

Charles H F Peden

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Remarkable self-degradation of Cu/SAPO-34 selective catalytic reduction catalysts during storage at ambient conditions. <i>Catalysis Today</i> , 2021, 360, 367-374.	2.2	18
2	Revisiting effects of alkali metal and alkaline earth co-cation additives to Cu/SSZ-13 selective catalytic reduction catalysts. <i>Journal of Catalysis</i> , 2019, 378, 363-375.	3.1	59
3	Using Transient FTIR Spectroscopy to Probe Active Sites and Reaction Intermediates for Selective Catalytic Reduction of NO on Cu/SSZ-13 Catalysts. <i>ACS Catalysis</i> , 2019, 9, 6137-6145.	5.5	105
4	Cu/Chabazite catalysts for "Lean-Burn"™ vehicle emission control. <i>Journal of Catalysis</i> , 2019, 373, 384-389.	3.1	40
5	Structural Intergrowth in γ -Al ₂ O ₃ . <i>Journal of Physical Chemistry C</i> , 2019, 123, 9454-9460.	1.5	14
6	Unraveling the mysterious failure of Cu/SAPO-34 selective catalytic reduction catalysts. <i>Nature Communications</i> , 2019, 10, 1137.	5.8	99
7	NH ₃ -SCR on Cu, Fe and Cu + Fe exchanged beta and SSZ-13 catalysts: Hydrothermal aging and propylene poisoning effects. <i>Catalysis Today</i> , 2019, 320, 91-99.	2.2	90
8	Formation of NO ⁺ and its possible roles during the selective catalytic reduction of NO _x with NH ₃ on Cu-CHA catalysts. <i>Catalysis Today</i> , 2019, 320, 61-71.	2.2	32
9	Where Does the Sulphur Go? Deactivation of a Low Temperature CO Oxidation Catalyst by Sulphur Poisoning. <i>Catalysis Letters</i> , 2018, 148, 1445-1450.	1.4	3
10	Improved thermal stability of a copper-containing ceria-based catalyst for low temperature CO oxidation under simulated diesel exhaust conditions. <i>Catalysis Science and Technology</i> , 2018, 8, 1383-1394.	2.1	20
11	Catalytic N ₂ O decomposition and reduction by NH ₃ over Fe/Beta and Fe/SSZ-13 catalysts. <i>Journal of Catalysis</i> , 2018, 358, 199-210.	3.1	80
12	Recent Progress in Atomic-Level Understanding of Cu/SSZ-13 Selective Catalytic Reduction Catalysts. <i>Catalysis</i> , 2018, 8, 140.	1.6	91
13	Ambient-temperature NO oxidation over amorphous CrO _x -ZrO ₂ mixed oxide catalysts: Significant promoting effect of ZrO ₂ . <i>Applied Catalysis B: Environmental</i> , 2017, 202, 706-714.	10.8	60
14	Transformation of Active Sites in Fe/SSZ-13 SCR Catalysts during Hydrothermal Aging: A Spectroscopic, Microscopic, and Kinetics Study. <i>ACS Catalysis</i> , 2017, 7, 2458-2470.	5.5	89
15	Ambient temperature NO oxidation over Cr-based amorphous mixed oxide catalysts: effects from the second oxide components. <i>Catalysis Science and Technology</i> , 2017, 7, 2362-2370.	2.1	27
16	Selective Catalytic Reduction over Cu/SSZ-13: Linking Homo- and Heterogeneous Catalysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 4935-4942.	6.6	380
17	New insights into Cu/SSZ-13 SCR catalyst acidity. Part I: Nature of acidic sites probed by NH ₃ titration. <i>Journal of Catalysis</i> , 2017, 348, 291-299.	3.1	233
18	Toward Rational Design of Cu/SSZ-13 Selective Catalytic Reduction Catalysts: Implications from Atomic-Level Understanding of Hydrothermal Stability. <i>ACS Catalysis</i> , 2017, 7, 8214-8227.	5.5	278

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19	Sub-micron Cu/SSZ-13: Synthesis and application as selective catalytic reduction (SCR) catalysts. Applied Catalysis B: Environmental, 2017, 201, 461-469.	10.8	101
