Johannes A Lercher

List of Publications by Year in Descending Order

586 papers	28,186 citations	82 h-index	134 g-index
633 ext. papers	31,230 ext. citations	7.8 avg, IF	7.38 L-index

#	Paper	IF	Citations
586	Pellet Size-Induced Increase in Catalyst Stability and Yield in Zeolite-Catalyzed 2-Butene/Isobutane Alkylation. *Industrial & Engineering Chemistry Research*, **2022**, 61, 330-338	3.9	0
585	Enhanced catalytic performance of palladium nanoparticles in MOFs by channel engineering. *Cell Reports Physical Science*, **2022**, 3, 100757	6.1	0
584	Mechanistic differences between methanol and dimethyl ether in zeolite-catalyzed hydrocarbon synthesis.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	3
583	Di- and Tetrameric Molybdenum Sulfide Clusters Activate and Stabilize Dihydrogen as Hydrides.. *Jacs Au*, **2022**, 2, 613-622		
582	Critical role of solvent-modulated hydrogen-binding strength in the catalytic hydrogenation of benzaldehyde on palladium. *Nature Catalysis*, **2021**, 4, 976-985	36.5	4
581	On the Mechanism of Catalytic Decarboxylation of Carboxylic Acids on Carbon-Supported Palladium Hydride. *ACS Catalysis*, **2021**, 11, 14625-14634	13.1	2
580	Site Densities, Rates, and Mechanism of Stable Ni/UiO-66 Ethylene Oligomerization Catalysts. *Journal of the American Chemical Society*, **2021**, 143, 20274-20280	16.4	10
579	Impact of the Local Concentration of Hydronium Ions at Tungstate Surfaces for Acid-Catalyzed Alcohol Dehydration. *Journal of the American Chemical Society*, **2021**, 143, 20133-20143	16.4	1
578	Rate enhancement of phenol hydrogenation on Pt by hydronium ions in the aqueous phase. *Journal of Catalysis*, **2021**, 404, 579-579	7.3	2
577	R□ktitelbild: Influence of Intracrystalline Ionic Strength in MFI Zeolites on Aqueous Phase Dehydration of Methylcyclohexanols (Angew. Chem. 47/2021). *Angewandte Chemie*, **2021**, 133, 25368	3.6	
576	Zeolite-Stabilized Di- and Tetranuclear Molybdenum Sulfide Clusters Form Stable Catalytic Hydrogenation Sites. *Angewandte Chemie*, **2021**, 133, 9387-9391	3.6	
575	Toward quantification of active sites and site-specific activity for polyaromatics hydrogenation on transition metal sulfides. *Journal of Catalysis*, **2021**,	7.3	4
574	Zeolite-Stabilized Di- and Tetranuclear Molybdenum Sulfide Clusters Form Stable Catalytic Hydrogenation Sites. *Angewandte Chemie - International Edition*, **2021**, 60, 9301-9305	16.4	6
573	Environment of Metal-O-Fe Bonds Enabling High Activity in CO Reduction on Single Metal Atoms and on Supported Nanoparticles. *Journal of the American Chemical Society*, **2021**, 143, 5540-5549	16.4	16
572	Confinement effects and acid strength in zeolites. *Nature Communications*, **2021**, 12, 2630	17.4	29
571	Role of the ionic environment in enhancing the activity of reacting molecules in zeolite pores. *Science*, **2021**, 372, 952-957	33.3	27
570	Ni/CeO2 promoted Ru and Pt supported on FeCrAl gauze for cycling methane catalytic partial oxidation□POX. *Applied Catalysis B: Environmental*, **2021**, 286, 119849	21.8	9

569	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. *Angewandte Chemie*, **2021**, 133, 2334-2341	3.6	0
568	Alkylation of lignin-derived aromatic oxygenates with cyclic alcohols on acidic zeolites. *Applied Catalysis B: Environmental*, **2021**, 281, 119424	21.8	4
567	Hydrogen Bonding Enhances the Electrochemical Hydrogenation of Benzaldehyde in the Aqueous Phase. *Angewandte Chemie*, **2021**, 133, 294-300	3.6	2
566	Hydrogen Bonding Enhances the Electrochemical Hydrogenation of Benzaldehyde in the Aqueous Phase. *Angewandte Chemie - International Edition*, **2021**, 60, 290-296	16.4	12
