Charles H F Peden

List of Publications by Year
in descending order

160 papers	18,047 citations	13865 67 h-index	12946 131 g-index
165 all docs	165 docs citations	165 times ranked	14454 citing authors

#	Article	IF	Citations
1	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO₂ Fixation. Chemical Reviews, 2013, 113, 6621-6658.	47.7	1,786
2	CHEMISTRY: Oxygen Vacancies and Catalysis on Ceria Surfaces. Science, 2005, 309, 713-714.	12.6	1,103
3	Coordinatively Unsaturated Al ³⁺ Centers as Binding Sites for Active Catalyst Phases of Platinum on Î³-Al ₂ O ₃. Science, 2009, 325, 1670-1673.	12.6	790
4	Excellent activity and selectivity of Cu-SSZ-13 in the selective catalytic reduction of NOx with NH3. Journal of Catalysis, 2010, 275, 187-190.	6.2	674
5	Low-temperature carbon monoxide oxidation catalysed by regenerable atomically dispersed palladium on alumina. Nature Communications, 2014, 5, 4885.	12.8	498
6	Interaction of Molecular Oxygen with the Vacuum-Annealed TiO2(110) Surface:Â Molecular and Dissociative Channels. Journal of Physical Chemistry B, 1999, 103, 5328-5337.	2.6	473
7	Effects of hydrothermal aging on NH3-SCR reaction over Cu/zeolites. Journal of Catalysis, 2012, 287, 203-209.	6.2	438
8	Insights into Photoexcited Electron Scavenging Processes on TiO2Obtained from Studies of the Reaction of O2with OH Groups Adsorbed at Electronic Defects on TiO2(110). Journal of Physical Chemistry B, 2003, 107, 534-545.	2.6	413
9	Structureâ€“activity relationships in NH3-SCR over Cu-SSZ-13 as probed by reaction kinetics and EPR studies. Journal of Catalysis, 2013, 300, 20-29.	6.2	409
10	Selective Catalytic Reduction over Cu/SSZ-13: Linking Homo- and Heterogeneous Catalysis. Journal of the American Chemical Society, 2017, 139, 4935-4942.	13.7	380
11	Two different cationic positions in Cu-SSZ-13?. Chemical Communications, 2012, 48, 4758.	4.1	350
12	Insight into methanol synthesis from CO2 hydrogenation on Cu(111): Complex reaction network and the effects of H2O. Journal of Catalysis, 2011, 281, 199-211.	6.2	347
13	Effects of Si/Al ratio on Cu/SSZ-13 NH3-SCR catalysts: Implications for the active Cu species and the roles of BrÃ¸nsted acidity. Journal of Catalysis, 2015, 331, 25-38.	6.2	341
14	Kinetics of carbon monoxide oxidation on single-crystal palladium, platinum, and iridium. The Journal of Physical Chemistry, 1988, 92, 5213-5221.	2.9	325
15	Understanding ammonia selective catalytic reduction kinetics over Cu/SSZ-13 from motion of the Cu ions. Journal of Catalysis, 2014, 319, 1-14.	6.2	307
16	Current Understanding of Cu-Exchanged Chabazite Molecular Sieves for Use as Commercial Diesel Engine DeNOx Catalysts. Topics in Catalysis, 2013, 56, 1441-1459.	2.8	297
17	Toward Rational Design of Cu/SSZ-13 Selective Catalytic Reduction Catalysts: Implications from Atomic-Level Understanding of Hydrothermal Stability. ACS Catalysis, 2017, 7, 8214-8227.	11.2	278
18	Evidence for oxygen adatoms on TiO2(110) resulting from O2 dissociation at vacancy sites. Surface Science, 1998, 412-413, 333-343.	1.9	273

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19	Thermal durability of Cu-CHA NH3-SCR catalysts for diesel NO reduction. Catalysis Today, 2012, 184, 252-261.	4.4	245
