Andreas Jentys

List of Publications by Year
in descending order

195 papers	9,114 citations	36303 51 h-index	51608 86 g-index
205 all docs	205 docs citations	205 times ranked	8608 citing authors

#	Article	IF	Citations
1	Single-site trinuclear copper oxygen clusters in mordenite for selective conversion of methane to methanol. Nature Communications, 2015, 6, 7546.	12.8	623
2	Estimation of mean size and shape of small metal particles by EXAFS. Physical Chemistry Chemical Physics, 1999, 1, 4059-4063.	2.8	331
3	Structure Sensitivity of the Hydrogenation of Crotonaldehyde over Pt/SiO2and Pt/TiO2. Journal of Catalysis, 1997, 166, 25-35.	6.2	289
4	Elementary steps of NOx adsorption and surface reaction on aÂcommercial storageâ€"reduction catalyst. Journal of Catalysis, 2003, 214, 308-316.	6.2	266
5	Towards understanding the bifunctional hydrodeoxygenation and aqueous phase reforming of glycerol. Journal of Catalysis, 2010, 269, 411-420.	6.2	263
6	Adsorption of water on ZSM 5 zeolites. The Journal of Physical Chemistry, 1989, 93, 4837-4843.	2.9	252
7	Influence of Surface Modification on the Acid Site Distribution of HZSM-5. Journal of Physical Chemistry B, 2002, 106, 9552-9558.	2.6	227
8	Lewisâ€"BrÃ¸nsted Acid Pairs in Ga/H-ZSM-5 To Catalyze Dehydrogenation of Light Alkanes. Journal of the American Chemical Society, 2018, 140, 4849-4859.	13.7	198
9	Nature of hydroxy groups in MCM-41. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 3287.	1.7	195
10	Tunable Water and CO₂ Sorption Properties in Isostructural Azine-Based Covalent Organic Frameworks through Polarity Engineering. Chemistry of Materials, 2015, 27, 7874-7881.	6.7	192
11	Steaming of Zeolite BEA and Its Effect on Acidity: A Comparative NMR and IR Spectroscopic Study. Journal of Physical Chemistry C, 2011, 115, 8005-8013.	3.1	163
12	Concentration of surface hydroxyl groups on MCM-41. Microporous and Mesoporous Materials, 1999, 27, 321-328.	4.4	145
13	Generation and Characterization of Well-Defined Zn2+ Lewis Acid Sites in Ion Exchanged Zeolite BEA. Journal of Physical Chemistry B, 2004, 108, 4116-4126.	2.6	121
14	Accurate Adsorption Thermodynamics of Small Alkanes in Zeolites. Ab initio Theory and Experiment for H-Chabazite. Journal of Physical Chemistry C, 2015, 119, 6128-6137.	3.1	120
15	Studies on the deactivation of NO storage-reduction catalysts by sulfur dioxide. Catalysis Today, 2002, 75, 413-419.	4.4	115
16	Mechanism and Kinetics of CO₂ Adsorption on Surface Bonded Amines. Journal of Physical Chemistry C, 2015, 119, 4126-4135.	3.1	111
17	Methane autothermal reforming with and without ethane over mono- and bimetal catalysts prepared from hydrotalcite precursors. Journal of Catalysis, 2005, 229, 185-196.	6.2	106
18	Reductive deconstruction of organosolv lignin catalyzed by zeolite supported nickel nanoparticles. Green Chemistry, 2015, 17, 5079-5090.	9.0	98

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19	Hydroisomerization of Heptane Isomers over Pd/SAPO Molecular Sieves: Influence of the Acid and Metal Site Concentration and the Transport Properties on the Activity and Selectivity. Journal of Catalysis, 2000, 190, 419-432.	6.2	97
20	On the coke deposition in dry reforming of methane at elevated pressures. Applied Catalysis A: General, 2015, 504, 599-607.	4.3	97
21	Enhancement of Sorption Processes in the Zeolite Hâ€ZSM5 by Postsynthetic Surface Modification. Angewandte Chemie - International Edition, 2009, 48, 533-538.	13.8	96
22	Xylene isomerization with surface-modified HZSM-5 zeolite catalysts: An in situ IR study. Journal of Catalysis, 2006, 241, 304-311.	6.2	95
23	Role of Amine Functionality for CO₂ Chemisorption on Silica. Journal of Physical Chemistry B, 2016, 120, 1988-1995.	2.6	92