565	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. *Angewandte Chemie - International Edition*, **2021**, 60, 2304-2311	16.4	7
564	Differences in Mechanism and Rate of Zeolite-Catalyzed Cyclohexanol Dehydration in Apolar and Aqueous Phase. *ACS Catalysis*, **2021**, 11, 2879-2888	13.1	8
563	Activity of Cu-Al-Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. *Jacs Au*, **2021**, 1, 1412-1421		7
562	Influence of Intracrystalline Ionic Strength in MFI Zeolites on Aqueous Phase Dehydration of Methylcyclohexanols. *Angewandte Chemie - International Edition*, **2021**, 60, 24806-24810	16.4	1
561	Electronic impact of Ni2P nanoparticle size on hydrogenation rates. *Journal of Catalysis*, **2021**, 401, 129-136	7.3	2
560	Conversion of CO2 to methanol over bifunctional basic-metallic catalysts. *Catalysis Communications*, **2021**, 159, 106347	3.2	1
559	Surface Effects Determining Transport in Binary Xylene Mixtures. *Journal of Physical Chemistry C*, **2020**, 124, 26814-26820	3.8	1
558	Rate Enhancement of Acid-Catalyzed Alcohol Dehydration by Supramolecular Organic Capsules. *ACS Catalysis*, **2020**, 10, 13371-13376	13.1	6
557	Enhancing hydrogenation activity of Ni-Mo sulfide hydrodesulfurization catalysts. *Science Advances*, **2020**, 6, eaax5331	14.3	18
556	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cu-exchanged Mordenite. *Chemistry - A European Journal*, **2020**, 26, 7515	4.8	1
555	FeCrAl as a Catalyst Support. *Chemical Reviews*, **2020**, 120, 7516-7550	68.1	25
554	Influence of Acid Sites on Xylene Transport in MFI Type Zeolites. *Journal of Physical Chemistry C*, **2020**, 124, 4134-4140	3.8	3
553	Magnesium Aluminum Mixed Oxides as Basic Catalysts for the Synthesis of Methanethiol. *Catalysis Letters*, **2020**, 150, 2304-2308	2.8	1
552	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cu-Exchanged Mordenite. *Chemistry - A European Journal*, **2020**, 26, 7563-7567	4.8	17

551	Aqueous phase catalytic and electrocatalytic hydrogenation of phenol and benzaldehyde over platinum group metals. *Journal of Catalysis*, **2020**, 382, 372-384	7.3	32
550	Roles of Cu+ and Cu0 sites in liquid-phase hydrogenation of esters on core-shell CuZnx@C catalysts. *Applied Catalysis B: Environmental*, **2020**, 267, 118698	21.8	29
549	Impact of Alkali and Alkali-Earth Cations on Ni-Catalyzed Dimerization of Butene. *ChemCatChem*, **2020**, 12, 3705-3711	5.2	6
548	The Critical Role of Reductive Steps in the Nickel-Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether C□O Bonds. *Angewandte Chemie*, **2020**, 132, 1461-1465	3.6	4
547	On the multifaceted roles of NiSx in hydrodearomatization reactions catalyzed by unsupported Ni-promoted MoS2. *Journal of Catalysis*, **2020**, 391, 212-223	7.3	4
546	Single-event kinetic model for methanol-to-olefins (MTO) over ZSM-5: Fundamental kinetics for the olefin co-feed reactivity. *Chemical Engineering Journal*, **2020**, 402, 126023	14.7	8
545	Copper-zirconia interfaces in UiO-66 enable selective catalytic hydrogenation of CO to methanol. *Nature Communications*, **2020**, 11, 5849	17.4	30
544	On the Promoting Effects of Te and Nb in the Activity and Selectivity of M1 MoV-Oxides for Ethane Oxidative Dehydrogenation. *Topics in Catalysis*, **2020**, 63, 1754-1764	2.3	2
543	Towards understanding and predicting the hydronium ion catalyzed dehydration of cyclic-primary, secondary and tertiary alcohols. *Journal of Catalysis*, **2020**, 390, 237-243	7.3	4
542	Electrocatalytic Hydrogenation of Biomass-Derived Organics: A Review. *Chemical Reviews*, **2020**, 120, 11370-11419	68.1	62