20	Iron Loading Effects in Fe/SSZ-13 NH ₃ -SCR Catalysts: Nature of the Fe Ions and Structure-Function Relationships. ACS Catalysis, 2016, 6, 2939-2954.	5.5	126
21	Virtual Special Issue on Catalysis at the U.S. Department of Energy's National Laboratories. ACS Catalysis, 2016, 6, 3227-3235.	5.5	2
22	Hydrothermal Aging Effects on Fe/SSZ-13 and Fe/Beta NH ₃ -SCR Catalysts. Topics in Catalysis, 2016, 59, 882-886.	1.3	26
23	Characterization of Fe ²⁺ ions in Fe,H/SSZ-13 zeolites: FTIR spectroscopy of CO and NO probe molecules. Physical Chemistry Chemical Physics, 2016, 18, 10473-10485.	1.3	25
24	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.	3.1	47
25	NO oxidation on zeolite supported Cu catalysts: Formation and reactivity of surface nitrates. Catalysis Today, 2016, 267, 17-27.	2.2	39
26	Modification of the acid/base properties of γ -Al ₂ O ₃ by oxide additives: An ethanol TPD investigation. Catalysis Today, 2016, 265, 240-244.	2.2	16
27	Performance and properties of K and TiO ₂ based LNT catalysts. Applied Catalysis B: Environmental, 2016, 181, 862-873.	10.8	7
28	Surface-Bound Intermediates in Low-Temperature Methanol Synthesis on Copper: Participants and Spectators. ACS Catalysis, 2015, 5, 7328-7337.	5.5	77
29	A comparative kinetics study between Cu/SSZ-13 and Fe/SSZ-13 SCR catalysts. Catalysis Today, 2015, 258, 347-358.	2.2	94
30	A comparative study of N ₂ O formation during the selective catalytic reduction of NO _x with NH ₃ on zeolite supported Cu catalysts. Journal of Catalysis, 2015, 329, 490-498.	3.1	115
31	Advantages of MgAlO _x over γ -Al ₂ O ₃ as a Support Material for Potassium-Based High-Temperature Lean NO _x Traps. ACS Catalysis, 2015, 5, 4680-4689.	5.5	15
32	Effect of Oxygen Defects on the Catalytic Performance of VO _x /CeO ₂ Catalysts for Oxidative Dehydrogenation of Methanol. ACS Catalysis, 2015, 5, 3006-3012.	5.5	96
33	Unraveling the Origin of Structural Disorder in High Temperature Transition Al ₂ O ₃ : Structure of γ -Al ₂ O ₃ . Chemistry of Materials, 2015, 27, 7042-7049.	3.2	51
34	Effects of Alkali and Alkaline Earth Cocations on the Activity and Hydrothermal Stability of Cu/SSZ-13 NH ₃ -SCR Catalysts. ACS Catalysis, 2015, 5, 6780-6791.	5.5	235
35	Effects of Si/Al ratio on Cu/SSZ-13 NH ₃ -SCR catalysts: Implications for the active Cu species and the roles of Brønsted acidity. Journal of Catalysis, 2015, 331, 25-38.	3.1	341
36	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.	1.5	63

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37	Synthesis and evaluation of Cu/SAPO-34 catalysts for NH ₃ -SCR 2: Solid-state ion exchange and one-pot synthesis. <i>Applied Catalysis B: Environmental</i> , 2015, 162, 501-514.	10.8	166
38	Fe/SSZ-13 as an NH ₃ -SCR catalyst: A reaction kinetics and FTIR/Mössbauer spectroscopic study. <i>Applied Catalysis B: Environmental</i> , 2015, 164, 407-419.	10.8	108
39	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. <i>Journal of Catalysis</i> , 2014, 314, 83-93.	3.1	131
40	Selective Catalytic Reduction of NO _x with NH ₃ over a Cu-SSZ-13 Catalyst Prepared by a Solid-State Ion-Exchange Method. <i>ChemCatChem</i> , 2014, 6, 1579-1583.	1.8	101