24	Heterogeneous catalysts for hydroamination reactions: structureâ€“activity relationship. Journal of Catalysis, 2004, 221, 302-312.	6.2	84
25	Structural properties of titanium sites in Ti-ZSM5. Catalysis Letters, 1993, 22, 251-257.	2.6	83
26	Design of stable Ni/ZrO2 catalysts for dry reforming of methane. Journal of Catalysis, 2017, 356, 147-156.	6.2	81
27	Comparison of kinetics and reaction pathways for hydrodeoxygenation of C3 alcohols on Pt/Al2O3. Catalysis Today, 2012, 183, 3-9.	4.4	78
28	Understanding the impact of aluminum oxide binder on Ni/HZSM-5 for phenol hydrodeoxygenation. Applied Catalysis B: Environmental, 2013, 132-133, 282-292.	20.2	76
29	An in situ IR study of the NOx adsorption/reduction mechanism on modified Y zeolites. Physical Chemistry Chemical Physics, 2003, 5, 1897-1905.	2.8	72
30	Support effects in the aqueous phase reforming of glycerol over supported platinum catalysts. Applied Catalysis A: General, 2012, 431-432, 113-119.	4.3	71
31	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.	2.8	71
32	Hydrogenation of tetralin on silicaâ€“alumina-supported Pt catalysts I. Physicochemical characterization of the catalytic materials. Journal of Catalysis, 2007, 251, 485-496.	6.2	69
33	Sulfur-Tolerant Pt-Supported Zeolite Catalysts for Benzene Hydrogenation. Journal of Catalysis, 2001, 201, 60-69.	6.2	66
34	Hydroxyl groups in phosphorus-modified HZSM-5. Applied Catalysis, 1989, 53, 299-312.	0.8	64
35	On the Enhanced Selectivity of HZSM-5 Modified by Chemical Liquid Deposition. Topics in Catalysis, 2003, 22, 101-106.	2.8	62
36	Methanol Usage in Toluene Methylation with Medium and Large Pore Zeolites. ACS Catalysis, 2013, 3, 817-825.	11.2	62

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37	Tailoring mesoscopically structured H-ZSM5 zeolites for toluene methylation. Journal of Catalysis, 2014, 311, 271-280.	6.2	62
38	Isomerization of 1-pentene over SAPO, CoAPO (AEL, AFI) molecular sieves and HZSM-5. Applied Catalysis A: General, 2001, 207, 397-405.	4.3	61
39	Temperature-programmed reduction of silica-supported platinum/nickel catalysts studied by XANES. The Journal of Physical Chemistry, 1992, 96, 1324-1328.	2.9	60
40	Infrared and Raman Spectroscopy for Characterizing Zeolites. Studies in Surface Science and Catalysis, 2007, 168, 435-476.	1.5	60
41	Formation of Active Cu-oxo Clusters for Methane Oxidation in Cu-Exchanged Mordenite. Journal of Physical Chemistry C, 2019, 123, 8759-8769.	3.1	60
42	Metal organic frameworks based on Cu2+ and benzene-1,3,5-tricarboxylate as host for SO2 trapping agents. Comptes Rendus Chimie, 2005, 8, 753-763.	0.5	59
43	Sulfur tolerance of Pt/mordenites for benzene hydrogenation. Catalysis Today, 2002, 73, 105-112.	4.4	58
44	Comparison of the Transport of Aromatic Compounds in Small and Large MFI Particles. Journal of Physical Chemistry C, 2009, 113, 20435-20444.	3.1	58
45	On the location, strength and accessibility of BrÃ¸nsted acid sites in hierarchical ZSM-5 particles. Catalysis Today, 2012, 198, 3-11.	4.4	58
46	Hydroisomerization and cracking of n-octane and C8 isomers on Ni-containing zeolites. Applied Catalysis A: General, 1999, 176, 119-128.	4.3	57
47	Platinum Nanoparticles on Gallium Nitride Surfaces: Effect of Semiconductor Doping on Nanoparticle Reactivity. Journal of the American Chemical Society, 2012, 134, 12528-12535.	13.7	57
48	Surface Processes during Sorption of Aromatic Molecules on Medium Pore Zeolitesâ€. Journal of Physical Chemistry B, 2005, 109, 2254-2261.	2.6	56
49	Acidity of SAPO and CoAPO molecular sieves and their activity in the hydroisomerization of n-heptane. Microporous and Mesoporous Materials, 1999, 31, 271-285.	4.4	55
50	On the enhanced para-selectivity of HZSM-5 modified by antimony oxide. Journal of Catalysis, 2003, 219, 310-319.	6.2	55