541	Intrinsic kinetic model for oxidative dehydrogenation of ethane over MoVTeNb mixed metal oxides: A mechanistic approach. *Chemical Engineering Journal*, **2020**, 383, 123195	14.7	13
540	Electrochemically Tunable Proton-Coupled Electron Transfer in Pd-Catalyzed Benzaldehyde Hydrogenation. *Angewandte Chemie - International Edition*, **2020**, 59, 1501-1505	16.4	21
539	Electrochemically Tunable Proton-Coupled Electron Transfer in Pd-Catalyzed Benzaldehyde Hydrogenation. *Angewandte Chemie*, **2020**, 132, 1517-1521	3.6	10
538	The Critical Role of Reductive Steps in the Nickel-Catalyzed Hydrogenolysis and Hydrolysis of Aryl Ether C-O Bonds. *Angewandte Chemie - International Edition*, **2020**, 59, 1445-1449	16.4	20
537	Development of photochemical and electrochemical cells for X-ray absorption spectroscopy during photocatalytic and electrocatalytic reactions. *Physical Chemistry Chemical Physics*, **2020**, 22, 18891-18901	3.6	5
536	Maximizing Active Site Concentrations at Ni-Substituted WS Edges for Hydrogenation of Aromatic Molecules. *Journal of Physical Chemistry Letters*, **2019**, 10, 5617-5622	6.4	2
535	Cesium Induced Changes in the Acid–Base Properties of Metal Oxides and the Consequences for Methanol Thiolation. *ACS Catalysis*, **2019**, 9, 9245-9252	13.1	9
534	Design and synthesis of highly active MoVTeNb-oxides for ethane oxidative dehydrogenation. *Nature Communications*, **2019**, 10, 4012	17.4	32

533	Effects of Local Water Concentrations on Cyclohexanol Dehydration in H-BEA Zeolites. *Journal of Physical Chemistry C*, **2019**, 123, 25255-25266	3.8	22
532	The role of weak Lewis acid sites for methanol thiolation. *Catalysis Science and Technology*, **2019**, 9, 509-516	5.5	11
531	Genesis and Stability of Hydronium Ions in Zeolite Channels. *Journal of the American Chemical Society*, **2019**, 141, 3444-3455	16.4	74
530	Promotion of protolytic pentane conversion on H-MFI zeolite by proximity of extra-framework aluminum oxide and Brønsted acid sites. *Journal of Catalysis*, **2019**, 370, 424-433	7.3	24
529	Quantifying Adsorption of Organic Molecules on Platinum in Aqueous Phase by Hydrogen Site Blocking and in Situ X-ray Absorption Spectroscopy. *ACS Catalysis*, **2019**, 9, 6869-6881	13.1	26
528	Selective Methane Oxidation to Methanol on Cu-Oxo Dimers Stabilized by Zirconia Nodes of an NU-1000 Metal-Organic Framework. *Journal of the American Chemical Society*, **2019**, 141, 9292-9304	16.4	66
527	The synergistic effect between Ni sites and Ni-Fe alloy sites on hydrodeoxygenation of lignin-derived phenols. *Applied Catalysis B: Environmental*, **2019**, 253, 348-358	21.8	75
526	On the role of co-cations in nickel exchanged LTA zeolite for butene dimerization. *Microporous and Mesoporous Materials*, **2019**, 284, 241-246	5.3	7
525	Formation of Active Cu-oxo Clusters for Methane Oxidation in Cu-Exchanged Mordenite. *Journal of Physical Chemistry C*, **2019**, 123, 8759-8769	3.8	33
524	Catalytic Decomposition of the Oleaginous YeastCutaneotrichosporon Oleaginosusand Subsequent Biocatalytic Conversion of Liberated Free Fatty Acids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6531-6540	8.3	2
523	Operando XAFS Studies on Rh(CAAC)-Catalyzed Arene Hydrogenation. *ACS Catalysis*, **2019**, 9, 4106-4114	13.1	25
522	Rate enhancement by Cu in NixCu1−x/ZrO2 bimetallic catalysts for hydrodeoxygenation of stearic acid. *Catalysis Science and Technology*, **2019**, 9, 2620-2629	5.5	8
521	Critical role of formaldehyde during methanol conversion to hydrocarbons. *Nature Communications*, **2019**, 10, 1462	17.4	61