20	Effects of Alkali and Alkaline Earth Cocations on the Activity and Hydrothermal Stability of Cu/SSZ-13 NH₃â€“SCR Catalysts. ACS Catalysis, 2015, 5, 6780-6791.	11.2	235
21	New insights into Cu/SSZ-13 SCR catalyst acidity. Part I: Nature of acidic sites probed by NH3 titration. Journal of Catalysis, 2017, 348, 291-299.	6.2	233
22	Direct Conversion of Bio-ethanol to Isobutene on Nanosized Zn_{<i>x</i>}Zr_{<i>y</i>}O_{<i>z</i>} Mixed Oxides with Balanced Acidâ€“Base Sites. Journal of the American Chemical Society, 2011, 133, 11096-11099.	13.7	225
23	The Effect of Copper Loading on the Selective Catalytic Reduction of Nitric Oxide by Ammonia Over Cu-SSZ-13. Catalysis Letters, 2012, 142, 295-301.	2.6	186
24	Penta-coordinated Al3+ ions as preferential nucleation sites for BaO on Î³-Al2O3: An ultra-high-magnetic field 27Al MAS NMR study. Journal of Catalysis, 2007, 251, 189-194.	6.2	173
25	Synthesis and Evaluation of Cu-SAPO-34 Catalysts for Ammonia Selective Catalytic Reduction. 1. Aqueous Solution Ion Exchange. ACS Catalysis, 2013, 3, 2083-2093.	11.2	168
26	Stable platinum nanoparticles on specific MgAl2O4 spinel facets at high temperatures in oxidizing atmospheres. Nature Communications, 2013, 4, 2481.	12.8	166
27	Synthesis and evaluation of Cu/SAPO-34 catalysts for NH3-SCR 2: Solid-state ion exchange and one-pot synthesis. Applied Catalysis B: Environmental, 2015, 162, 501-514.	20.2	166
28	In situ DRIFTS-MS studies on the oxidation of adsorbed NH3 by NO over a Cu-SSZ-13 zeolite. Catalysis Today, 2013, 205, 16-23.	4.4	158
29	Characterization of Cu-SSZ-13 NH3 SCR catalysts: an in situ FTIR study. Physical Chemistry Chemical Physics, 2013, 15, 2368.	2.8	142
30	NO Chemisorption on Cu/SSZ-13: A Comparative Study from Infrared Spectroscopy and DFT Calculations. ACS Catalysis, 2014, 4, 4093-4105.	11.2	139
31	Direct Observation of the Active Center for Methane Dehydroaromatization Using an Ultrahigh Field ⁹⁵Mo NMR Spectroscopy. Journal of the American Chemical Society, 2008, 130, 3722-3723.	13.7	134
32	Following the movement of Cu ions in a SSZ-13 zeolite during dehydration, reduction and adsorption: A combined in situ TP-XRD, XANES/DRIFTS study. Journal of Catalysis, 2014, 314, 83-93.	6.2	131
33	Synthesis, characterization, and catalytic function of novel highly dispersed tungsten oxide catalysts on mesoporous silica. Journal of Catalysis, 2006, 239, 200-211.	6.2	130
34	Iron Loading Effects in Fe/SSZ-13 NH₃-SCR Catalysts: Nature of the Fe Ions and Structureâ€“Function Relationships. ACS Catalysis, 2016, 6, 2939-2954.	11.2	126
35	Differential kinetic analysis of diesel particulate matter (soot) oxidation by oxygen using a stepâ€“response technique. Applied Catalysis B: Environmental, 2005, 61, 120-129.	20.2	119
36	Electronic and Chemical Properties of Ce0.8Zr0.2O2(111) Surfaces:Â Photoemission, XANES, Density-Functional, and NO2Adsorption Studies. Journal of Physical Chemistry B, 2001, 105, 7762-7770.	2.6	118