51	Surface species during catalytic reduction of NO by propene studied by in situ IR-spectroscopy over Pt supported on mesoporous Al2O3 with MCM-41 type structure. Applied Catalysis B: Environmental, 2001, 33, 263-274.	20.2	54
52	Control of Acidâ˜'Base Properties of New Nanocomposite Derivatives of MCM-36 by Mixed Oxide Pillaring. Chemistry of Materials, 2004, 16, 724-730.	6.7	53
53	Role of the Surface Modification on the Transport of Hexane Isomers in ZSM-5. Journal of Physical Chemistry C, 2011, 115, 1171-1179.	3.1	50
54	Enhancing shape selectivity without loss of activity â€" novel mesostructured ZSM5 catalysts for methylation of toluene to p-xylene. Chemical Communications, 2013, 49, 10584.	4.1	50

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55	Dimerization of Linear Butenes on Zeolite-Supported Ni²⁺. ACS Catalysis, 2019, 9, 315-324.	11.2	50
56	Synthesis and characterization of mesoporic materials containing highly dispersed cobalt. Microporous Materials, 1996, 6, 13-17.	1.6	49
57	Critical role of solvent-modulated hydrogen-binding strength in the catalytic hydrogenation of benzaldehyde on palladium. Nature Catalysis, 2021, 4, 976-985.	34.4	49
58	Energetic and entropic contributions controlling the sorption of benzene in zeolites. Microporous and Mesoporous Materials, 2006, 90, 284-292.	4.4	48
59	Structure Sensitivity in Hydrogenation Reactions on Pt/C in Aqueousâ€phase. ChemCatChem, 2019, 11, 575-582.	3.7	47
60	Surface chemistry of H-ZSM5 studied by time-resolved IR spectroscopy. Journal of Molecular Catalysis, 1989, 51, 309-327.	1.2	45
61	Structural properties of cadmium oxide and cadmium sulfide clusters in zeolite Y. The Journal of Physical Chemistry, 1993, 97, 13535-13538.	2.9	45
62	Structure-activity relations for Ni-containing zeolites during NO reduction I. Influence of acid sites. Journal of Catalysis, 2003, 218, 348-353.	6.2	43
63	Hydrogenation of tetralin on silicaâ€“alumina-supported Pt catalysts II. Influence of the support on catalytic activity. Journal of Catalysis, 2007, 251, 497-506.	6.2	43
64	Structure-activity relations for Ni-containing zeolites during NO reductionII. Role of the chemical state of Ni. Journal of Catalysis, 2003, 218, 375-385.	6.2	42
65	Novel Model Explaining Toluene Diffusion in HZSM-5 after Surface Modification. Journal of Physical Chemistry B, 2004, 108, 1337-1343.	2.6	42
66	Elementary Reactions and Intermediate Species Formed during the Oxidative Regeneration of Spent Fluid Catalytic Cracking Catalysts. Industrial & Engineering Chemistry Research, 2004, 43, 3097-3104.	3.7	41
67	Nanoporous Glass as a Model System for a Consistency Check of the Different Techniques of Diffusion Measurement. ChemPhysChem, 2011, 12, 1130-1134.	2.1	41
68	Alkane conversion over Pd/SAPO molecular sieves: influence of acidity, metal concentration and structure. Catalysis Today, 2001, 65, 171-177.	4.4	40
69	Structure simulation of MCM-41 type materials. Journal of Molecular Catalysis A, 2001, 166, 53-57.	4.8	39
70	Identification of reaction intermediates during hydrogenation of CD3CN on Raney-Co. Journal of Catalysis, 2009, 263, 34-41.	6.2	39
71	Enhancing hydrogenation activity of Ni-Mo sulfide hydrodesulfurization catalysts. Science Advances, 2020, 6, eaax5331.	10.3	39
72	On the surface reactions during NO reduction with propene and propane on Ni-exchanged mordenite. Applied Catalysis B: Environmental, 2003, 46, 189-202.	20.2	38

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73	Characterization of Fe-Exchanged BEA Zeolite Under NH₃ Selective Catalytic Reduction Conditions. Journal of Physical Chemistry C, 2013, 117, 986-993.	3.1	38