520	Hydrodeoxygenation of phenolic compounds to cycloalkanes over supported nickel phosphides. *Catalysis Today*, **2019**, 319, 48-56	5.3	27
519	On the enhanced catalytic activity of acid-treated, trimetallic Ni-Mo-W sulfides for quinoline hydrodenitrogenation. *Journal of Catalysis*, **2019**, 380, 332-342	7.3	12
518	Influence of Hydronium Ions in Zeolites on Sorption. *Angewandte Chemie - International Edition*, **2019**, 58, 3450-3455	16.4	56
517	The Nature of Hydrogen Adsorption on Platinum in the Aqueous Phase. *Angewandte Chemie*, **2019**, 131, 3565-3570	3.6	2
516	Impact of pH on Aqueous-Phase Phenol Hydrogenation Catalyzed by Carbon-Supported Pt and Rh. *ACS Catalysis*, **2019**, 9, 1120-1128	13.1	36

515	The Nature of Hydrogen Adsorption on Platinum in the Aqueous Phase. *Angewandte Chemie - International Edition*, **2019**, 58, 3527-3532	16.4	43
514	Structure Sensitivity in Hydrogenation Reactions on Pt/C in Aqueous-phase. *ChemCatChem*, **2019**, 11, 575-582	5.2	28
513	Influence of Hydronium Ions in Zeolites on Sorption. *Angewandte Chemie*, **2019**, 131, 3488-3493	3.6	9
512	Understanding Elementary Steps of Transport of Xylene Mixtures in ZSM-5 Zeolites. *Journal of Physical Chemistry C*, **2019**, 123, 8092-8100	3.8	9
511	Dimerization of Linear Butenes on Zeolite-Supported Ni2+. *ACS Catalysis*, **2019**, 9, 315-324	13.1	31
510	Kinetic Coupling of Water Splitting and Photoreforming on SrTiO3-Based Photocatalysts. *ACS Catalysis*, **2018**, 8, 2902-2913	13.1	21
509	Lewis-Brønsted Acid Pairs in Ga/H-ZSM-5 To Catalyze Dehydrogenation of Light Alkanes. *Journal of the American Chemical Society*, **2018**, 140, 4849-4859	16.4	131
508	In Situ Monitoring the Uptake of Moisture into Hybrid Perovskite Thin Films. *Journal of Physical Chemistry Letters*, **2018**, 9, 2015-2021	6.4	41
507	Hydrogenation of benzaldehyde via electrocatalysis and thermal catalysis on carbon-supported metals. *Journal of Catalysis*, **2018**, 359, 68-75	7.3	77
506	Solvent-determined mechanistic pathways in zeolite-H-BEA-catalysed phenol alkylation. *Nature Catalysis*, **2018**, 1, 141-147	36.5	53
505	Palladium-Catalyzed Reductive Insertion of Alcohols into Aryl Ether Bonds. *Angewandte Chemie - International Edition*, **2018**, 57, 3747-3751	16.4	18
504	Palladium-Catalyzed Reductive Insertion of Alcohols into Aryl Ether Bonds. *Angewandte Chemie*, **2018**, 130, 3809-3813	3.6	6
503	Elementary Steps of Faujasite Formation Followed by in Situ Spectroscopy. *Chemistry of Materials*, **2018**, 30, 888-897	9.6	21
502	Ni3P as a high-performance catalytic phase for the hydrodeoxygenation of phenolic compounds. *Green Chemistry*, **2018**, 20, 609-619	10	58
501	Rh(CAAC)-Catalyzed Arene Hydrogenation: Evidence for Nanocatalysis and Sterically Controlled Site-Selective Hydrogenation. *ACS Catalysis*, **2018**, 8, 8441-8449	13.1	60
500	Hydrolysis of zeolite framework aluminum and its impact on acid catalyzed alkane reactions. *Journal of Catalysis*, **2018**, 365, 359-366	7.3	33
499	Aqueous Phase Hydrodeoxygenation of Phenol over Ni3P-CePO4 Catalysts. *Industrial & Engineering Chemistry Research*, **2018**, 57, 10216-10225	3.9	29
498	Overcoming Thermodynamic Limitations in Dimethyl Carbonate Synthesis from Methanol and CO2. *Catalysis Letters*, **2018**, 148, 1914-1919	2.8	15

497	The Merits of In situ Environmental STEM for the Study of Complex Oxide Catalysts at Work. *Microscopy and Microanalysis*, **2018**, 24, 238-239	0.5	1
496	Sinter-Resistant Platinum Catalyst Supported by Metal-Organic Framework. *Angewandte Chemie - International Edition*, **2018**, 57, 909-913	16.4	70