41	Effects of CeO ₂ support facets on VO _x /CeO ₂ catalysts in oxidative dehydrogenation of methanol. <i>Journal of Catalysis</i> , 2014, 315, 15-24.	3.1	66
42	Understanding ammonia selective catalytic reduction kinetics over Cu/SSZ-13 from motion of the Cu ions. <i>Journal of Catalysis</i> , 2014, 319, 1-14.	3.1	307
43	Structure of γ -Alumina: Toward the Atomic Level Understanding of Transition Alumina Phases. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18051-18058.	1.5	72
44	Effect of H ₂ O on the Morphological Changes of KNO ₃ Formed on K ₂ O/Al ₂ O ₃ NO _x Storage Materials: Fourier Transform Infrared and Time-Resolved X-ray Diffraction Studies. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4189-4197.	1.5	14
45	A General Mechanism for Stabilizing the Small Sizes of Precious Metal Nanoparticles on Oxide Supports. <i>Chemistry of Materials</i> , 2014, 26, 5475-5481.	3.2	53
46	Low-temperature carbon monoxide oxidation catalysed by regenerable atomically dispersed palladium on alumina. <i>Nature Communications</i> , 2014, 5, 4885.	5.8	498
47	NO Chemisorption on Cu/SSZ-13: A Comparative Study from Infrared Spectroscopy and DFT Calculations. <i>ACS Catalysis</i> , 2014, 4, 4093-4105.	5.5	139
48	Effects of potassium loading and thermal aging on K/Pt/Al ₂ O ₃ high-temperature lean NO _x trap catalysts. <i>Catalysis Today</i> , 2014, 231, 164-172.	2.2	21
49	In situ DRIFTS-MS studies on the oxidation of adsorbed NH ₃ by NO over a Cu-SSZ-13 zeolite. <i>Catalysis Today</i> , 2013, 205, 16-23.	2.2	158
50	Synthesis and Evaluation of Cu-SAPO-34 Catalysts for Ammonia Selective Catalytic Reduction. 1. Aqueous Solution Ion Exchange. <i>ACS Catalysis</i> , 2013, 3, 2083-2093.	5.5	168
51	Effect of K loadings on nitrate formation/decomposition and on NO _x storage performance of K-based NO _x storage-reduction catalysts. <i>Applied Catalysis B: Environmental</i> , 2013, 142-143, 472-478.	10.8	21
52	Stable platinum nanoparticles on specific MgAl ₂ O ₄ spinel facets at high temperatures in oxidizing atmospheres. <i>Nature Communications</i> , 2013, 4, 2481.	5.8	166
53	Characterization of Cu-SSZ-13 NH ₃ SCR catalysts: an in situ FTIR study. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2368.	1.3	142
54	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO ₂ Fixation. <i>Chemical Reviews</i> , 2013, 113, 6621-6658.	23.0	1,786

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55	Structure-activity relationships in NH ₃ -SCR over Cu-SSZ-13 as probed by reaction kinetics and EPR studies. <i>Journal of Catalysis</i> , 2013, 300, 20-29.	3.1	409
56	Cation Movements during Dehydration and NO ₂ Desorption in a Ba ^Y ,FAU Zeolite: An in Situ Time-Resolved X-ray Diffraction Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 3915-3922.	1.5	36
57	Tomography and High-Resolution Electron Microscopy Study of Surfaces and Porosity in a Plate-like γ -Al ₂ O ₃ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 179-186.	1.5	81
58	Current Understanding of Cu-Exchanged Chabazite Molecular Sieves for Use as Commercial Diesel Engine DeNO _x Catalysts. <i>Topics in Catalysis</i> , 2013, 56, 1441-1459.	1.3	297
59	Effect of Sodium on the Catalytic Properties of VO _x /CeO ₂ Catalysts for Oxidative Dehydrogenation of Methanol. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5722-5729.	1.5	25