74	Hydroconversion of n-heptane over bifunctional HZSM5 zeolites influence of the metal concentration and distribution on the activity and selectivity. Applied Catalysis A: General, 1998, 166, 29-38.	4.3	37
75	Sulfur-Tolerant Pt-Supported Catalysts for Benzene Hydrogenation. Journal of Catalysis, 2001, 203, 434-442.	6.2	37
76	Surface chemistry and kinetics of the hydrolysis of isocyanic acid on anatase. Applied Catalysis B: Environmental, 2007, 70, 91-99.	20.2	37
77	Acidity and Basicity: Determination by Adsorption Microcalorimetry. Molecular Sieves - Science and Technology, 2006, , 45-152.	0.2	36
78	Diffusion pathways of benzene, toluene and p-xylene in MFI. Microporous and Mesoporous Materials, 2009, 125, 3-10.	4.4	36
79	Understanding Ni Promotion of MoS₂/Î³â€Al₂O₃ and its Implications for the Hydrogenation of Phenanthrene. ChemCatChem, 2015, 7, 4118-4130.	3.7	36
80	Kinetic Coupling of Water Splitting and Photoreforming on SrTiO₃-Based Photocatalysts. ACS Catalysis, 2018, 8, 2902-2913.	11.2	36
81	On the Nature of Nitrogen-Containing Carbonaceous Deposits on Coked Fluid Catalytic Cracking Catalysts. Industrial & Engineering Chemistry Research, 2004, 43, 2368-2375.	3.7	35
82	Impact of supported ionic liquids on supported Pt catalysts. Green Chemistry, 2009, 11, 656.	9.0	35
83	Spectroscopic Characterization of Cobalt-Containing Mesoporous Materials. Journal of Physical Chemistry B, 2006, 110, 5386-5394.	2.6	34
84	Influence of Postsynthetic Surface Modification on Shape Selective Transport of Aromatic Molecules in HZSM-5. Journal of Physical Chemistry C, 2009, 113, 15355-15363.	3.1	34
85	Overcoming the Rate-Limiting Reaction during Photoreforming of Sugar Aldoses for H₂-Generation. ACS Catalysis, 2017, 7, 3236-3244.	11.2	34
86	Comparison of impregnation, liquid- and solid-state ion exchange procedures for the incorporation of nickel in HMFI, HMOR and HBEA. Microporous and Mesoporous Materials, 2000, 39, 307-317.	4.4	33
87	Oxidation state of bimetallic PdCu catalysts during liquid phase nitrate reduction. Catalysis Letters, 2000, 69, 11-16.	2.6	33
88	Tailoring p-xylene selectivity in toluene methylation on medium pore-size zeolites. Microporous and Mesoporous Materials, 2015, 210, 52-59.	4.4	33
89	Orientation of Alkyl-Substituted Aromatic Molecules during Sorption in the Pores of H/ZSM-5 Zeolites. Journal of Physical Chemistry C, 2007, 111, 3973-3980.	3.1	32
90	On the Role of the Vanadium Distribution in MoVTeNbO x Mixed Oxides for the Selective Catalytic Oxidation of Propane. Topics in Catalysis, 2011, 54, 639-649.	2.8	32

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91	Reduction of nitric oxide by propene and propane on Ni-exchanged mordenite. Applied Catalysis B: Environmental, 2003, 43, 105-115.	20.2	31
92	Waterâ€“gas shift catalysts based on ionic liquid mediated supported Cu nanoparticles. Journal of Catalysis, 2010, 276, 280-291.	6.2	31
93	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cuâ€Exchanged Mordenite. Chemistry - A European Journal, 2020, 26, 7563-7567.	3.3	31
94	Tailoring silicaâ€“alumina-supported Ptâ€“Pd as poison-tolerant catalyst for aromatics hydrogenation. Journal of Catalysis, 2013, 304, 135-148.	6.2	31
95	Novel derivatives of MCM-36 as catalysts for the reduction of nitrogen oxides from FCC regenerator flue gas streams. Journal of Catalysis, 2004, 227, 117-129.	6.2	29
96	Surface Transport Processes and Sticking Probability of Aromatic Molecules in HZSM-5. Journal of Physical Chemistry C, 2008, 112, 2538-2544.	3.1	29
97	Bimetallic Ptâ€“Pd/silicaâ€“alumina hydrotreating catalysts. Part II: Structureâ€“activity correlations in the hydrogenation of tetralin in the presence of dibenzothiophene and quinoline. Journal of Catalysis, 2012, 292, 13-25.	6.2	29
