> , 1984 , 1085-1086		38
15	Kinetics of the potassium carbonate-catalysed CO ₂ gasification of activated carbon. <i>Fuel</i> , 1983 , 62, 221-225		61
14	Thermodynamics of the geometrical isomerization of 2-butene and 2-pentene. <i>Journal of Chemical Thermodynamics</i> , 1983 , 15, 137-146	2.9	16
13	Thermodynamics of the metathesis of propene into ethene and 2-butene. <i>Journal of Chemical Thermodynamics</i> , 1983 , 15, 147-152	2.9	22
12	Formation of intercalate-like structures by heat treatment of K ₂ CO ₃ -carbon in an inert atmosphere. <i>Fuel</i> , 1983 , 62, 249-251	7.1	30
11	A packed-bed balance reactor for gas adsorption and gas-solid reactions under elevated pressures. <i>Journal of Physics E: Scientific Instruments</i> , 1982 , 15, 1064-1067		7
10	Stereochemistry in metathesis of n-alkenes using heterogeneous oxide catalysts. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1982 , 78, 2583		14
9	Kinetics of the metathesis of propene over dirhenium heptaoxide/.gamma.-aluminum oxide. <i>Industrial & Engineering Chemistry Product Research and Development</i> , 1981 , 20, 457-466		49
8	Heterogeneous metathesis of unsaturated fatty acid esters. <i>Journal of the Chemical Society Chemical Communications</i> , 1977 , 198		94
7	CHAPTER 10:MOFs as Nano-reactors. <i>RSC Catalysis Series</i> ,310-343	0.3	8
6	Laboratory Reactors1359-1398		16
5	Kinetics and Transport Processes1189-1261		8
4	The Focused Action of Surface Tension Versus the Brute Force of Turbulence [Scaleable Microchannel-Based Process Intensification using Monoliths149-164		

3	Zeolite membranes – The importance of support analysis. <i>Chemie-Ingenieur-Technik</i> ,	0.8	0
2	A thermally/chemically robust and easily regenerable anilato-based ultramicroporous 3D MOF for CO ₂ uptake and separation. <i>Journal of Materials Chemistry A</i> ,	13	3
1	CHAPTER 8. Photocatalysis: Past Achievements and Future Trends. <i>RSC Green Chemistry</i> ,227-269	0.9	