495	Oxidative Functionalization of Methane on Heterogeneous Catalysts **2018**, 141-157		2
494	Carbon-supported Pt during aqueous phenol hydrogenation with and without applied electrical potential: X-ray absorption and theoretical studies of structure and adsorbates. *Journal of Catalysis*, **2018**, 368, 8-19	7.3	39
493	Active Sites on Nickel-Promoted Transition-Metal Sulfides That Catalyze Hydrogenation of Aromatic Compounds. *Angewandte Chemie*, **2018**, 130, 14763-14767	3.6	1
492	Exceptional Fluorocarbon Uptake with Mesoporous Metal□Organic Frameworks for Adsorption-Based Cooling Systems. *ACS Applied Energy Materials*, **2018**, 1, 5853-5858	6.1	25
491	Well-Defined Rhodium-Gallium Catalytic Sites in a Metal-Organic Framework: Promoter-Controlled Selectivity in Alkyne Semihydrogenation to E-Alkenes. *Journal of the American Chemical Society*, **2018**, 140, 15309-15318	16.4	56
490	Active Sites on Nickel-Promoted Transition-Metal Sulfides That Catalyze Hydrogenation of Aromatic Compounds. *Angewandte Chemie - International Edition*, **2018**, 57, 14555-14559	16.4	25
489	A nitrogen-doped PtSn nanocatalyst supported on hollow silica spheres for acetic acid hydrogenation. *Chemical Communications*, **2018**, 54, 8818-8821	5.8	14
488	Impact of structural defects and hydronium ion concentration on the stability of zeolite BEA in aqueous phase. *Applied Catalysis B: Environmental*, **2018**, 237, 996-1002	21.8	25
487	Sinter-Resistant Platinum Catalyst Supported by Metal□Organic Framework. *Angewandte Chemie*, **2018**, 130, 921-925	3.6	2
486	Palladium-Catalyzed Hydrolytic Cleavage of Aromatic C-O Bonds. *Angewandte Chemie - International Edition*, **2017**, 56, 2110-2114	16.4	65
485	Palladium-Catalyzed Hydrolytic Cleavage of Aromatic C□O Bonds. *Angewandte Chemie*, **2017**, 129, 2142-2146	3.6	16
484	Atomic Layer Deposition in a Metal□Organic Framework: Synthesis, Characterization, and Performance of a Solid Acid. *Chemistry of Materials*, **2017**, 29, 1058-1068	9.6	35
483	Enhancing the catalytic activity of hydronium ions through constrained environments. *Nature Communications*, **2017**, 8, 14113	17.4	66
482	Mechanism of Phenol Alkylation in Zeolite H-BEA Using In Situ Solid-State NMR Spectroscopy. *Journal of the American Chemical Society*, **2017**, 139, 9178-9185	16.4	37
481	Impact of Ni promotion on the hydrogenation pathways of phenanthrene on MoS2/□Al2O3. *Journal of Catalysis*, **2017**, 352, 171-181	7.3	30
480	Role of Spatial Constraints of Br□sted Acid Sites for Adsorption and Surface Reactions of Linear Pentenes. *Journal of the American Chemical Society*, **2017**, 139, 8646-8652	16.4	15

479	Tailoring nanoscopic confines to maximize catalytic activity of hydronium ions. *Nature Communications*, **2017**, 8, 15442	17.4	32
478	27Al MAS NMR Studies of HBEA Zeolite at Low to High Magnetic Fields. *Journal of Physical Chemistry C*, **2017**, 121, 12849-12854	3.8	28
477	Simultaneous hydrodenitrogenation and hydrodesulfurization on unsupported Ni-Mo-W sulfides. *Catalysis Today*, **2017**, 297, 344-355	5.3	31
476	Methane Oxidation to Methanol Catalyzed by Cu-Oxo Clusters Stabilized in NU-1000 Metal-Organic Framework. *Journal of the American Chemical Society*, **2017**, 139, 10294-10301	16.4	203
475	Overcoming the Rate-Limiting Reaction during Photoreforming of Sugar Aldoses for H2-Generation. *ACS Catalysis*, **2017**, 7, 3236-3244	13.1	23
474	Methanol thiolation over Al2O3 and WS2 catalysts modified with cesium. *Journal of Catalysis*, **2017**, 345, 308-318	7.3	17
473	Carbon□Carbon Bond Scission Pathways in the Deoxygenation of Fatty Acids on Transition-Metal Sulfides. *ACS Catalysis*, **2017**, 7, 1068-1076	13.1	31