98	Catalytic reduction of NOx over transition-metal-containing MCM-41. Catalysis Letters, 1998, 56, 189-194.	2.6	28
99	Phase formation and selective oxidation of propane over MoVTeNbOx catalysts with varying compositions. Applied Catalysis A: General, 2011, 391, 63-69.	4.3	28
100	Structure of Co and Co oxide clusters in MCM-41. Catalysis Today, 1998, 39, 311-315.	4.4	27
101	Sulfate formation on SOx trapping materials studied by Cu and S K-edge XAFS. Physical Chemistry Chemical Physics, 2005, 7, 1283.	2.8	27
102	Catalytic Test Reactions for Probing the Acidity and Basicity of Zeolites. Molecular Sieves - Science and Technology, 2008, , 153-212.	0.2	27
103	Investigation of the Adsorption of Methanol on Alkali Metal Cation Exchanged Zeolite X by Inelastic Neutron Scattering. Journal of Physical Chemistry B, 2004, 108, 7902-7910.	2.6	26
104	Î³â€Al₂O₃â€Supported and Unsupported (Ni)MoS₂ for the Hydrodenitrogenation of Quinoline in the Presence of Dibenzothiophene. ChemCatChem, 2014, 6, 485-499.	3.7	26
105	Co-containing zeolites prepared by solid-state ion exchange. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 4091-4094.	1.7	25
106	On the Sticking Probability of Aromatic Molecules on Zeolites. Comment on â€œSTICKING PROBABILITY ON ZEOLITESâ€. Journal of Physical Chemistry B, 2006, 110, 17691-17693.	2.6	25
107	Determination of the Redox Processes in FeBEA Catalysts in NH₃âˆ'SCR Reaction by MÃ¶ssbauer and X-ray Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2011, 2, 950-955.	4.6	25
108	Bimetallic Ptâ€“Pd/silicaâ€“alumina hydrotreating catalysts â€“ Part I: Physicochemical characterization. Journal of Catalysis, 2012, 292, 1-12.	6.2	25

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109	Unique Dynamic Changes of Fe Cationic Species under NH₃-SCR Conditions. Journal of Physical Chemistry C, 2012, 116, 5846-5856.	3.1	24
110	Formation of metallic particles during temperature-programmed reduction of silica-supported platinum and nickel chlorides. The Journal of Physical Chemistry, 1993, 97, 484-488.	2.9	23
111	Inelastic Neutron Scattering of Hydrogen and Butyronitrile Adsorbed on Raney-Co Catalysts. Catalysis Letters, 2004, 97, 155-162.	2.6	23
112	On the quantitative aspects of hydrolysis of isocyanic acid on TiO2. Catalysis Today, 2007, 127, 165-175.	4.4	23
113	Atomistic Engineering of Catalyst Precursors: Dynamic Reordering of PdAu Nanoparticles during Vinyl Acetate Synthesis Enhanced by Potassium Acetate. ACS Catalysis, 2015, 5, 5776-5786.	11.2	23
114	Enhanced Activity in Methane Dry Reforming by Carbon Dioxide Induced Metalâ€Oxide Interface Restructuring of Nickel/Zirconia. ChemCatChem, 2017, 9, 3809-3813.	3.7	23
115	IR Study of The Adsorption of Benzene on HZSM5. Studies in Surface Science and Catalysis, 1989, , 585-594.	1.5	22
116	In Situ XANES Study of Pt/Mordenite during Benzene Hydrogenation in the Presence of Thiophene. Journal of Physical Chemistry B, 2000, 104, 11644-11649.	2.6	22
117	INS and IR and NMR Spectroscopic Study of C1âˆ'C4 Alcohols Adsorbed on Alkali Metal-Exchanged Zeolite X. Journal of Physical Chemistry B, 2004, 108, 15013-15026.	2.6	22
118	Characterization of metallic species on Ni- and Co-containing ZSM-5 catalystsâ€"reduction behavior and catalytic properties. Zeolites, 1997, 18, 391-397.	0.5	21
119	Structureâ€"Activity Relationships of Nickelâ€"Hexaaluminates in Reforming Reactions Partâ€…II: Activity and Stability of Nanostructured Nickelâ€"Hexaaluminateâ€Based Catalysts in the Dry Reforming of Methane. ChemCatChem, 2014, 6, 1447-1452.	3.7	21
120	Activity of Cuâ€"Alâ€"Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. Jacs Au, 2021, 1, 1412-1421.	7.9	21
121	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.	12.9	20