60	A Common Intermediate for N ₂ Formation in Enzymes and Zeolites: Side-On Cu ^I -Nitrosyl Complexes. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9985-9989.	7.2	94
61	Effect of sulfur loading on the desulfation chemistry of a commercial lean NO _x trap catalyst. <i>Catalysis Today</i> , 2012, 197, 3-8.	2.2	11
62	A large sample volume magic angle spinning nuclear magnetic resonance probe for in situ investigations with constant flow of reactants. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2137-2143.	1.3	20
63	Highly Dispersed and Active ReO _x on Alumina-Modified SBA-15 Silica for 2-Butanol Dehydration. <i>ACS Catalysis</i> , 2012, 2, 1020-1026.	5.5	22
64	Size-Dependent Catalytic Performance of CuO on γ -Al ₂ O ₃ : NO Reduction versus NH ₃ Oxidation. <i>ACS Catalysis</i> , 2012, 2, 1432-1440.	5.5	75
65	Two different cationic positions in Cu-SSZ-13?. <i>Chemical Communications</i> , 2012, 48, 4758.	2.2	350
66	Well-studied Cu ^I BTC still serves surprises: evidence for facile Cu ²⁺ /Cu ⁺ interchange. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4383.	1.3	91
67	The Effect of Copper Loading on the Selective Catalytic Reduction of Nitric Oxide by Ammonia Over Cu-SSZ-13. <i>Catalysis Letters</i> , 2012, 142, 295-301.	1.4	186
68	Enhanced High Temperature Performance of MgAl ₂ O ₄ -Supported Pt ^{Ba} Lean NO _x Trap Catalysts. <i>Topics in Catalysis</i> , 2012, 55, 70-77.	1.3	12
69	Synthesis of butenes through 2-butanol dehydration over mesoporous materials produced from ferrierite. <i>Catalysis Today</i> , 2012, 185, 191-197.	2.2	25
70	Thermal durability of Cu-CHA NH ₃ -SCR catalysts for diesel NO reduction. <i>Catalysis Today</i> , 2012, 184, 252-261.	2.2	245
71	Possible origin of improved high temperature performance of hydrothermally aged Cu/beta zeolite catalysts. <i>Catalysis Today</i> , 2012, 184, 245-251.	2.2	35
72	Deactivation mechanisms of Pt/Pd-based diesel oxidation catalysts. <i>Catalysis Today</i> , 2012, 184, 197-204.	2.2	86

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73	Characteristics of Pt/K/MgAl ₂ O ₄ lean NO _x trap catalysts. <i>Catalysis Today</i> , 2012, 184, 2-7.	2.2	27
74	Isothermal desulfation of pre-sulfated Pt-BaO/ γ -Al ₂ O ₃ lean NO _x trap catalysts with H ₂ : The effect of H ₂ concentration and the roles of CO ₂ and H ₂ O. <i>Applied Catalysis B: Environmental</i> , 2012, 111-112, 342-348.	10.8	11
75	Effects of hydrothermal aging on NH ₃ -SCR reaction over Cu/zeolites. <i>Journal of Catalysis</i> , 2012, 287, 203-209.	3.1	438
76	Using a Surface-Sensitive Chemical Probe and a Bulk Structure Technique to Monitor the γ - to δ -Al ₂ O ₃ Phase Transformation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12575-12579.	1.5	37
77	Characterizing Surface Acidic Sites in Mesoporous-Silica-Supported Tungsten Oxide Catalysts Using Solid-State NMR and Quantum Chemistry Calculations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23354-23362.	1.5	11
78	Solvent Evaporation Assisted Preparation of Oriented Nanocrystalline Mesoporous MFI Zeolites. <i>ACS Catalysis</i> , 2011, 1, 682-690.	5.5	67