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37	NO2Adsorption on BaO/Al2O3:Â The Nature of Nitrate Species. Journal of Physical Chemistry B, 2005, 109, 27-29.	2.6	117
38	A comparative study of N2O formation during the selective catalytic reduction of NOx with NH3 on zeolite supported Cu catalysts. Journal of Catalysis, 2015, 329, 490-498.	6.2	115
39	Kinetics of hydrogen absorption by Pd(110). Physical Review B, 1986, 34, 817-822.	3.2	108
40	Fe/SSZ-13 as an NH3-SCR catalyst: A reaction kinetics and FTIR/MÃ¶ssbauer spectroscopic study. Applied Catalysis B: Environmental, 2015, 164, 407-419.	20.2	108
41	Role of Pentacoordinated Al³⁺ Ions in the High Temperature Phase Transformation of Î³-Al₂O₃. Journal of Physical Chemistry C, 2008, 112, 9486-9492.	3.1	106
42	(100) facets of Î³-Al2O3: The Active Surfaces for Alcohol Dehydration Reactions. Catalysis Letters, 2011, 141, 649-655.	2.6	105
43	Using Transient FTIR Spectroscopy to Probe Active Sites and Reaction Intermediates for Selective Catalytic Reduction of NO on Cu/SSZ-13 Catalysts. ACS Catalysis, 2019, 9, 6137-6145.	11.2	105
44	Unique Role of Anchoring Penta-Coordinated Al³⁺ Sites in the Sintering of Î³-Al₂O₃-Supported Pt Catalysts. Journal of Physical Chemistry Letters, 2010, 1, 2688-2691.	4.6	101
45	Selective Catalytic Reduction of NO_{<i>x</i>} with NH₃ over a Cuâ€SSZâ€13 Catalyst Prepared by a Solidâ€State Ionâ€Exchange Method. ChemCatChem, 2014, 6, 1579-1583.	3.7	101
46	Sub-micron Cu/SSZ-13: Synthesis and application as selective catalytic reduction (SCR) catalysts. Applied Catalysis B: Environmental, 2017, 201, 461-469.	20.2	101
47	Unraveling the mysterious failure of Cu/SAPO-34 selective catalytic reduction catalysts. Nature Communications, 2019, 10, 1137.	12.8	99
48	Effect of H2O on the Adsorption of NO2on Î³-Al2O3:â€‰ an in Situ FTIR/MS Study. Journal of Physical Chemistry C, 2007, 111, 2661-2669.	3.1	97
49	Cs-substituted tungstophosphoric acid salt supported on mesoporous silica. Catalysis Today, 2000, 55, 117-124.	4.4	96
50	The different impacts of SO2 and SO3 on Cu/zeolite SCR catalysts. Catalysis Today, 2010, 151, 266-270.	4.4	96
51	Effect of Oxygen Defects on the Catalytic Performance of VO_{<i>x</i>}/CeO₂ Catalysts for Oxidative Dehydrogenation of Methanol. ACS Catalysis, 2015, 5, 3006-3012.	11.2	96
52	A Common Intermediate for N₂ Formation in Enzymes and Zeolites: Sideâ€On Cuâ€“Nitrosyl Complexes. Angewandte Chemie - International Edition, 2013, 52, 9985-9989.	13.8	94
53	A comparative kinetics study between Cu/SSZ-13 and Fe/SSZ-13 SCR catalysts. Catalysis Today, 2015, 258, 347-358.	4.4	94
54	Well-studied Cuâ€“BTC still serves surprises: evidence for facile Cu2+/Cu+ interchange. Physical Chemistry Chemical Physics, 2012, 14, 4383.	2.8	91

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55	Recent Progress in Atomic-Level Understanding of Cu/SSZ-13 Selective Catalytic Reduction Catalysts. Catalysts, 2018, 8, 140.	3.5	91
56	NH3-SCR on Cu, Fe and Cu + Fe exchanged beta and SSZ-13 catalysts: Hydrothermal aging and propylene poisoning effects. Catalysis Today, 2019, 320, 91-99.	4.4	90
57	Transformation of Active Sites in Fe/SSZ-13 SCR Catalysts during Hydrothermal Aging: A Spectroscopic, Microscopic, and Kinetics Study. ACS Catalysis, 2017, 7, 2458-2470.	11.2	89