122	Improving bifunctional zeolite catalysts for alkane hydroisomerization via gas phase sulfation. Journal of Catalysis, 2006, 237, 337-348.	6.2	19
123	Impact of alkali acetate promoters on the dynamic ordering of PdAu catalysts during vinyl acetate synthesis. Journal of Catalysis, 2016, 333, 71-77.	6.2	19
124	Towards Understanding Structureâ€"Activity Relationships of Niâ€"Moâ€"W Sulfide Hydrotreating Catalysts. ChemCatChem, 2017, 9, 629-641.	3.7	19
125	Hard X-ray-based techniques for structural investigations of CO₂ methanation catalysts prepared by MOF decomposition. Nanoscale, 2020, 12, 15800-15813.	5.6	19
126	Hydroconversion of n-heptane over CoNi containing HZSM5. Applied Catalysis A: General, 1997, 152, 93-105.	4.3	18

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127	In Situ S K-Edge X-ray Absorption Spectroscopy for Understanding and Developing SOxStorage Catalysts. Journal of Physical Chemistry B, 2005, 109, 21842-21846.	2.6	18
128	Catalytic activity of Pt and tungstophosphoric acid supported on MCM-41 for the reduction of NOx in the presence of water vapor. Catalysis Today, 2000, 59, 313-321.	4.4	17
129	On the trapping of SOx on CaOâ€"Al2O3-based novel high capacity sorbents. Physical Chemistry Chemical Physics, 2006, 8, 1601.	2.8	17
130	Dynamic Self-Organization of Supported Pd/Au Catalysts during Vinyl Acetate Synthesis. Journal of Physical Chemistry C, 2013, 117, 8161-8169.	3.1	17
131	Distribution of Metal Cations in Niâ€Moâ€W Sulfide Catalysts. ChemCatChem, 2015, 7, 3692-3704.	3.7	17
132	Oxidation state of platinum clusters during the reduction of NOx with propene and propane. Catalysis Letters, 2001, 73, 67-72.	2.6	16
133	SOxStorage Materials under Leanâ˜'Rich Cycling Conditions. Part I:Â Identification of Transient Species. Journal of Physical Chemistry B, 2006, 110, 10729-10737.	2.6	16
134	Effects of adsorbed oxygen containing molecules on the XANES of Pt in supported Pt/SiO2 catalysts. Catalysis Letters, 1993, 21, 303-308.	2.6	15
135	Preparation and characterization of Pt particles in unidimensional microporous supports. Applied Catalysis A: General, 1998, 174, 155-162.	4.3	15
136	Kinetic processes during sorption and diffusion of aromatic molecules on medium pore zeolites studied by time resolved IR spectroscopy. Studies in Surface Science and Catalysis, 2002, 142, 1619-1626.	1.5	15
137	Tailoring hierarchically structured SiO₂ spheres for high pressure CO₂ adsorption. Journal of Materials Chemistry A, 2014, 2, 13624-13634.	10.3	15
138	Ni/CeO2 promoted Ru and Pt supported on FeCrAl gauze for cycling methane catalytic partial oxidationâ€"CPOX. Applied Catalysis B: Environmental, 2021, 286, 119849.	20.2	15
139	Changes in the oxidation state of transition metal containing MCM-41 during deNOx reactions. Catalysis Letters, 1997, 47, 193-198.	2.6	14
140	SOxStorage Materials under Leanâ˜'Rich Cycling ConditionsPart II:Â Influence of Pt, H2O, and Cycling Time. Journal of Physical Chemistry B, 2006, 110, 26024-26032.	2.6	13
141	Effect of chromium migration from metallic supports on the activity of diesel exhaust catalysts. Applied Catalysis B: Environmental, 2009, 89, 123-127.	20.2	13
142	Understanding Elementary Steps of Transport of Xylene Mixtures in ZSM-5 Zeolites. Journal of Physical Chemistry C, 2019, 123, 8092-8100.	3.1	13
143	Interaction of Hydrocarbons and Water With ZSM5. Studies in Surface Science and Catalysis, 1989, , 847-856.	1.5	12
144	Structure of small Ni clusters on SiO2. Catalysis Letters, 1995, 30, 77-85.	2.6	12

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145	Unique catalytic properties of Pt and tungstophosphoric acid supported on MCM-41 for the reduction of NOx in the presence of water vapour. Chemical Communications, 1999, , 335-336.	4.1	12