79	Direct Conversion of Bio-ethanol to Isobutene on Nanosized Zn _x Zr _y O _z Mixed Oxides with Balanced Acid-Base Sites. <i>Journal of the American Chemical Society</i> , 2011, 133, 11096-11099.	6.6	225
80	Insight into methanol synthesis from CO ₂ hydrogenation on Cu(111): Complex reaction network and the effects of H ₂ O. <i>Journal of Catalysis</i> , 2011, 281, 199-211.	3.1	347
81	Effect of reductive treatments on Pt behavior and NO _x storage in lean NO _x trap catalysts. <i>Catalysis Today</i> , 2011, 175, 78-82.	2.2	4
82	Regeneration of field-spent activated carbon catalysts for low-temperature selective catalytic reduction of NO _x with NH ₃ . <i>Chemical Engineering Journal</i> , 2011, 174, 242-248.	6.6	25
83	The Origin of Regioselectivity in n -Butanol Dehydration on Solid Acid Catalysts. <i>ChemCatChem</i> , 2011, 3, 1557-1561.	1.8	30
84	(100) facets of γ -Al ₂ O ₃ : The Active Surfaces for Alcohol Dehydration Reactions. <i>Catalysis Letters</i> , 2011, 141, 649-655.	1.4	105
85	Excellent activity and selectivity of Cu-SSZ-13 in the selective catalytic reduction of NO _x with NH ₃ . <i>Journal of Catalysis</i> , 2010, 275, 187-190.	3.1	674
86	Catalyst size and morphological effects on the interaction of NO ₂ with BaO/ γ -Al ₂ O ₃ materials. <i>Catalysis Today</i> , 2010, 151, 304-313.	2.2	8
87	The different impacts of SO ₂ and SO ₃ on Cu/zeolite SCR catalysts. <i>Catalysis Today</i> , 2010, 151, 266-270.	2.2	96
88	Unique Role of Anchoring Penta-Coordinated Al ³⁺ Sites in the Sintering of γ -Al ₂ O ₃ -Supported Pt Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2688-2691.	2.1	101
89	Effect of Produced HCl during the Catalysis on Micro- and Mesoporous MOFs. <i>Crystal Growth and Design</i> , 2010, 10, 4118-4122.	1.4	15
90	Micro and mesoporous metal-organic frameworks for catalysis applications. <i>Dalton Transactions</i> , 2010, 39, 1692-1694.	1.6	71

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91	Coordinatively Unsaturated Al ³⁺ Centers as Binding Sites for Active Catalyst Phases of Platinum on γ -Al ₂ O ₃ . <i>Science</i> , 2009, 325, 1670-1673.	6.0	790
92	Understanding the nature of surface nitrates in BaO/ γ -Al ₂ O ₃ NO _x storage materials: A combined experimental and theoretical study. <i>Journal of Catalysis</i> , 2009, 261, 17-22.	3.1	79
93	Promotional Effect of CO ₂ on Desulfation Processes for Pre-Sulfated Pt-BaO/Al ₂ O ₃ Lean NO _x Trap Catalysts. <i>Topics in Catalysis</i> , 2009, 52, 1719-1722.	1.3	3
94	An isotropic chemical shift ¹³ C chemical shift anisotropic correlation experiment using discrete magic angle turning. <i>Journal of Magnetic Resonance</i> , 2009, 198, 105-110.	1.2	2
95	Effects of Sulfation Level on the Desulfation Behavior of Presulfated Pt-BaO/Al ₂ O ₃ Lean NO _x Trap Catalysts: A Combined H ₂ 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. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7336-7341.	1.5	17
96	Characterization of Dispersed Heteropoly Acid on Mesoporous Zeolite Using Solid-State ³¹ P NMR Spin ¹ Lattice Relaxation. <i>Journal of the American Chemical Society</i> , 2009, 131, 9715-9721.	6.6	42
97	Characteristics of Desulfation Behavior for Presulfated Pt-BaO/CeO ₂ Lean NO _x Trap Catalyst: The Role of the CeO ₂ Support. <i>Journal of Physical Chemistry C</i> , 2009, 113, 21123-21129.	1.5	14