58	Deactivation mechanisms of Pt/Pd-based diesel oxidation catalysts. Catalysis Today, 2012, 184, 197-204.	4.4	86
59	Tomography and High-Resolution Electron Microscopy Study of Surfaces and Porosity in a Plate-like Î³-Al₂O₃. Journal of Physical Chemistry C, 2013, 117, 179-186.	3.1	81
60	Catalytic N2O decomposition and reduction by NH3 over Fe/Beta and Fe/SSZ-13 catalysts. Journal of Catalysis, 2018, 358, 199-210.	6.2	80
61	Changing Morphology of BaO/Al2O3during NO2Uptake and Release. Journal of Physical Chemistry B, 2005, 109, 7339-7344.	2.6	79
62	Understanding the nature of surface nitrates in BaO/Î³-Al2O3 NOx storage materials: A combined experimental and theoretical study. Journal of Catalysis, 2009, 261, 17-22.	6.2	79
63	Surface-Bound Intermediates in Low-Temperature Methanol Synthesis on Copper: Participants and Spectators. ACS Catalysis, 2015, 5, 7328-7337.	11.2	77
64	Size-Dependent Catalytic Performance of CuO on Î³-Al₂O₃: NO Reduction versus NH₃ Oxidation. ACS Catalysis, 2012, 2, 1432-1440.	11.2	75
65	Structure of Î´-Alumina: Toward the Atomic Level Understanding of Transition Alumina Phases. Journal of Physical Chemistry C, 2014, 118, 18051-18058.	3.1	72
66	Micro and mesoporous metalâ€“organic frameworks for catalysis applications. Dalton Transactions, 2010, 39, 1692-1694.	3.3	71
67	Effects of Ba loading and calcination temperature on BaAl2O4 formation for BaO/Al2O3 NOx storage and reduction catalysts. Catalysis Today, 2006, 114, 86-93.	4.4	70
68	The adsorption of NO2and the NOâ€‰+â€‰O2reaction on Na-Y,FAU: an in situ FTIR investigation. Physical Chemistry Chemical Physics, 2003, 5, 4045-4051.	2.8	68
69	Solvent Evaporation Assisted Preparation of Oriented Nanocrystalline Mesoporous MFI Zeolites. ACS Catalysis, 2011, 1, 682-690.	11.2	67
70	Effects of CeO2 support facets on VOx/CeO2 catalysts in oxidative dehydrogenation of methanol. Journal of Catalysis, 2014, 315, 15-24.	6.2	66
71	The Effect of Water on the Adsorption of NO2in Naâˆ’ and Baâˆ’Y, FAU Zeolites:Â A Combined FTIR and TPD Investigation. Journal of Physical Chemistry B, 2004, 108, 3746-3753.	2.6	64
72	Investigation of Aluminum Site Changes of Dehydrated Zeolite H-Beta during a Rehydration Process by High-Field Solid-State NMR. Journal of Physical Chemistry C, 2015, 119, 1410-1417.	3.1	63

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73	Catalytic oxidation of HCN over a 0.5% Pt/Al2O3 catalyst. Applied Catalysis B: Environmental, 2006, 65, 282-290.	20.2	61
74	NO2Adsorption on Ultrathin Î¸-Al2O3Films:Â Formation of Nitrite and Nitrate Species. Journal of Physical Chemistry B, 2005, 109, 15977-15984.	2.6	60
75	Ambient-temperature NO oxidation over amorphous CrOx-ZrO2 mixed oxide catalysts: Significant promoting effect of ZrO2. Applied Catalysis B: Environmental, 2017, 202, 706-714.	20.2	60
76	Revisiting effects of alkali metal and alkaline earth co-cation additives to Cu/SSZ-13 selective catalytic reduction catalysts. Journal of Catalysis, 2019, 378, 363-375.	6.2	59