146	Catalytically Active Sites of Supported Pt Catalysts for Hydrogenation of Tetralin in the Presence of Dibenzothiophene and Quinoline. Journal of Physical Chemistry C, 2010, 114, 14532-14541.	3.1	12
147	Formation of sulfur surface species on a commercial NOx-storage reduction catalyst. Research on Chemical Intermediates, 2003, 29, 257-269.	2.7	11
148	Prerequisites for kinetic modeling of TPD data of porous catalystsâ€"Exemplified by toluene/H-ZSM-5 system. Chemical Engineering Science, 2015, 137, 807-815.	3.8	11
149	On the Mechanism of Catalytic Decarboxylation of Carboxylic Acids on Carbon-Supported Palladium Hydride. ACS Catalysis, 2021, 11, 14625-14634.	11.2	11
150	Speciation of Cu-Oxo Clusters in Ferrierite for Selective Oxidation of Methane to Methanol. Chemistry of Materials, 2022, 34, 4355-4363.	6.7	11
151	n -Heptane cracking on H- and Ni-containingzeolites. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 1837-1842.	1.7	10
152	11-P-24 - Structural properties and sieving effects of surface modified ZSM-5. Studies in Surface Science and Catalysis, 2001, , 214.	1.5	10
153	NMR Spectroscopic Techniques for Determining Acidity and Basicity. Molecular Sieves - Science and Technology, 2007, , 1-43.	0.2	10
154	A comparative study of diffusion of benzene/p-xylene mixtures in MFI particles, pellets and grown membranes. Catalysis Today, 2011, 168, 147-157.	4.4	10
155	Zeoliteâ€Stabilized Diâ€•and Tetranuclear Molybdenum Sulfide Clusters Form Stable Catalytic Hydrogenation Sites. Angewandte Chemie - International Edition, 2021, 60, 9301-9305.	13.8	10
156	Conversion of CO2 to methanol over bifunctional basic-metallic catalysts. Catalysis Communications, 2021, 159, 106347.	3.3	10
157	Selective liquid phase oxidation of o-xylene with gaseous oxygen by transition metal containing polysiloxane initiator/catalyst systems. Journal of Catalysis, 2011, 283, 25-33.	6.2	9
158	Structureâ€"Activity Relationships of Nickelâ€"Hexaaluminates in Reforming Reactions Partâ€…I: Controlling Nickel Nanoparticle Growth and Phase Formation. ChemCatChem, 2014, 6, 1438-1446.	3.7	9
159	Diffusion of Mixtures of Light Alkanes and Benzene in Nano-Sized H-ZSM5. Journal of Physical Chemistry C, 2014, 118, 8424-8434.	3.1	9
160	Interaction of alkali acetates with silica supported PdAu. Catalysis Science and Technology, 2016, 6, 7203-7211.	4.1	9
161	Embedding nano-clusters in siliceous faujasite. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2093.	1.7	8
162	Polymerâ€Coated PtCo Nanoparticles Deposited on Diblock Copolymer Templates: Chemical Selectivity versus Topographical Effects. ChemPhysChem, 2014, 15, 2236-2239.	2.1	8

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163	Dynamic Phase Separation in Supported Pdâ€"Au Catalysts. Journal of Physical Chemistry C, 2015, 119, 2471-2482.	3.1	8
164	On the Determination of the Location of Metal Clusters Supported on Molecular Sieves by X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2000, 104, 9411-9415.	2.6	7
165	Co and Mn polysiloxanes as unique initiatorâ€"catalyst-systems for the selective liquid phase oxidation of o-xylene. Chemical Communications, 2011, 47, 3254.	4.1	7
166	Adsorption of SO2 on different metal impregnated zeolites. Studies in Surface Science and Catalysis, 2004, 154, 3003-3009.	1.5	6
167	Acidity and Basicity of Ordered Silica-based Mesoporous Materials. Molecular Sieves - Science and Technology, 2007, , 213-267.	0.2	6
168	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.	2.8	6
169	Development of photochemical and electrochemical cells for <i>operando</i> X-ray absorption spectroscopy during photocatalytic and electrocatalytic reactions. Physical Chemistry Chemical Physics, 2020, 22, 18891-18901.	2.8	6