472	Hydronium-Ion-Catalyzed Elimination Pathways of Substituted Cyclohexanols in Zeolite H-ZSM5. *ACS Catalysis*, **2017**, 7, 7822-7829	13.1	15
471	Tracking the Chemical Transformations at the Brønsted Acid Site upon Water-Induced Deprotonation in a Zeolite Pore. *Chemistry of Materials*, **2017**, 29, 9030-9042	9.6	48
470	On the role of the alkali cations on methanol thiolation. *Catalysis Science and Technology*, **2017**, 7, 4437-4443	5.5	11
469	Formation of Oxygen Radical Sites on MoVNbTeOx by Cooperative Electron Redistribution. *Journal of the American Chemical Society*, **2017**, 139, 12342-12345	16.4	29
468	Deoxygenation of Palmitic Acid on Unsupported Transition-Metal Phosphides. *ACS Catalysis*, **2017**, 7, 6331-6341	13.1	52
467	Stability of Zeolites in Aqueous Phase Reactions. *Chemistry of Materials*, **2017**, 29, 7255-7262	9.6	43
466	Aqueous phase hydrogenation of phenol catalyzed by Pd and PdAg on ZrO2. *Applied Catalysis A: General*, **2017**, 548, 128-135	5.1	14
465	Design of stable Ni/ZrO2 catalysts for dry reforming of methane. *Journal of Catalysis*, **2017**, 356, 147-156	7.3	51
464	Elementary steps and reaction pathways in the aqueous phase alkylation of phenol with ethanol. *Journal of Catalysis*, **2017**, 352, 329-336	7.3	29
463	Bridging Zirconia Nodes within a Metal-Organic Framework via Catalytic Ni-Hydroxo Clusters to Form Heterobimetallic Nanowires. *Journal of the American Chemical Society*, **2017**, 139, 10410-10418	16.4	64
462	Towards Understanding Structure□Activity Relationships of Ni□Mo□W Sulfide Hydrotreating Catalysts. *ChemCatChem*, **2017**, 9, 629-641	5.2	16

461	Controlling Hydrodeoxygenation of Stearic Acid to n-Heptadecane and n-Octadecane by Adjusting the Chemical Properties of Ni/SiO2ZrO2 Catalyst. *ChemCatChem*, **2017**, 9, 195-203	5.2	33
460	Mechanistic insights into aqueous phase propanol dehydration in H-ZSM-5 zeolite. *AICHE Journal*, **2017**, 63, 172-184	3.6	32
459	Enhanced Activity in Methane Dry Reforming by Carbon Dioxide Induced Metal-Oxide Interface Restructuring of Nickel/Zirconia. *ChemCatChem*, **2017**, 9, 3809-3813	5.2	18
458	Aqueous phase electrocatalysis and thermal catalysis for the hydrogenation of phenol at mild conditions. *Applied Catalysis B: Environmental*, **2016**, 182, 236-246	21.8	72
457	Bulk and Al2O3-supported Ni2P and MoP for hydrodeoxygenation of palmitic acid. *Applied Catalysis B: Environmental*, **2016**, 180, 301-311	21.8	62
456	Hydrodeoxygenation of fatty acid esters catalyzed by Ni on nano-sized MFI type zeolites. *Catalysis Science and Technology*, **2016**, 6, 7976-7984	5.5	36
455	Effect of Location and Distribution of Al Sites in ZSM-5 on the Formation of Cu-Oxo Clusters Active for Direct Conversion of Methane to Methanol. *Topics in Catalysis*, **2016**, 59, 1554-1563	2.3	55
454	Nitrogen Modified Carbon Nano-Materials as Stable Catalysts for Phosgene Synthesis. *ACS Catalysis* , **2016**, 6, 5843-5855	13.1	28
453	Interaction of alkali acetates with silica supported PdAu. *Catalysis Science and Technology*, **2016**, 6, 7203-7211	5.5	5
452	Hydrogen Transfer Pathways during Zeolite Catalyzed Methanol Conversion to Hydrocarbons. *Journal of the American Chemical Society*, **2016**, 138, 15994-16003	16.4	186
451	Integrated catalytic and electrocatalytic conversion of substituted phenols and diaryl ethers. *Journal of Catalysis*, **2016**, 344, 263-272	7.3	53
450	Enabling Overall Water Splitting on Photocatalysts by CO-Covered Noble Metal Co-catalysts. *Journal of Physical Chemistry Letters*, **2016**, 7, 4358-4362	6.4	25