77	Excellent sulfur resistance of Pt/BaO/CeO2 lean NOx trap catalysts. Applied Catalysis B: Environmental, 2008, 84, 545-551.	20.2	55
78	A General Mechanism for Stabilizing the Small Sizes of Precious Metal Nanoparticles on Oxide Supports. Chemistry of Materials, 2014, 26, 5475-5481.	6.7	53
79	Relationship of Pt Particle Size to the NOxStorage Performance of Thermally Aged Pt/BaO/Al2O3Lean NOxTrap Catalysts. Industrial & Engineering Chemistry Research, 2006, 45, 8815-8821.	3.7	51
80	Unraveling the Origin of Structural Disorder in High Temperature Transition Al₂O₃: Structure of Î¸-Al₂O₃. Chemistry of Materials, 2015, 27, 7042-7049.	6.7	51
81	Carbonate Formation and Stability on a Pt/BaO/Î³-Al2O3 NOX Storage/Reduction Catalyst. Journal of Physical Chemistry C, 2008, 112, 10952-10959.	3.1	47
82	High field 27Al MAS NMR and TPD studies of active sites in ethanol dehydration using thermally treated transitional aluminas as catalysts. Journal of Catalysis, 2016, 336, 85-93.	6.2	47
83	NO x uptake mechanism on Pt/BaO/Al2O3 catalysts. Catalysis Letters, 2006, 111, 119-126.	2.6	46
84	Changes in Ba Phases in BaO/Al2O3 upon Thermal Aging and H2O Treatment. Catalysis Letters, 2005, 105, 259-268.	2.6	43
85	Synthesis of nanodispersed oxides of vanadium, titanium, molybdenum, and tungsten on mesoporous silica using atomic layer deposition. Topics in Catalysis, 2006, 39, 245-255.	2.8	43
86	Characterization of Dispersed Heteropoly Acid on Mesoporous Zeolite Using Solid-State ³¹P NMR Spinâˆ'Lattice Relaxation. Journal of the American Chemical Society, 2009, 131, 9715-9721.	13.7	42
87	Non-thermal plasma-assisted NOx reduction over alkali and alkaline earth ion exchanged Y, FAU zeolites. Catalysis Today, 2004, 89, 135-141.	4.4	41
88	Cu/Chabazite catalysts for â€˜Lean-Burnâ€™ vehicle emission control. Journal of Catalysis, 2019, 373, 384-389.	6.2	40
89	Adsorption and Reaction of SO2on Model Ce1Â-ÂxZrxO2(111) Catalysts. Journal of Physical Chemistry B, 2004, 108, 2931-2938.	2.6	39
90	Water-induced bulk Ba(NO3)2 formation from NO2 exposed thermally aged BaO/Al2O3. Applied Catalysis B: Environmental, 2007, 72, 233-239.	20.2	39

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91	NO oxidation on zeolite supported Cu catalysts: Formation and reactivity of surface nitrates. Catalysis Today, 2016, 267, 17-27.	4.4	39
92	Using a Surface-Sensitive Chemical Probe and a Bulk Structure Technique to Monitor the Î³- to Î¸-Al₂O₃ Phase Transformation. Journal of Physical Chemistry C, 2011, 115, 12575-12579.	3.1	37
93	Nonthermal plasma-assisted catalytic NOx reduction over Ba-Y,FAU: the effect of catalyst preparation. Journal of Catalysis, 2003, 220, 291-298.	6.2	36
94	Oxidation of ethanol to acetaldehyde over Na-promoted vanadium oxide catalysts. Applied Catalysis A: General, 2007, 332, 263-272.	4.3	36
95	Cation Movements during Dehydration and NO₂ Desorption in a Baâ€“Y,FAU Zeolite: An in Situ Time-Resolved X-ray Diffraction Study. Journal of Physical Chemistry C, 2013, 117, 3915-3922.	3.1	36
96	Interaction of Water with Ordered Î¸-Al2O3Ultrathin Films Grown on NiAl(100). Journal of Physical Chemistry B, 2005, 109, 3431-3436.	2.6	35