98	Studies of the Active Sites for Methane Dehydroaromatization Using Ultrahigh-Field Solid-State ⁹⁵ Mo NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2936-2942.	1.5	29
99	First-Principles Analysis of NO _x Adsorption on Anhydrous γ -Al ₂ O ₃ Surfaces. <i>Journal of Physical Chemistry C</i> , 2009, 113, 7779-7789.	1.5	28
100	Characterization of surface and bulk nitrates of γ -Al ₂ O ₃ -supported alkaline earth oxides using density functional theory. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3380.	1.3	10
101	Promotional Effects of H ₂ O Treatment on NO _x Storage Over Fresh and Thermally Aged Pt-BaO/Al ₂ O ₃ Lean NO _x Trap Catalysts. <i>Catalysis Letters</i> , 2008, 124, 39-45.	1.4	13
102	Effects of Novel Supports on the Physical and Catalytic Properties of Tungstophosphoric Acid for Alcohol Dehydration Reactions. <i>Topics in Catalysis</i> , 2008, 49, 259-267.	1.3	24
103	Sequential high temperature reduction, low temperature hydrolysis for the regeneration of sulfated NO _x trap catalysts. <i>Catalysis Today</i> , 2008, 136, 183-187.	2.2	10
104	NO _x uptake on alkaline earth oxides (BaO, MgO, CaO and SrO) supported on γ -Al ₂ O ₃ . <i>Catalysis Today</i> , 2008, 136, 121-127.	2.2	27
105	NMR studies of Cu/zeolite SCR catalysts hydrothermally aged with urea. <i>Catalysis Today</i> , 2008, 136, 34-39.	2.2	35
106	Title is missing!. <i>Catalysis Today</i> , 2008, 136, 1-2.	2.2	4
107	Excellent sulfur resistance of Pt/BaO/CeO ₂ lean NO _x trap catalysts. <i>Applied Catalysis B: Environmental</i> , 2008, 84, 545-551.	10.8	55
108	Role of Pentacoordinated Al ³⁺ Ions in the High Temperature Phase Transformation of γ -Al ₂ O ₃ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 9486-9492.	1.5	106

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109	Carbonate Formation and Stability on a Pt/BaO/ $\hat{\Gamma}^3$ -Al ₂ O ₃ NOX Storage/Reduction Catalyst. Journal of Physical Chemistry C, 2008, 112, 10952-10959.	1.5	47
110	Roles of Pt and BaO in the Sulfation of Pt/BaO/Al ₂ O ₃ Lean NO _x Trap Materials: Sulfur K-edge XANES and Pt L _{III} XAFS Studies. Journal of Physical Chemistry C, 2008, 112, 2981-2987.	1.5	17
111	Adsorption and Formation of BaO Overlayers on $\hat{\Gamma}^3$ -Al ₂ O ₃ Surfaces. Journal of Physical Chemistry C, 2008, 112, 18050-18060.	1.5	29
112	Direct Observation of the Active Center for Methane Dehydroaromatization Using an Ultrahigh Field ⁹⁵ Mo NMR Spectroscopy. Journal of the American Chemical Society, 2008, 130, 3722-3723.	6.6	134
113	Grafting sulfated zirconia on mesoporous silica. Green Chemistry, 2007, 9, 540.	4.6	23
114	Effect of H ₂ O on the Adsorption of NO ₂ on $\hat{\Gamma}^3$ -Al ₂ O ₃ : an in Situ FTIR/MS Study. Journal of Physical Chemistry C, 2007, 111, 2661-2669.	1.5	97
115	Water-induced morphology changes in BaO/ $\hat{\Gamma}^3$ -Al ₂ O ₃ NO _x storage materials. Chemical Communications, 2007, , 984-986.	2.2	13
116	Understanding Practical Catalysts Using a Surface Science Approach: The Importance of Strong Interaction between BaO and Al ₂ O ₃ in NO _x Storage Materials. Journal of Physical Chemistry C, 2007, 111, 14942-14944.	1.5	32
117	Design of a Reaction Protocol for Decoupling Sulfur Removal and Thermal Aging Effects during Desulfation of Pt-BaO/Al ₂ O ₃ Lean NO _x Trap Catalysts. Industrial & Engineering Chemistry Research, 2007, 46, 2735-2740.	1.8	11