449	Formation Mechanism of the First Carbon-Carbon Bond and the First Olefin in the Methanol Conversion into Hydrocarbons. *Angewandte Chemie - International Edition*, **2016**, 55, 5723-6	16.4	113
448	Atomic-Scale Determination of Active Facets on the MoVTeNb Oxide M1 Phase and Their Intrinsic Catalytic Activity for Ethane Oxidative Dehydrogenation. *Angewandte Chemie*, **2016**, 128, 9019-9023	3.6	5
447	Improving Stability of Zeolites in Aqueous Phase via Selective Removal of Structural Defects. *Journal of the American Chemical Society*, **2016**, 138, 4408-15	16.4	55
446	Sintering-Resistant Single-Site Nickel Catalyst Supported by Metal-Organic Framework. *Journal of the American Chemical Society*, **2016**, 138, 1977-82	16.4	233
445	Photoreforming of ethylene glycol over Rh/TiO2 and Rh/GaN:ZnO. *Journal of Catalysis*, **2016**, 338, 68-81	7.3	16
444	Dehydration of 1-Octadecanol over H-BEA: A Combined Experimental and Computational Study. *ACS Catalysis*, **2016**, 6, 878-889	13.1	13

443	Role of Amine Functionality for CO2 Chemisorption on Silica. *Journal of Physical Chemistry B*, **2016**, 120, 1988-95	3.4	73
442	Impact of alkali acetate promoters on the dynamic ordering of PdAu catalysts during vinyl acetate synthesis. *Journal of Catalysis*, **2016**, 333, 71-77	7.3	17
441	FY17-PDH-EVTest04 GodInput Impact of the Oxygen Defects FY17-PDH-EVTest04 Reduction Rates of Stearic Acid. *Chemistry - A European Journal*, **2016**, 2436-2434	4.8	
440	Bent Carbon Surface Moieties as Active Sites on Carbon Catalysts for Phosgene Synthesis. *Angewandte Chemie*, **2016**, 128, 1760-1764	3.6	4
439	Bent Carbon Surface Moieties as Active Sites on Carbon Catalysts for Phosgene Synthesis. *Angewandte Chemie - International Edition*, **2016**, 55, 1728-32	16.4	19
438	Atomic-Scale Determination of Active Facets on the MoVTeNb Oxide M1 Phase and Their Intrinsic Catalytic Activity for Ethane Oxidative Dehydrogenation. *Angewandte Chemie - International Edition* , **2016**, 55, 8873-7	16.4	47
437	Innentitelbild: Atomic-Scale Determination of Active Facets on the MoVTeNb Oxide M1 Phase and Their Intrinsic Catalytic Activity for Ethane Oxidative Dehydrogenation (Angew. Chem. 31/2016). *Angewandte Chemie*, **2016**, 128, 8914-8914	3.6	
436	Formation Mechanism of the First Carbon□arbon Bond and the First Olefin in the Methanol Conversion into Hydrocarbons. *Angewandte Chemie*, **2016**, 128, 5817-5820	3.6	37
435	Revealing the Working Active Sites of M1 phase for Ethane Oxidation. *Microscopy and Microanalysis*, **2016**, 22, 790-791	0.5	1
434	Stability and reactivity of copper oxo-clusters in ZSM-5 zeolite for selective methane oxidation to methanol. *Journal of Catalysis*, **2016**, 338, 305-312	7.3	174
433	Impact of solvents and surfactants on the self-assembly of nanostructured amine functionalized silica spheres for CO2 capture. *Journal of Energy Chemistry*, **2016**, 25, 327-335	12	15
432	Anharmonicity and Confinement in Zeolites: Structure, Spectroscopy, and Adsorption Free Energy of Ethanol in H-ZSM-5. *Journal of Physical Chemistry C*, **2016**, 120, 7172-7182	3.8	62
431	Catalytic routes and oxidation mechanisms in photoreforming of polyols. *Journal of Catalysis*, **2016**, 344, 806-816	7.3	36
430	Electrocatalytic Hydrogenation of Phenol over Platinum and Rhodium: Unexpected Temperature Effects Resolved. *ACS Catalysis*, **2016**, 6, 7466-7470	13.1	56
429	Tailoring p-xylene selectivity in toluene methylation on medium pore-size zeolites. *Microporous and Mesoporous Materials*, **2015**, 210, 52-59	5.3	28
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