97	Water-Induced Morphology Changes in BaO/Î³-Al2O3NOxStorage Materials:â€‰ an FTIR, TPD, and Time-Resolved Synchrotron XRD Study. Journal of Physical Chemistry C, 2007, 111, 4678-4687.	3.1	35
98	NMR studies of Cu/zeolite SCR catalysts hydrothermally aged with urea. Catalysis Today, 2008, 136, 34-39.	4.4	35
99	Possible origin of improved high temperature performance of hydrothermally aged Cu/beta zeolite catalysts. Catalysis Today, 2012, 184, 245-251.	4.4	35
100	Line narrowing in 1H MAS spectrum of mesoporous silica by removing adsorbed H2O using N2. Solid State Nuclear Magnetic Resonance, 2005, 27, 200-205.	2.3	32
101	Understanding Practical Catalysts Using a Surface Science Approach:â€‰ The Importance of Strong Interaction between BaO and Al₂O₃ in NO<i>_x</i> Storage Materials. Journal of Physical Chemistry C, 2007, 111, 14942-14944.	3.1	32
102	Formation of NO+ and its possible roles during the selective catalytic reduction of NOx with NH3 on Cu-CHA catalysts. Catalysis Today, 2019, 320, 61-71.	4.4	32
103	Conversion of N2O to N2 on TiO2(1 1 0). Catalysis Today, 2003, 85, 251-266.	4.4	30
104	Effect of Barium Loading on the Desulfation of Pt-BaO/Al2O3Studied by H2TPRX, TEM, Sulfur K-edge XANES, and in Situ TR-XRD. Journal of Physical Chemistry B, 2006, 110, 10441-10448.	2.6	30
105	The Origin of Regioselectivity in 2â€Butanol Dehydration on Solid Acid Catalysts. ChemCatChem, 2011, 3, 1557-1561.	3.7	30
106	Adsorption and Formation of BaO Overlayers on Î³-Al₂O₃ Surfaces. Journal of Physical Chemistry C, 2008, 112, 18050-18060.	3.1	29
107	Studies of the Active Sites for Methane Dehydroaromatization Using Ultrahigh-Field Solid-State 95Mo NMR Spectroscopy. Journal of Physical Chemistry C, 2009, 113, 2936-2942.	3.1	29
108	First-Principles Analysis of NO_{<i>x</i>} Adsorption on Anhydrous Î³-Al₂O₃ Surfaces. Journal of Physical Chemistry C, 2009, 113, 7779-7789.	3.1	28

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109	Ba Deposition and Oxidation on Î¸-Al2O3/NiAl(100) Ultrathin Films. Part I:â€‰ Anaerobic Deposition Conditions. Journal of Physical Chemistry B, 2006, 110, 17001-17008.	2.6	27
110	Low Temperature H2O and NO2 Coadsorption on Î¸-Al2O3/NiAl(100) Ultrathin Films. Journal of Physical Chemistry B, 2006, 110, 8025-8034.	2.6	27
111	Ba Deposition and Oxidation on Î¸-Al2O3/NiAl(100) Ultrathin Films. Part II:â€‰ O2(g) Assisted Ba Oxidation. Journal of Physical Chemistry B, 2006, 110, 17009-17014.	2.6	27
112	NOx uptake on alkaline earth oxides (BaO, MgO, CaO and SrO) supported on Î³-Al2O3. Catalysis Today, 2008, 136, 121-127.	4.4	27
113	Characteristics of Ptâ€“K/MgAl2O4 lean NOx trap catalysts. Catalysis Today, 2012, 184, 2-7.	4.4	27
114	Ambient temperature NO oxidation over Cr-based amorphous mixed oxide catalysts: effects from the second oxide components. Catalysis Science and Technology, 2017, 7, 2362-2370.	4.1	27
115	Hydrothermal Aging Effects on Fe/SSZ-13 and Fe/Beta NH3â€“SCR Catalysts. Topics in Catalysis, 2016, 59, 882-886.	2.8	26
116	Regeneration of field-spent activated carbon catalysts for low-temperature selective catalytic reduction of NOx with NH3. Chemical Engineering Journal, 2011, 174, 242-248.	12.7	25