170	Development of novel catalytic additives for the in situ reduction of NOx from fluid catalytic cracking units. Studies in Surface Science and Catalysis, 2004, , 2441-2448.	1.5	5
171	Diffusion in Circularly Ordered Mesoporous Silica Fibers. Journal of Physical Chemistry C, 2011, 115, 8602-8612.	3.1	5
172	Structural response of Ni/ZrO₂to feed modulations during CH₄reforming reactions. Journal of Physics: Conference Series, 2016, 712, 012049.	0.4	5
173	Structural stabilisation of (CoO)x clusters in ZSM5 zeolites. Catalysis Letters, 1996, 39, 119-123.	2.6	4
174	Adsorption of methanol on MCM-36 derivatives with strong acid and base sites. Studies in Surface Science and Catalysis, 2004, 154, 1598-1605.	1.5	4
175	Using Tomography for Exploring Complex Structured Emission Control Catalysts. Catalysis Letters, 2010, 134, 24-30.	2.6	4
176	Molecular Understanding of Sorption in Mesoscale Organized Zeolites with MFI Structure. Catalysis Letters, 2013, 143, 1116-1122.	2.6	4
177	Laboratory-scale <i>in situ</i> X-ray absorption spectroscopy of a palladium catalyst on a compact inverse-Compton scattering X-ray beamline. Journal of Analytical Atomic Spectrometry, 2021, 36, 2649-2659.	3.0	4
178	Adsorption of SO2 on Ba impregnated metal organic framework materials. Studies in Surface Science and Catalysis, 2005, , 995-1002.	1.5	3
179	Unraveling the Reaction Mechanism of NO_{<i>x</i>} Removal by Highly Timeâ€Resolved IR Spectroscopy. ChemCatChem, 2010, 2, 49-50.	3.7	3
180	Importance of Methane Chemical Potential for Its Conversion to Methanol on Cuâ€exchanged Mordenite. Chemistry - A European Journal, 2020, 26, 7515-7515.	3.3	3

#	Article	IF	Citations
181	Influence of Acid Sites on Xylene Transport in MFI Type Zeolites. Journal of Physical Chemistry C, 2020, 124, 4134-4140.	3.1	3
182	Acidity and Basicity. Molecular Sieves - Science and Technology, 2008, , .	0.2	2
183	Surface Effects Determining Transport in Binary Xylene Mixtures. Journal of Physical Chemistry C, 2020, 124, 26814-26820.	3.1	2
184	Study of silica supported PtxNi1-x catalysts by ion scattering spectroscopy. Mikrochimica Acta, 1997, 125, 389-393.	5.0	1
185	27-O-04-Dual pathways for benzene hydrogenation on Pt/mordenites: implication for sulfur tolerance. Studies in Surface Science and Catalysis, 2001, , 166.	1.5	1
186	Characterization of acidic properties of sulfated zeolite Beta. Studies in Surface Science and Catalysis, 2005, 158, 1763-1770.	1.5	1
187	The energetic and entropic contributions controlling the orientation of alkyl substituted aromatic molecules in the pores of MFI zeolites. Studies in Surface Science and Catalysis, 2007, 170, 926-933.	1.5	1
188	Design of Platinum Based Metallic Catalysts for Selective Hydrogenation of Crotonaldehyde. Studies in Surface Science and Catalysis, 1993, 75, 2301-2304.	1.5	0
189	30-P-30-Reduction of nitric oxide by hydrocarbons on Ni-ion exchanged zeolites. Studies in Surface Science and Catalysis, 2001, , 328.	1.5	0
190	Kinetic Aspects of the Urea SCR Technology for Mobile Diesel Engines. Studies in Surface Science and Catalysis, 2007, 172, 509-512.	1.5	0
191	Experimental and theoretical investigation of the sticking probability of aromatics on HZSM-5 and SiO2. Studies in Surface Science and Catalysis, 2008, 174, 585-590.	1.5	0
192	The German Catalyst for Success: Weimar. ChemCatChem, 2011, 3, 1659-1660.	3.7	0
193	Zeoliteâ€Stabilized Diâ€•and Tetranuclear Molybdenum Sulfide Clusters Form Stable Catalytic Hydrogenation Sites. Angewandte Chemie, 2021, 133, 9387-9391.	2.0	0
194	Catalytic Activity of Pt and Tungsto-Phosphoric Acid Supported on MCM-41 for the Reduction of NO. , 2005, , 213-230.		0
195	Di- and Tetrameric Molybdenum Sulfide Clusters Activate and Stabilize Dihydrogen as Hydrides. Jacs Au, 2022, 2, 613-622.	7.9	0