118	Water-Induced Morphology Changes in BaO/ $\hat{\Gamma}^3$ -Al ₂ O ₃ NO _x Storage Materials: an FTIR, TPD, and Time-Resolved Synchrotron XRD Study. Journal of Physical Chemistry C, 2007, 111, 4678-4687.	1.5	35
119	Oxidation of ethanol to acetaldehyde over Na-promoted vanadium oxide catalysts. Applied Catalysis A: General, 2007, 332, 263-272.	2.2	36
120	Penta-coordinated Al ³⁺ ions as preferential nucleation sites for BaO on $\hat{\Gamma}^3$ -Al ₂ O ₃ : An ultra-high-magnetic field ²⁷ Al MAS NMR study. Journal of Catalysis, 2007, 251, 189-194.	3.1	173
121	Water-induced bulk Ba(NO ₃) ₂ formation from NO ₂ exposed thermally aged BaO/Al ₂ O ₃ . Applied Catalysis B: Environmental, 2007, 72, 233-239.	10.8	39
122	Ba Deposition and Oxidation on $\hat{\Gamma}^3$ -Al ₂ O ₃ /NiAl(100) Ultrathin Films. Part I: Anaerobic Deposition Conditions. Journal of Physical Chemistry B, 2006, 110, 17001-17008.	1.2	27
123	Low Temperature H ₂ O and NO ₂ Coadsorption on $\hat{\Gamma}^3$ -Al ₂ O ₃ /NiAl(100) Ultrathin Films. Journal of Physical Chemistry B, 2006, 110, 8025-8034.	1.2	27
124	Ba Deposition and Oxidation on $\hat{\Gamma}^3$ -Al ₂ O ₃ /NiAl(100) Ultrathin Films. Part II: O ₂ (g) Assisted Ba Oxidation. Journal of Physical Chemistry B, 2006, 110, 17009-17014.	1.2	27
125	Effect of Barium Loading on the Desulfation of Pt-BaO/Al ₂ O ₃ Studied by H ₂ TPRX, TEM, Sulfur K-edge XANES, and in Situ TR-XRD. Journal of Physical Chemistry B, 2006, 110, 10441-10448.	1.2	30
126	Relationship of Pt Particle Size to the NO _x Storage Performance of Thermally Aged Pt/BaO/Al ₂ O ₃ Lean NO _x Trap Catalysts. Industrial & Engineering Chemistry Research, 2006, 45, 8815-8821.	1.8	51

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127	Fractional Factorial Study of HCN Removal over a 0.5% Pt/Al ₂ O ₃ Catalyst: Effects of Temperature, Gas Flow Rate, and Reactant Partial Pressure. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 934-939.	1.8	19
128	Characterization of NO _x species in dehydrated and hydrated Na- and Ba-Y, FAU zeolites formed in NO ₂ adsorption. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2006, 150, 164-170.	0.8	19
129	Effects of Ba loading and calcination temperature on BaAl ₂ O ₄ formation for BaO/Al ₂ O ₃ NO _x storage and reduction catalysts. <i>Catalysis Today</i> , 2006, 114, 86-93.	2.2	70
130	Synthesis of nanodispersed oxides of vanadium, titanium, molybdenum, and tungsten on mesoporous silica using atomic layer deposition. <i>Topics in Catalysis</i> , 2006, 39, 245-255.	1.3	43
131	Non-thermal Plasma-assisted NO _x Reduction over Na-Y Zeolites: The Promotional Effect of Acid Sites. <i>Catalysis Letters</i> , 2006, 109, 1-6.	1.4	19
132	NO _x uptake mechanism on Pt/BaO/Al ₂ O ₃ catalysts. <i>Catalysis Letters</i> , 2006, 111, 119-126.	1.4	46
133	Synthesis, characterization, and catalytic function of novel highly dispersed tungsten oxide catalysts on mesoporous silica. <i>Journal of Catalysis</i> , 2006, 239, 200-211.	3.1	130
134	Catalytic oxidation of HCN over a 0.5% Pt/Al ₂ O ₃ catalyst. <i>Applied Catalysis B: Environmental</i> , 2006, 65, 282-290.	10.8	61
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