117	Synthesis of butenes through 2-butanol dehydration over mesoporous materials produced from ferrierite. Catalysis Today, 2012, 185, 191-197.	4.4	25
118	Effect of Sodium on the Catalytic Properties of VO_{<i>x</i>}/CeO₂ Catalysts for Oxidative Dehydrogenation of Methanol. Journal of Physical Chemistry C, 2013, 117, 5722-5729.	3.1	25
119	Characterization of Fe²⁺ ions in Fe,H/SSZ-13 zeolites: FTIR spectroscopy of CO and NO probe molecules. Physical Chemistry Chemical Physics, 2016, 18, 10473-10485.	2.8	25
120	Effects of Novel Supports on the Physical and Catalytic Properties of Tungstophosphoric Acid for Alcohol Dehydration Reactions. Topics in Catalysis, 2008, 49, 259-267.	2.8	24
121	Grafting sulfated zirconia on mesoporous silica. Green Chemistry, 2007, 9, 540.	9.0	23
122	Highly Dispersed and Active ReO_{<i>x</i>} on Alumina-Modified SBA-15 Silica for 2-Butanol Dehydration. ACS Catalysis, 2012, 2, 1020-1026.	11.2	22
123	Effect of K loadings on nitrate formation/decomposition and on NOx storage performance of K-based NOx storage-reduction catalysts. Applied Catalysis B: Environmental, 2013, 142-143, 472-478.	20.2	21
124	Effects of potassium loading and thermal aging on K/Pt/Al2O3 high-temperature lean NOx trap catalysts. Catalysis Today, 2014, 231, 164-172.	4.4	21
125	A large sample volume magic angle spinning nuclear magnetic resonance probe for in situ investigations with constant flow of reactants. Physical Chemistry Chemical Physics, 2012, 14, 2137-2143.	2.8	20
126	Improved thermal stability of a copper-containing ceria-based catalyst for low temperature CO oxidation under simulated diesel exhaust conditions. Catalysis Science and Technology, 2018, 8, 1383-1394.	4.1	20

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127	Fractional Factorial Study of HCN Removal over a 0.5% Pt/Al2O3 Catalyst:â€‰ Effects of Temperature, Gas Flow Rate, and Reactant Partial Pressure. Industrial & Engineering Chemistry Research, 2006, 45, 934-939.	3.7	19
128	Characterization of NOx species in dehydrated and hydrated Na- and Ba-Y, FAU zeolites formed in NO2 adsorption. Journal of Electron Spectroscopy and Related Phenomena, 2006, 150, 164-170.	1.7	19
129	Non-thermal Plasma-assisted NOx Reduction over Na-Y Zeolites: The Promotional Effect of Acid Sites. Catalysis Letters, 2006, 109, 1-6.	2.6	19
130	Adsorption, Coadsorption, and Reaction of Acetaldehyde and NO2on Naâˆ'Y,FAU:Â An In Situ FTIR Investigation. Journal of Physical Chemistry B, 2004, 108, 17050-17058.	2.6	18
131	Remarkable self-degradation of Cu/SAPO-34 selective catalytic reduction catalysts during storage at ambient conditions. Catalysis Today, 2021, 360, 367-374.	4.4	18
132	Roles of Pt and BaO in the Sulfation of Pt/BaO/Al₂O₃ Lean NO<i>_x</i> Trap Materials:â€‰ Sulfur K-edge XANES and Pt L_{III} XAFS Studies. Journal of Physical Chemistry C, 2008, 112, 2981-2987.	3.1	17
133	Effects of Sulfation Level on the Desulfation Behavior of Presulfated Pt-BaO/Al₂O₃ Lean NO<i>_x</i> Trap Catalysts: A Combined H₂ Temperature-Programmed Reaction, in Situ Sulfur K-Edge X-ray Absorption Near-Edge Spectroscopy, X-ray Photoelectron Spectroscopy, and Time-Resolved X-ray Diffraction Study. Journal of Physical Chemistry C, 2009, 113, 7336-7341.	3.1	17
134	Modification of the acid/base properties of Î³-Al2O3 by oxide additives: An ethanol TPD investigation. Catalysis Today, 2016, 265, 240-244.	4.4	16
135	Effect of Produced HCl during the Catalysis on Micro- and Mesoporous MOFs. Crystal Growth and Design, 2010, 10, 4118-4122.	3.0	15
136	Advantages of MgAlO_{<i>x</i>} over Î³-Al₂O₃ as a Support Material for Potassium-Based High-Temperature Lean NO_{<i>x</i>} Traps. ACS Catalysis, 2015, 5, 4680-4689.	11.2	15
137	Characteristics of Desulfation Behavior for Presulfated Pt-BaO/CeO2 Lean NOx Trap Catalyst: The Role of the CeO2 Support. Journal of Physical Chemistry C, 2009, 113, 21123-21129.	3.1	14
138	Effect of H₂O on the Morphological Changes of KNO₃ Formed on K₂O/Al₂O₃ NO_{<i>x</i>} Storage Materials: Fourier Transform Infrared and Time-Resolved X-ray Diffraction Studies. Journal of Physical Chemistry C, 2014, 118, 4189-4197.	3.1	14
139	Structural Intergrowth in Î´-Al₂O₃. Journal of Physical Chemistry C, 2019, 123, 9454-9460.	3.1	14
140	Comment on ?Structure sensitivity in CO oxidation over rhodium? by M. Bowker, Q. Guo, Y. Li and R. W. Joyner. Catalysis Letters, 1993, 22, 271-274.	2.6	13
141	Water-induced morphology changes in BaO/Î³-Al2O3NOxstorage materials. Chemical Communications, 2007, , 984-986.	4.1	13
142	Promotional Effects of H2O Treatment on NO x Storage Over Fresh and Thermally Aged Ptâ€"BaO/Al2O3 Lean NO x Trap Catalysts. Catalysis Letters, 2008, 124, 39-45.	2.6	13
143	Preparation of Highly Dispersed Cs-Tungstophosphoric Acid Salt on MCM-41 Silica. Catalysis Letters, 2001, 75, 169-173.	2.6	12
144	Enhanced High Temperature Performance of MgAl2O4-Supported Ptâ€"BaO Lean NOx Trap Catalysts. Topics in Catalysis, 2012, 55, 70-77.	2.8	12

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145	Design of a Reaction Protocol for Decoupling Sulfur Removal and Thermal Aging Effects during Desulfation of Ptâ^'BaO/Al2O3 Lean NOx Trap Catalysts. Industrial & Engineering Chemistry Research, 2007, 46, 2735-2740.	3.7	11
146	Characterizing Surface Acidic Sites in Mesoporous-Silica-Supported Tungsten Oxide Catalysts Using Solid-State NMR and Quantum Chemistry Calculations. Journal of Physical Chemistry C, 2011, 115, 23354-23362.	3.1	11
147	Effect of sulfur loading on the desulfation chemistry of a commercial lean NOx trap catalyst. Catalysis Today, 2012, 197, 3-8.	4.4	11
148	Isothermal desulfation of pre-sulfated Pt-BaO/Î³-Al2O3 lean NOx trap catalysts with H2: The effect of H2 concentration and the roles of CO2 and H2O. Applied Catalysis B: Environmental, 2012, 111-112, 342-348.	20.2	11
149	Sequential high temperature reduction, low temperature hydrolysis for the regeneration of sulfated NOx trap catalysts. Catalysis Today, 2008, 136, 183-187.	4.4	10
150	Characterization of surface and bulk nitrates of Î³-Al2O3â€"supported alkaline earth oxides using density functional theory. Physical Chemistry Chemical Physics, 2009, 11, 3380.	2.8	10
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